

# Trustees, Administration, Faculty



## OFFICERS

.....

Kent Kresa, *Chairman*  
Walter L. Weisman, *Vice Chairman*

Jean-Lou Chameau, *President*  
Edward M. Stolper, *Provost*

Dean W. Currie  
*Vice President for Business and Finance*

Gary Dicoivitsky  
*Vice President for Development and Alumni Relations*

Charles Elachi  
*Vice President and Director, Jet Propulsion Laboratory*

Sandra Ell  
*Chief Investment Officer*

Robert L. O'Rourke  
*Vice President for Public Relations*

Sharon E. Patterson  
*Associate Vice President for Finance and Treasurer*

Anneila I. Sargent  
*Vice President for Student Affairs*

Mary L. Webster  
*Secretary*

Harry M. Yohalem  
*General Counsel*

## BOARD OF TRUSTEES

.....

**Trustees**  
*(with date of first election)*

George L. Argyros (1992)  
*Chairman and CEO  
Arnel and Affiliates*

Robert C. Bonner (2008)  
*Senior Principal  
Sentinel HS Group, L.L.C.*

John E. Bryson (2005)  
*Chairman and CEO  
Edison International*

Jean-Lou Chameau (2006)  
*President  
California Institute of Technology*

Milton Chang (2005)  
*Managing Director  
Incubic Venture Capital*

John S. Chen (2008)  
*Chairman, CEO, and President  
Sybase, Inc.*

Robert B. Chess (2006)  
*Chairman  
Nektar Therapeutics*

John D. Diekman (2003)  
*Founder and Managing Partner  
5AM Ventures*

Lounette M. Dyer (1998)  
Gilad I. Elbaz (2008)  
William T. Gross (1994)  
*Chairman and Founder  
Idealab*

Frederick J. Hameetman (2006)  
*Chairman  
American Group*

Robert T. Jenkins (2005)  
Peter D. Kaufman (2008)  
*Chairman and CEO  
Glenair, Inc.*

Jon Faiz Kayyem (2006)  
*Managing Partner  
Efficacy Capital Ltd.*

Louise Kirkbride (1995)  
*Board Member  
State of California Contractors  
State License Board*

Kent Kresa (1994)  
*Chairman Emeritus  
Northrop Grumman Corporation*

Jon B. Kutler (2005)  
*Chairman and CEO  
Admiralty Partners, Inc.*

David Li Lee (2000)  
*Managing General Partner  
Clarity Partners, L.P.*

York Liao (1997)  
*Managing Director  
Winbridge Company Ltd.*

Alexander Lidow (1998)  
Ronald K. Linde (1989)  
*Independent Investor and  
Chairman of the Board  
The Ronald and Maxine Linde  
Foundation*

John W. Mack (2004)  
*President  
Los Angeles Police Commission*

Shirley M. Malcom (1999)  
*Director, Education and Human  
Resources Programs  
American Association for the  
Advancement of Science*

Deborah McWhinney (2007)  
Richard Merkin, M.D.  
*Founder and CEO  
Heritage Provider Network*

Clara S. Miller (2004)  
*Principal*  
*Regulus International Capital Corp.*

Philip M. Neches (1995)  
*Chairman*  
*Foundation Ventures LLC*

Patrick H. Nettles, Jr. (1998)  
*Executive Chairman*  
*Ciena Corporation*

Peter F. Norton (2006)  
*President*  
*Norton Family Office*

Ronald L. Olson (1998)  
*Senior Partner*  
*Munger, Tolles & Olson*

Stephen R. Onderdonk (1986)  
*President and CEO (Retired)*  
*Econolite Control Products, Inc.*

Stewart A. Resnick (2005)  
*Chairman*  
*Roll International Corp.*

Sally Kristen Ride (2000)  
*President*  
*Imaginary Lines, Inc., and*  
*Ingrid and Joseph Hibben Professor of Physics*  
*University of California, San Diego*

Nelson C. Rising (2006)  
*Chairman and CEO*  
*Rising Realty Partners*

Stephen A. Ross (1993)  
*Franco Modigliani Professor of Finance and Economics*  
*Massachusetts Institute of Technology, and Chairman*  
*Compensation Valuation, Inc.*

James F. Rothenberg (2006)  
*President*  
*Capital Research and Management Company*

Marc I. Stern (2004)  
*President*  
*TCW Group, Inc.*

Donald W. Tang (2005)  
*Senior Managing Director*  
*Bear Stearns and Company*

Charles R. Trimble (2002)  
*Founder and Former CEO*  
*Trimble Navigation Ltd.*

Lewis W. van Amerongen (2004)  
*LvA Enterprises Inc.*

Gayle E. Wilson (1995)  
*Nonprofit Consultant*

Jay S. Wintrob (2007)  
*President and CEO*  
*AIG Retirement Services Inc.*

Suzanne H. Woolsey (2006)  
*Corporate Governance Consultant*

**Senior Trustees**  
*(with date of first election and date of election as Senior Trustee)*

G. Patricia Beckman (2003, 2005)  
*Community Leader*

Gordon M. Binder (1995, 2007)  
*Managing Director*  
*Coastview Capital*

Harold Brown (1969, 1999)  
*President Emeritus*  
*Counselor*  
*Center for Strategic and International Studies (CSIS)*

Walter Burke (1975, 1994)  
*Treasurer*  
*Sherman Fairchild Foundation, Inc.*

William H. Davidow (1996, 2007)  
*General Partner*  
*Mobr Davidow Ventures*

Thomas E. Everhart (1998, 2004)  
*President Emeritus*  
*California Institute of Technology*

Arthur L. Goldstein (1995, 2007)  
*Chairman and CEO (Retired)*  
*Ionic, Inc.*

Shirley M. Hufstедler (1975, 1997)  
*Senior Of Counsel*  
*Morrison & Foerster*

Bobby R. Inman (1989, 2003)  
*Private Investor*

A. Michael Lipper (2005, 2007)  
*President and CEO*  
*Lipper Advisory Services, Inc.*

Gordon E. Moore (1983, 2001)  
*Chairman Emeritus*  
*Chairman Emeritus*  
*Intel Corporation*

Stanley R. Rawn, Jr. (1974, 2000)  
*Private Investor*

Walter L. Weisman (1988, 2007)  
*Former Chairman and CEO*  
*American Medical International, Inc.*

Virginia V. Weldon (1996, 2007)  
*Senior Vice President for Public Policy (Retired)*  
*Monsanto Company*

**Life Trustees**  
*(with date of first election and date of election as Life Trustee)*

Stephen D. Bechtel, Jr. (1967, 1997)  
*Chairman Emeritus and Director*  
*Bechtel Group, Inc.*

Donald L. Bren (1983, 2004)  
*Chairman of the Board*  
*The Irvine Company*

Eli Broad (1993, 2007)  
*Founder*  
*The Broad Foundations*

Jewel Plummer Cobb (1990, 2005)  
*President Emerita*  
*California State University, Fullerton*

Harry M. Conger (1985, 2007)  
*Chairman & CEO, Emeritus*  
*Homestake Mining Company*

Richard P. Cooley (1973, 2007)  
*Retired Chairman*  
*Seafirst Bank*

Camilla C. Frost (1977, 2007)  
*Trustee of the Chandler Trust and a Director and Secretary-Treasurer*  
*Chandis Securities Company*

Philip M. Hawley (1975, 1997)  
*President*  
*P. M. Hawley, Inc.*

William F. Kieschnick (1982, 2005)  
*President and CEO (Retired)*  
*Atlantic Richfield Co.*

Robert S. McNamara (1969, 1988)  
*President (Retired)*  
*The World Bank*

Sidney R. Petersen (1980, 2007)  
*Chairman and CEO (Retired)*  
*Getty Oil Company*

Simon Ramo (1964, 1985)  
*Co-Founder & Director Emeritus*  
*TRW Inc.*

Arthur Rock (1988, 1998)  
*Principal*  
*Arthur Rock and Company*

Benjamin M. Rosen (1986, 2005)  
*Chairman Emeritus*  
*Chairman Emeritus*  
*Compaq Computer Corporation*

Richard M. Rosenberg (1989, 2007)  
*Chairman and CEO (Retired)*  
*Bank of America Corporation*

Robert J. Schultz (1991, 2002)  
*Vice Chairman (Retired)*  
*General Motors Corporation*

Mary L. Scranton (1974, 1990)  
*Nonprofit Consultant*

Dennis Stanfill (1976, 1999)  
*Private Investor*

Charles H. Townes (1979, 1987)  
*Nobel Laureate and Professor in the Graduate School Department of Physics*  
*University of California, Berkeley*

Harry Wetzel (1979, 2002)  
*Chairman and CEO (Retired)*  
*The Garrett Corporation*

Albert D. Wheelon (1987, 2001)

**Standing Committees**

**Executive Committee**—K. Kresa, *Chair*; W.L. Weisman, *Vice Chair*; J.-L. Chameau\*, W.H. Davidow, S.M. Hufstедler, B.R. Inman, R.T. Jenkins, L. Kirkbride, D.L. Lee, A. Lidow, R.K. Linde, G.E. Moore, P.M. Neches, S.R. Onderdonk, S.A. Ross, C.R. Trimble, G.E. Wilson; *Consulting Member*: B.M. Rosen; *Advisory Members*: D.W. Currie, G. Dicovitsky, C. Elachi, R.L. O'Rourke, A.I. Sargent, E.M. Stolper, H.M. Yohalem

**Audit and Compliance Committee**—R.K. Linde, *Chair*; L. Kirkbride, K. Kresa\*, A.M. Lipper, P.M. Neches, S.R. Onderdonk, M.I. Stern, W.L. Weisman; *Advisory Members*: M. Brewer, J.-L. Chameau, D.W. Currie, C. Elachi, D.M. Johnson, P. Koyzis, S.E. Patterson, S.L. Proia, E.M. Stolper, V. Stratman, E.L. Tattini, H.M. Yohalem

**Buildings and Grounds Committee**—S.R. Onderdonk, *Chair*; N.C. Rising, *Vice Chair*; G.P. Beckman, J.E. Bryson, J.-L. Chameau\*, L. Dyer, T.E. Everhart, R.T. Jenkins, K. Kresa\*, J.B. Kutler, S.A. Resnick, L.W. van Amerongen; *Consulting Members*: S.D. Bechtel, Jr.; *Advisory Members*: J. Cowell, D.W. Currie, H.P. Daily, G. Dicovitsky, S.A. Ell, A.I. Sargent, E.M. Stolper

**Business and Finance Committee**—D.L. Lee, *Chair*; G.L. Argyros, *Vice Chair*; J.-L. Chameau\*, J.D. Diekmann, T.E. Everhart, K. Kresa\*, A. Lidow, R.K. Linde, A.M. Lipper, S.M. Malcom, P.M. Neches, S.R. Rawn, Jr., J.M. Rothenberg, D.W. Tang, L.W. van Amerongen, W.L. Weisman, S.H. Woolsey; *Consulting Member*: H.M. Conger; *Advisory Members*: D.W. Currie, G. Dicovitsky, S.A. Ell, D.M. Johnson, J. McCallin, S.E.

Patterson, E.M. Stolper, H.M. Yohalem

#### **Executive Compensation**

**Subcommittee**—A. Lidow, *Chair*; K. Kresa\*, D.L. Lee\*, R.K. Linde, P.M. Neches, W.L. Weisman; *Advisory Members*: J.-L. Chameau, J. McCallin

#### **Development Committee**—W.H.

Davidow, *Chair*; J.F. Rothenberg, *Vice Chair*; J.-L. Chameau\*, R.J. Jenkins, K. Kresa\*, D.D. McWhinney, W.L. Weisman; *Advisory Members*: G. Dicovitsky, R.E. McQuinn, E.M. Stolper

#### **Institute and Alumni Relations**

**Committee**—R.T. Jenkins, *Chair*; J.E. Bryson, J.-L. Chameau\*, W.H. Davidow, L.M. Dyer, W.T. Gross, L. Kirkbride, K. Kresa\*, Y. Liao, R.K. Linde, S.M. Malcom, P.M. Neches, S.R. Onderdonk, W.L. Weisman, V.V. Weldon, G.E. Wilson; *Advisory Members*: A. Bealko\*, J.L. Campbell, K. Chang\*, D.W. Currie, H.P. Daily, G. Dicovitsky, B. Folsom, R. Kieckhefer, R.E. McQuinn, R.L. O'Rourke, A.I. Sargent, A. Shaindlin, E.M. Stolper, K. Wiltsey

#### **Investment Committee**—S.A.

Ross, *Chair*; J.-L. Chameau\*, R.K. Linde, J.S. Wintrob; *Advisory Members*: E. Broad, S. Dow, S.A. Ell, L.R. Hoagland, R. Perry

#### **Jet Propulsion Laboratory**

**Committee**—C.R. Trimble, *Chair*; J.B. Kutler, *Vice Chair*; H. Brown, W. Burke, J.-L. Chameau\*, L. Dyer, T.E. Everhart, F.J. Hameetman, S.M. Hufstедler, B.R. Inman, J.F. Kayyem, L. Kirkbride, K. Kresa\*, G.E. Moore, P.M. Neches, P. Norton, R.L. Olson, S.R. Onderdonk, S.R. Rawn, Jr., S.A. Resnick, S.K. Ride, W.L. Weisman, G.E. Wilson, S.H. Woolsey; *Consulting Member*: C.H. Townes; *Advisory Members*: D.W. Currie, H.P. Daily, C. Elachi, R.L. O'Rourke, R.P. O'Toole, E.M. Stolper, H.M. Yohalem

#### **Nominating Committee**—G.E.

Wilson, *Chair*; A. Lidow, *Vice Chair*; H. Brown, J.-L. Chameau\*, B.R. Inman, L. Kirkbride, K. Kresa\*, D.L. Lee, R.K. Linde, D.D. McWhinney, R.L. Olson, W.L. Weisman, V.V. Weldon, S.H. Woolsey; *Consulting Members*: W.F. Kieschnick, S. Ramo; *Advisory Members*: G. Dicovitsky, E.M. Stolper, H.M. Yohalem

#### **Student Experience**

**Committee**—L. Kirkbride, *Chair*; P.H. Nettles, *Vice Chair*; J.-L. Chameau\*, M.M. Chang, R.B. Chess, K. Kresa\*, J.W. Mack, S.M. Malcom, D.D. McWhinney; P. Norton, C.R. Trimble, S.H. Woolsey; *Advisory Members*: J.F. Hall, M.R. Hoffmann, M.L. Hunt, A.I. Sargent, E.M. Stolper; *Student Advisory Members*: A. Beck, D. Bower, J. Nikolaus, T. Wang

#### **Technology Transfer**

**Committee**—P.M. Neches, *Chair*; L. Kirkbride, *Vice Chair*; G.M. Binder, H. Brown, J.-L. Chameau\*, M.M. Chang, R.B. Chess, J.D. Diekman, L.M. Dyer, A.L. Goldstein, F.J. Hameetman, J.F. Kayyem, K. Kresa\*, A. Lidow, R.K. Linde, C.S. Miller, P.H. Nettles, Jr., R.L. Olson, C.R. Trimble, L.W. van Amerongen; *Advisory Members*: D.W. Currie, S.A. Ell, F. Farina, S. Mayo, E.M. Stolper, T.A. Tombrello, H.M. Yohalem

#### **Transaction Review**

**Subcommittee**  
P.M. Neches, *Chair*; L. Kirkbride, A. Lidow, R.K. Linde, R.L. Olson; *Advisory Member*: H.M. Yohalem

\* *ex officio* member

## **ADMINISTRATIVE OFFICERS**



Jean-Lou Chameau  
*President*



Edward M. Stolper  
*Provost*

Judith L. Campbell  
*Chair of the Faculty Board*  
Dean W. Currie  
*Vice President for Business and Finance*  
Hall P. Daily  
*Assistant Vice President for Government and Community Relations*  
Gary Dicovitsky  
*Vice President for Development and Alumni Relations*  
Charles Elachi  
*Vice President and Director, Jet Propulsion Laboratory*  
Sandra Ell  
*Chief Investment Officer*  
Richard E. Fagen  
*Chief Information Officer*  
John F. Hall  
*Dean of Students*

Melany L. Hunt  
*Vice Provost*  
Stephen L. Mayo  
*Vice Provost*  
Julia McCallin  
*Associate Vice President for Human Resources*  
Robert L. O'Rourke  
*Vice President for Public Relations*  
Sharon E. Patterson  
*Associate Vice President for Finance and Treasurer*  
Anneila I. Sargent  
*Vice President for Student Affairs*  
Mary L. Webster  
*Secretary, Board of Trustees*  
Harry M. Yohalem  
*General Counsel*  
TBA  
*Dean of Graduate Studies*

#### **Chairs of Divisions**

Elliot M. Meyerowitz  
*Biology*  
David A. Tirrell  
*Chemistry and Chemical Engineering*  
David B. Rutledge  
*Engineering and Applied Science*  
Kenneth A. Farley  
*Geological and Planetary Sciences*  
Jonathan N. Katz  
*Humanities and Social Sciences*  
Andrew E. Lange  
*Physics, Mathematics and Astronomy*

## Administrative Committees

### Administrative Management

**Council (AMC)**—J.-L. Chameau, *Chair*; J.L. Campbell, D.W. Currie, G. Dicovitsky, M.L. Hunt, S. Mayo, R.L. O'Rourke, A.I. Sargent, E.M. Stolper, M.L. Webster, H.M. Yohalem

**Animal Care and Use** [fills the role of Caltech's Institutional Animal Care and Use Committee—IACUC] (Reports to the Provost)—J.H. Strauss, *Chair*; R.A. Andersen, J. Baer\*, J. Brackman, D. Chan, G.C. Fisher-Adams, E. Helms, L. Hsieh-Wilson, D. Mayo, C. Scislowicz (alternate), M. Ton (alternate)

**Benefits** (Reports to the Vice President for Business and Finance)—D.M. Grether, *Chair*; P.L. Carter-Lockert\*, W. Chapman, I. Cureton-Snead, J.R. Goodstein, J.A. Grinols, C. Hart\*, P.T. Hoffman, D.M. Johnson, A. Kuppermann, J. McCallin\*, J.C. Milbrandt, K.L. Montes\*, S.E. Patterson\*, N.A. Pierce, R.M. Roessler\*, J. Stock

**Biosafety** [fills the role of Caltech's Institutional Biosafety Committee—IBC] (Reports to the Vice President for Business and Finance)—E. Rothenberg, *Chair*; J. Baer, W. Dietrick, G. Fisher-Adams\*, R.D. Lansford, J.D. Leadbetter, C. Scislowicz\*, R.P. Seligman\*

**Computing Advisory Committee** (Reports to the Provost)—K.M. Chandy, *Chair*; K.C. Border, R. Clayton, D.W. Currie\*, K. Douglas\*, R. Fagen, W.C. Ford, J. Kaiser<sup>§</sup>, S. Kalyanaraman<sup>†</sup>, S.L. Mayo, J. McCallin\*, B.V. McKoy, E. O'Neal\*, S.E. Patterson\*, D.B. Rutledge, B. Simon

### Council on Undergraduate

**Education** (Reports to the Provost)—M.L. Hunt, *Chair*; P.M. Bellan, M.E. Brown, B.W. Filippone, J.F. Hall, C. Jurca, C. Montouri<sup>‡</sup>, M.N. Morley, C. Ng<sup>‡</sup>, A.I. Sargent, A. Siegel<sup>‡</sup>, B.M. Stoltz, A.J. Weinstein

**Institute Academic Council (IACC)**—E.M. Stolper, *Chair*; J.-L. Chameau, K.A. Farley, J.N. Katz, A.E. Lange, E.M. Meyerowitz, D.B. Rutledge, D.A. Tirrell

**Institute Administrative Council (IAC)**—J.-L. Chameau, *Chair*; J.L. Campbell, D.W. Currie, H.P. Daily, G. Dicovitsky, C. Elachi, S.A. Ell, R. Fagen, K.A. Farley, J.F. Hall, M.L. Hunt, J.N. Katz, A.E. Lange, S. Mayo, J. McCallin, E.M. Meyerowitz, R.L. O'Rourke, S. Patterson, D.B. Rutledge, A.I. Sargent, E.M. Stolper, D.A. Tirrell, M.L. Webster, H.M. Yohalem, Dean of Graduate Studies (TBA)

**Institute Art** (Reports to the Director, Public Events)—P. Perona, *Chair*; A. Boyle, J. Buchwald, F.E.C. Culick, H.P. Daily, S. Ell, G. Gage, D.G. Goodwin, C. Klein<sup>†</sup>, T. Knutson<sup>†</sup>, D. Kremers, D. Nelson Nash\*, T. Schneider, C.S. Smith, C. Theodoris<sup>‡</sup> (alternate), L. Yeung<sup>‡</sup>

**Performing and Visual Arts** (Reports to the Vice President for Student Affairs)—S.C. Frautschi, *Chair*; P.D. Asimow, J. Barry, S. Brown, P.T. Hoffman, J. La Belle, S.A. Marneus, D. Nelson Nash, J.H. Richards, J.D. Roberts

**President's Diversity Council** (Reports to the President)—E.M. Stolper, *Chair*; R.M. Alvarez, J.E. Bercau, J.F. Hall\*, M.R. Hoffmann\*, M.L. Hunt, S.L. Mayo, J.M. McCallin, D. Nelson Nash, A.I. Sargent, C.A. Weinstein

### Protection of Human Subjects

[fills the role of Caltech's Institutional Review Board—IRB] (Reports to the Provost)—C.R. Plott, *Chair*; J.M. Allman (alternate), J.F. Baer (alternate), R.I. Feinberg, G. Fisher-Adams, A. Frey (adviser), G.Q. Jung, J.L. Kirschvink, P. Perona, C. Scislowicz\*, R.P. Seligman\*, J.M. Tyszka (adviser), H.M. Yohalem\*, D.W. Zeh

**Radiation Safety** (Reports to the Vice President for Business and Finance)—D.S. Burnett, *Chair*; A. Athagiri, B. Filippone, H. Issaian, W.L. Johnson, A. Kumagai, C. Scislowicz\*

**Sponsored Research** (Reports to the Provost)—B.V. McKoy, *Chair*; T.H. Heaton, J.O. Ledyard, P.H. Patterson, N.C. Yeh

**SURF** (Reports to the Provost)—F.H. Shair, *Chair*; P.M. Bellan, G.A. Blake, S.G. Djorgovski, S.C. Frautschi, J. Houser\*, J.L. Kirschvink, N.S. Lewis, C.S. Parker, D.B. Rutledge, C. Rypisi\*, T.A. Tombrello, W.M. Whitney, R.M. Wilson

\**ex officio member*

<sup>†</sup>*representing graduate students*

<sup>‡</sup>*representing undergraduate students*

<sup>§</sup>*representing postdoctoral scholars*

## FACULTY OFFICERS AND COMMITTEES 2008-09

### Officers

*Chair*: J. L. Campbell  
*Vice Chair*: R. M. Murray  
*Secretary*: F. Cowie

### Faculty Board

R. M. Alvarez, 2011  
K. C. Border, 2009  
M. E. Brown, 2010  
M. K. Chandy, 2010  
J. O. Dabiri, 2010  
S. E. Fraser, 2011  
N. S. Lewis, 2010  
H. D. Politzer, 2009  
G. Ravichandran, 2009  
W. Sargent, 2011  
A. Stathopoulos, 2010  
C. S. Steidel, 2010  
P. W. Sternberg, 2009  
D. J. Stevenson, 2011  
J. M. Stock, 2009  
B. Stoltz, 2009  
Z.-G. Wang, 2011  
E. Winfree, 2011

### Ex Officio:

J.-L. Chameau  
K. A. Farley  
J. F. Hall  
J. N. Katz  
A. E. Lange  
E. M. Meyerowitz  
D. B. Rutledge  
A. I. Sargent  
E. M. Stolper  
D. A. Tirrell

### Steering

J. L. Campbell, *Chair*  
F. Cowie\*  
R. M. Murray\*  
E. M. Stolper\*

\**ex officio member*

**Academic Freedom and Tenure**

J. Bercaw, 2010  
 P. Dimotakis, 2009  
 S. Fraser, 2010  
 F. A. Harrison, 2010  
 A. P. Ingersoll, 2009  
 J. A. Kornfield, 2009

**Academic Policies**

P. M. Bellan, *Chair*  
 O. Aharonson, 2009  
 M. Bronner-Fraser, 2009  
 S. C. Frautschi, 2010  
 W. Goddard, 2011  
 J. E. Marsden, 2010  
 J. D. Roberts, 2010

**Athletics and Physical Education**

M. R. Hoffmann, *Chair*  
 O. Aharonson, 2009  
 R. Bischoff\*  
 D. Cohen, 2009  
 R. H. Grubbs, 2009  
 L. Hillenbrand, 2010  
 W. J. Irwin\*  
 J. L. Kirschvink, 2009  
 J. P. Wendell\*

**Convocations**

K. P. Giapis, *Chair*  
 J. F. Hall\*  
 C. Hitchcock, 2010  
 M. R. Hoffmann\*  
 R. M. Murray\*  
 T. Schneider, 2010  
 E. M. Schuman, 2009

**Core Curriculum Steering**

B. W. Filippone, *Chair*  
 K. Gilmartin, 2009  
 M. B. Kennedy, 2010  
 N. S. Lewis, 2009  
 D. I. Meiron, 2010  
 E. Phinney III, 2011  
 J. Pine, 2011

**Curriculum**

F. Echenique, *Chair*  
 R. W. Clayton, 2010  
 J. F. Hall\*  
 L. Hillenbrand, 2010  
 C. Hitchcock, 2010  
 M. B. Kennedy, 2009  
 M. N. Morley\*  
 D. Rees, 2011

B. M. Simon, 2009  
 A. J. Weinstein, 2009

**Educational Outreach**

M. Feingold, *Chair*  
 M. Bronner-Fraser, 2010  
 S. Golwala, 2010  
 N. Lapusta, 2009

**Exchange Programs and Study Abroad**

H. B. Newman, *Chair*  
 P. M. Bellan, 2009  
 J. Goodstein\*  
 T. C. Ho, 2011  
 G. J. Laurent, 2011  
 M. N. Morley\*  
 N. A. Pierce, 2010  
 T. Schneider, 2009  
 D. J. Stevenson, 2010  
 L. Stolper\*

**Foreign Students and Scholars**

A. G. Siapas, *Chair*  
 K. P. Giapis, 2010  
 M. Gooding\*  
 G. J. Laurent, 2011  
 J. Pine, 2009

**Freshman Admissions**

G. A. Blake, *Chair*  
 M. Aschbacher, 2010  
 J. L. Beauchamp, 2009  
 W. Bing\*  
 R. Bischoff\*  
 W. C. Brown, 2010  
 N. R. Corngold, 2009  
 M. C. Cross, 2010  
 D. R. Kiewiet, 2009  
 B. McKoy, 2011  
 B. Megdal\*  
 R. M. Murray, 2009  
 J.-P. Revel, 2009  
 S. Shimojo, 2010  
 B. Wernicke, 2010

**Graduate Studies**

G. R. Rossman, *Chair*  
 Dean of Graduate Studies\*  
 Option Representatives

\**ex officio member*

**Health**

P. T. Hoffman, *Chair*  
 K. Austin\*  
 D. M. Grether, 2009  
 W. Jack\*  
 J. A. Kornfield, 2010  
 S. C. Miller\*  
 P. H. Patterson, 2009

**Institute Programs**

J. Cohen, *Chair*  
 D. Bing\*  
 F. A. Harrison, 2009  
 K. Haugen, 2010  
 D. LaVertu\*  
 S. Mazmanian, 2010  
 R. L. O'Rourke\*  
 T. R. Palfrey, 2010  
 H. Zirin, 2009

**Library**

J. H. Richards, *Chair*  
 C. E. Brennen, 2010  
 R. A. Cameron, 2010  
 S. G. Djorgovski, 2009  
 K. Douglas\*  
 R. C. Flagan, 2011  
 A. P. Ingersoll, 2009  
 J. M. Kousser, 2010  
 C. Y. Ku, 2009  
 G. R. Rossman, 2009  
 C. Steidel, 2011

**Membership and Bylaws**

K. C. Border, 2009  
 F. Cowie\*  
 R. M. Murray\*  
 M. Okumura, 2009  
 N. A. Pierce, 2009  
 T. Schneider, 2009  
 R. P. Sherman, 2009

**Nominating**

K. Border, *Chair*

**Patents and Relations with Industry**

T. Colonius, *Chair*  
 F. H. Arnold, 2009  
 K. Bhattacharya, 2010  
 J. Bruck, 2011  
 M. Gharib, 2011  
 S.-A. Hajimiri, 2011  
 N. A. Pierce, 2011  
 A. G. Siapas, 2009  
 B. J. Wold, 2009  
 A. Yariv, 2011

**Scholarships and Financial Aid**

A. W. Blain, *Chair*  
 R. Bischoff\*  
 G. Blake\*  
 D. Crewell\*  
 S. E. Fraser, 2009  
 J. F. Hall\*  
 J. L. Kirschvink, 2010  
 A. Kuppermann, 2009

**Student Housing**

J. Shepherd, *Chair*  
 P. D. Asimow, 2011  
 J. E. Bercaw, 2009  
 T. Chang\*  
 P. Daily\*  
 M. Iaryczower, 2011  
 W. Jack\*  
 C. Jurca\*  
 T. Mannion\*  
 B. J. McKeon, 2010  
 P. Wennberg, 2008  
 L. Yariv, 2011

**Undergraduate Academic Standards and Honors**

M. Brown, *Chair*  
 C. E. Brennen, 2009  
 W. C. Brown, 2010  
 D. Goodwin, 2011  
 J. F. Hall\*  
 M. N. Morley\*  
 N. A. Pierce, 2009  
 R. P. Sherman, 2010  
 Z.-G. Wang, 2009

**Upperclass Admissions**

R. Bischoff\*  
 D. Calegari, 2010  
 V. Orphan, 2009

\**ex officio member*

## STAFF OF INSTRUCTION AND RESEARCH

### Division of Biology

Elliot M. Meyerowitz, *Chair*  
Raymond Deshaies, *Executive  
Officer for Molecular Biology*  
Christof Koch, *Executive Officer of  
Neurobiology*

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*George Beadle Professor of Biology*  
Charles J. Brokaw, Ph.D.  
*Biology*  
John J. Hopfield, Ph.D.  
*Roscoe G. Dickinson Professor of  
Chemistry and Biology*  
Ray D. Owen, Ph.D., Sc.D.h.c.  
*Biology*  
Jean-Paul Revel, Ph.D.  
*Albert Billings Ruddock Professor  
of Biology*  
Melvin I. Simon, Ph.D.  
*Anne P. and Benjamin F. Biaggini  
Professor of Biological Sciences*  
James H. Strauss, Ph.D.  
*Ethel Wilson Bowles and Robert  
Bowles Professor of Biology*

#### Senior Research Associate Emeriti

Roy J. Britten, Ph.D.  
*Distinguished Carnegie Senior  
Research Associate in Biology,  
Emeritus*  
Anne Chomyn, Ph.D.  
Ellen G. Strauss, Ph.D.

#### Professors

Ralph Adolphs, Ph.D.  
*Bren Professor of Psychology and  
Neuroscience and Professor of  
Biology*  
John M. Allman, Ph.D.  
*Frank P. Hixon Professor of  
Neurobiology*

Richard A. Andersen, Ph.D.  
*James G. Boswell Professor of  
Neuroscience*  
David J. Anderson, Ph.D.<sup>1</sup>  
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Biology*  
David Baltimore, Ph.D., D.Sc.h.c.,  
D.Phil.h.c., Nobel Laureate  
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of Biology*  
Pamela Bjorkman, Ph.D.<sup>1</sup>  
*Max Delbrück Professor of Biology*  
Marianne Bronner-Fraser, Ph.D.  
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of Biology*  
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*Chemistry and Biology*  
Eric H. Davidson, Ph.D.  
*Norman Chandler Professor of Cell  
Biology*  
Raymond Deshaies, Ph.D.<sup>1</sup>  
*Biology*  
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*Esther M. and Abe M. Zarem  
Professor of Bioengineering*  
William G. Dunphy, Ph.D.  
*Biology*  
Scott E. Fraser, Ph.D.  
*Anna L. Rosen Professor of Biology  
and Professor of Bioengineering*  
Mary B. Kennedy, Ph.D.  
*Allen and Lenabelle Davis  
Professor of Biology*  
Christof Koch, Ph.D.  
*Lois and Victor Troendle Professor  
of Cognitive and Behavioral  
Biology and Professor of  
Computation and Neural Systems*  
Masakazu Konishi, Ph.D.  
*Bing Professor of Behavioral  
Biology*  
Gilles J. Laurent, Ph.D., D.V.M.  
*Lawrence A. Hanson Jr. Professor  
of Biology and Computation and  
Neural Systems*  
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*Bren Professor of Biology and  
Chemistry*  
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Professor of Biological Sciences*

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*Albert Billings Ruddock Professor  
of Biology*  
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*Biology*  
Shinsuke Shimojo, Ph.D.  
*Biology*  
Paul W. Sternberg, Ph.D.<sup>1</sup>  
*Thomas Hunt Morgan Professor of  
Biology*  
Alexander J. Varshavsky, Ph.D.  
*Howard and Gwen Laurie Smits  
Professor of Cell Biology*  
Barbara J. Wold, Ph.D.  
*Bren Professor of Molecular  
Biology*  
Kai Zinn, Ph.D.  
*Biology*

<sup>1</sup> Joint appointment with Howard Hughes  
Medical Institute

#### Associate Professors

David C. Chan, M.D., Ph.D.  
*Biology*  
Bruce A. Hay, Ph.D.  
*Biology*  
Grant J. Jensen, Ph.D.  
*Biology*

#### Assistant Professors

Michael Elowitz, Ph.D.  
*Biology and Applied Physics  
Bren Scholar*  
Sarkis Mazmanian, Ph.D.  
*Biology*  
David Prober, Ph.D.  
*Biology*  
Athanassios G. Siapas, Ph.D.  
*Computation and Neural Systems  
Bren Scholar*  
Angelike Stathopoulos, Ph.D.  
*Biology*  
Doris Ying Tsao, Ph.D.  
*Biology*

#### Lecturers

Michael Liebling, Ph.D.  
Jane E. Mendel, Ph.D.  
James R. Pierce, M.D.  
Carol Chace Tydell, D.V.M.

#### Senior Research Associates

R. Andrew Cameron, Ph.D.  
Iain D. C. Fraser, Ph.D.  
Marcus G. B. Heisler, Ph.D.  
Akiko Kumagai, Ph.D.  
Jane E. Mendel, Ph.D.

#### Senior Research Fellows

Jae Hyoung Cho, Ph.D.  
Ila Fiete, Ph.D.  
Sang-Kyou Han, Ph.D.  
Rong-gui Hu, Ph.D.  
Joanna L. Jankowsky, Ph.D.  
Ali Khoshnan, Ph.D.  
David Koos, Ph.D.  
Peter Yunju Lwigale, Ph.D.  
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Daniel K. Meulemans, Ph.D.  
Andrew Steele, Ph.D.  
Allyson Whittaker, Ph.D.  
Hae Yong Yoo, Ph.D.  
Mary An-yuan Yui, Ph.D.

#### Senior Faculty Associate

Alice S. Huang, Ph.D.

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Hamid Bolouri, Ph.D.  
Andres Collazo, Ph.D.  
Michael Collins, Ph.D.  
Susan Ernst, Ph.D.  
Caleb Finch, Ph.D.  
Igor Fineman, M.D.  
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Narimon Honarpour, M.D., Ph.D.  
Leroy Hood, M.D., Ph.D.,  
D.Sc.h.c., D.h.c.  
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Carol Ann Miller, M.D.  
Eric Mjolsness, Ph.D.  
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Ph.D.  
Andrew Rautschek, M.D.

Jose Luis Riechmann, Ph.D.  
Kathleen M. Sakamoto, M.D.,  
Ph.D.  
Kathrin Schrick, Ph.D.  
Bruce E. Shapiro, Ph.D.  
Sandra B. Sharp, Ph.D.  
Thomas T. Su, M.D., Ph.D.  
Henry Y. Sun, Ph.D.  
Masumi Taki, Ph.D.  
Carol Chace Tydell, D.V.M.

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Bruce Cohen, Ph.D.  
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Ker-hwa Ou, M.S.  
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Hiroaki Shizuya, M.D., Ph.D.  
Peter Siegel, Ph.D.  
Julian Michael Tyszka, Ph.D.  
Jie Zhou, Ph.D.

#### **Senior Postdoctoral Scholars**

Vijay S. Chickarmane, Ph.D.  
Isabelle S. Peter Lashgari Faghani,  
Ph.D.  
Constantin Georgescu, Ph.D.  
Haixia Huang, Ph.D.  
S. M. Reza Motaghian Nezam,  
Ph.D.

#### **Postdoctoral Scholars**

Murat Acar, Ph.D.  
Mark Aizenberg, Ph.D.<sup>1</sup>  
Bader Al-Anzi, Ph.D.  
Roe Amit, Ph.D.  
Constantinos Anastassiou, Ph.D.  
Todd Anthony, Ph.D.  
Alejandro Balazs, Ph.D.

Tadato Ban, Ph.D.  
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He Cui, Ph.D.  
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Benjamin Deneen, Ph.D.  
Benjamin Deverman, Ph.D.  
Daniela Dieterich, Ph.D.  
Ron Diskin, Ph.D.  
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Ph.D.  
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Yongning He, Ph.D.  
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EunJung Hwang, Ph.D.  
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Chathurani Jayasena, Ph.D.

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Herwig Just, Ph.D.  
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Gary L. Kleiger, Ph.D.<sup>1</sup>  
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Sanjay Kumar, Ph.D.  
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Long Li, Ph.D.  
Wuxing Li, Ph.D.  
Zhuo Li, Ph.D.  
Dayu Lin, Ph.D.  
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Agnes Lukaszewicz, Ph.D.  
Xin M. Luo, Ph.D.  
Natalie Malkova, Ph.D.  
Edoardo Marcora, Ph.D.  
Sonja Jane McKeown, Ph.D.  
Juscilene Menezes, Ph.D.  
Zheng Meng, Ph.D.  
Eric Miller, Ph.D.<sup>1</sup>  
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Florian Mormann, M.D., Ph.D.  
Fraser John Moss, Ph.D.  
Mala Murthy, Ph.D.  
Jongmin Nam, Ph.D.  
Vidhya Navalpakkam, Ph.D.  
Huu Ngo, Ph.D.  
Shuyi Nie, Ph.D.  
Natalya V. Nikitina, Ph.D.  
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Nicolas D. Plachta, Ph.D.  
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Xiang Qu, Ph.D.  
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Ph.D.  
Parameswaran Ramakrishnan,  
Ph.D.  
Gregory Reeves, Ph.D.  
Hans Ingmar Riedel-Kruse, Ph.D.  
Adrienne Roeder, Ph.D.

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Frederique Ruf, Ph.D.  
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Anjanabha Saha, Ph.D.  
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Amir Sapir, Ph.D.  
Yuki Sato, Ph.D.  
Tatjana Sauka-Spengler, Ph.D.  
Ankur Saxena, Ph.D.  
Erik Schlicht, Ph.D.  
Deirdre D. Scripture-Adams, Ph.D.  
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Edward J. Silverman, Ph.D.  
Joel Smith, Ph.D.  
Alireza Soltani, Ph.D.  
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Zhiyin Song, Ph.D.  
David Sprinzak, Ph.D.  
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Rahul Srinivasan, Ph.D.  
Pablo Strobl Mazzulla, Ph.D.  
Kaoru Sugimoto, Ph.D.  
Willy Supatto, Ph.D.  
Amere Swathi, Ph.D.  
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Ph.D.  
Chin-Yin Tai, Ph.D.  
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Julien Vermot, Ph.D.  
Marc Vermulst, Ph.D.  
Sofia Vrontou, Ph.D.  
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Melanie Wilke, Ph.D.  
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Allan Wong, Ph.D.  
Elizabeth R. Wright, Ph.D.  
Cheng Xiao, M.D., Ph.D.  
Zhiru Yang, Ph.D.<sup>1</sup>  
Young Y. Yoon, Ph.D.<sup>1</sup>  
Zhiheng Yu, Ph.D.  
Alon Zaslaver, Ph.D.  
Xiaolan Zhang, Ph.D.  
Yan Zhang, M.D., Ph.D.  
Lin Zhao, Ph.D.  
Weiwei Zhong, Ph.D.<sup>1</sup>

<sup>1</sup> Joint appointment with Howard Hughes  
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Jeffrey M. Beck, Ph.D.  
Leonard Mlodinow, Ph.D.  
Seth W. Ruffins, Ph.D.  
William J. Zinnanti, B.S.

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Richard C. Flagan, *Executive Officer  
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Mitchio Okumura, *Executive Officer  
for Chemistry*  
Douglas C. Rees, *Executive Officer  
for Biochemistry and Molecular  
Biophysics*

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John D. Baldeschwieler, Ph.D.  
*J. Stanley Johnson Professor and  
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Sunney I. Chan, Ph.D.  
*George Grant Hoag Professor of  
Biophysical Chemistry*  
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*Chemical Engineering*  
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*Roscoe G. Dickinson Professor of  
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John D. Roberts, Ph.D.,  
Dr.rer.Nat.h.c., Sc.D.h.c.,  
D.Sc.h.c.  
*Institute Professor of Chemistry*  
Nicholas W. Tschoegl, Ph.D.  
*Chemical Engineering*

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William P. Schaefer, Ph.D.  
*Chemistry*

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*Dick and Barbara Dickinson  
Professor of Chemical Engineering  
and Biochemistry*

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Geoffrey A. Blake, Ph.D.  
*Cosmochemistry and Planetary  
Science and Chemistry*  
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*Chevron Professor of Chemical  
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Mechanical Engineering*  
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*Chemistry and Biology*  
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*Warren and Katharine Schlinger  
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Richard C. Flagan, Ph.D.  
*Irma and Ross McCollum–William  
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Engineering and Professor of  
Environmental Science and  
Engineering*  
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of Chemistry, Materials Science,  
and Applied Physics*  
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Laurea h.c., Fil.Dr.h.c., D.L.h.c.  
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of the Beckman Institute*  
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*Materials Science and Chemical  
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Professor of Chemistry*  
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*Chemical Engineering*  
Aron Kuppermann, Ph.D.  
*Chemical Physics*

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*George L. Argyros Professor and  
Professor of Chemistry*  
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D.Sc.h.c., Fil.Dr.h.c., D.h.c.,  
Nobel Laureate  
*Arthur Amos Noyes Professor of  
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Stephen L. Mayo, Ph.D.  
*Bren Professor of Biology and  
Chemistry*  
B. Vincent McKoy, Ph.D.  
*Theoretical Chemistry*  
Mitchio Okumura, Ph.D.  
*Chemical Physics*  
Carl S. Parker, Ph.D.  
*Biochemistry*  
Jonas C. Peters, Ph.D.  
*Chemistry*  
Douglas C. Rees, Ph.D.<sup>1</sup>  
*Roscoe Gilkey Dickinson Professor  
of Chemistry*  
John H. Richards, Ph.D.  
*Organic Chemistry and  
Biochemistry*  
John H. Seinfeld, Ph.D., D.Sc.h.c.  
*Louis E. Nohl Professor and  
Professor of Chemical Engineering*  
Brian M. Stoltz, Ph.D.  
*Ethel Wilson Bowles and Robert  
Bowles Professor of Chemistry*  
David A. Tirrell, Ph.D., D.h.c.  
*Ross McCollum–William H.  
Corcoran Professor and Professor of  
Chemistry and Chemical  
Engineering*  
Zhen-Gang Wang, Ph.D.  
*Chemical Engineering*  
Daniel P. Weitekamp, Ph.D.  
*Chemical Physics*  
Ahmed H. Zewail, Ph.D., D.Sc.h.c.,  
D.h.c., D.Univ.h.c., D.Phil.h.c.,  
LL.D.h.c., M.D.h.c., Nobel  
Laureate  
*Linus Pauling Professor of  
Chemistry and Professor of Physics*

<sup>1</sup> Joint appointment with Howard Hughes  
Medical Institute



**Associate Professors**

Konstantinos P. Giapis, Ph.D.  
*Chemical Engineering*  
Linda C. Hsieh-Wilson, Ph.D.<sup>1</sup>  
*Chemistry*

<sup>1</sup> Joint appointment with Howard Hughes  
Medical Institute

**Assistant Professors**

Theodor Agapie, Ph.D.  
*Chemistry*  
Anand R. Asthagiri, Ph.D.  
*Chemical Engineering*  
William M. Clemons, Ph.D.  
*Biochemistry*  
Thomas F. Miller III, Ph.D.  
*Chemistry*  
Sarah E. Reisman, Ph.D.  
*Chemistry*  
Shu-ou Shan, Ph.D.  
*Chemistry*  
Christina D. Smolke, Ph.D.  
*Chemical Engineering*

**Lecturers**

Kathryn Bikle, M.A.  
*Chemistry*  
Michael W. Day, Ph.D.  
*Chemistry*  
Michael G. Hill, Ph.D.  
*Chemistry*  
Sonjong Hwang, Ph.D.  
*Chemistry*  
Jay Labinger, Ph.D.  
*Chemistry*  
James Maloney, M.S.  
*Chemistry*  
Mona Shahgholi, Ph.D.  
*Chemistry*  
Michael Vacic, Ph.D.  
*Chemical Engineering*  
Scott Virgil, Ph.D.  
*Chemistry*

**Faculty Associates**

Jay A. Labinger, Ph.D.  
*Chemistry*  
Jay R. Winkler, Ph.D.  
*Chemistry*

**Moore Distinguished Scholar**

Shannon S. Stahl, Ph.D.  
*Chemistry*

**Visiting Associates**

Richard J. Bing, M.D., D.h.c.,  
M.D.h.c.  
*Chemistry*  
Pin Chen, Ph.D.  
*Chemistry*  
Ara Chutjian, Ph.D.  
*Chemistry*  
James B. Elder, M.D.  
*Chemical Engineering*  
Stephen J. Forman, M.D.  
*Chemical Engineering*  
Elmar M. Fuchs, Ph.D.  
*Chemical Engineering*  
Vernon C. Gibson, Ph.D.  
*Chemistry*  
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*Chemistry*  
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*Chemical Engineering*  
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*Chemical Engineering*  
Gholamabbas Parsafar, Ph.D.  
*Chemistry*  
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Lawrence C. Sowers, Ph.D.  
*Chemistry*  
Eric D. A. Stemp, Ph.D.  
*Chemistry*

Nagarajan Vaidehi, Ph.D.  
*Chemistry*  
Gerald E. Voecks, Ph.D.  
*Chemistry*  
Kenneth W. Wright, M.D.  
*Chemical Engineering*  
Rachid Yazami, Ph.D.  
*Chemistry*  
Yun Yen, M.D., Ph.D.  
*Chemical Engineering*

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Jay R. Winkler, Ph.D.

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*Chemical Engineering*  
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Sonjong Hwang, Ph.D.  
*Chemistry*  
Jane G. Raymond, Ph.D.  
*Chemistry*  
Mona Shahgholi, Ph.D.  
*Chemistry*

**Senior Postdoctoral Scholars**

Oh Hoon Kwon, Ph.D.  
Hyun Soon Park, Ph.D.  
Sang Tae Park, Ph.D.

**Postdoctoral Scholars**

Omar Farghaly Abdelsaboer, Ph.D.  
Ravinder Abrol, Ph.D.  
Marten Ahlquist, Ph.D.  
Nandini Ananth, Ph.D.  
Brett E. Barwick, Ph.D.  
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Bahar Bingol, Ph.D.  
Amie K. Boal, Ph.D.  
Shannon W. Boettcher, Ph.D.  
Kevin Boulware, Ph.D.

Julie C. Boulware, Ph.D.  
Jean-Baptiste Bourg, Ph.D.  
Andrew J. Boydston, Ph.D.  
Marisa C. Buzzeo, Ph.D.  
Fabrizio Carbone, Ph.D.  
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Wing Yan Chan, Ph.D.  
Shuh-Kuen Chang, Ph.D.  
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Lionel E. Cheruzel, Ph.D.  
Jun Chiba, Ph.D.  
Cheol K. Chung, Ph.D.  
Rosemary M. Conrad, Ph.D.  
Isabelle Michele Marie Darolles,  
Ph.D.  
Andrei Deev, Ph.D.  
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Michael J. Dougherty, Ph.D.  
Nathan C. Eddingsaas, Ph.D.  
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Nima Ghaderi, Ph.D.  
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Daniel A. Harki, Ph.D.  
Matthew R. Hartings, Ph.D.  
Nilay Hazari, Ph.D.  
Peter J. Heinzelman, Ph.D.  
Christopher E. Henry, Ph.D.  
Jiyoung Heo, Ph.D.  
Kevin G. Hoff, Ph.D.  
Vlad M. Iluc, Ph.D.  
Ehsan Jabbarzadeh, Ph.D.  
Keesu Jeon, Ph.D.  
Parag V. Jog, Ph.D.  
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Eric Johnson, Ph.D.  
Amanda C. Jones, Ph.D.  
Seung-Yong Jung, Ph.D.  
Yousung Jung, Ph.D.  
Jens T. Kaiser, Ph.D.  
Kathryn E. Kautzman, Ph.D.  
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Hugh I. Kim, Ph.D.  
Tetsunari Kimura, Ph.D.  
Daniel J. Koch, Ph.D.  
Oleksandr Kutana, Ph.D.  
Maksym Kryvohuz, Ph.D.  
Tsun Yin Lai, Ph.D.  
Vinh Q. Lam, Ph.D.  
Changshi Lao, Ph.D.

Vincent Lavallo, Ph.D.  
 Song-Gil Lee, Ph.D.  
 Oded Lewinson, Ph.D.  
 Jared C. Lewis, Ph.D.  
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 Zhenfeng Liu, Ph.D.  
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 Michael J. Mackel, Ph.D.  
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 Lidong Qin, Ph.D.  
 Xiangdong Qin, Ph.D.  
 Suresh Kumar Ramasamy, Ph.D.  
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 Cara Ann Tracewell, Ph.D.  
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 Seok-ho Yu, Ph.D.  
 Aycan Yurtsever, Ph.D.  
 Aihua Zhang, Ph.D.  
 Dawei Zhang, Ph.D.  
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#### Visitors

Monica Alcaraz, A.A.  
*Chemistry*  
 Diego Benitez, Ph.D.  
*Chemistry*  
 Stephen M. Contakes, Ph.D.  
*Chemistry*  
 Koji Endo, M.S.  
*Chemistry*  
 Daniel Ess, Ph.D.  
*Chemistry*  
 Tor Kit Goh, B.S.  
*Chemistry*  
 Sang Soo Han, Ph.D.  
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 Xiaoqing Han, Ph.D.  
*Chemistry*  
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*Chemistry*  
 Judy E. Kim, Ph.D.  
*Chemistry*  
 Ralf Langen, Ph.D.  
*Chemistry*  
 Yan Poon, Ph.D.  
*Chemistry*  
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*Frank J. Gilloon Distinguished  
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Professor of Physics and Applied  
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Applied Physics*  
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*Materials Science and Chemical  
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*Environmental Science and  
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Environmental Science*  
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*Charles Lee Powell Professor of  
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*Theoretical Physics and Computer  
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Computation and Neural Systems*  
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*Computer Science and Electrical  
Engineering*  
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*Fletcher Jones Professor of Applied  
and Computational Mathematics  
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Professor of Control and  
Dynamical Systems*  
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of Aeronautics and Mechanical  
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*Aeronautics and Civil Engineering*  
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*Applied Physics and Mechanical  
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Electrical Engineering*  
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*Theodore von Kármán Professor of  
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Guruswami Ravichandran, Ph.D.  
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Engineering*  
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*Theodore von Kármán Professor of  
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Computational Mathematics*  
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*Louis E. Nobl Professor and  
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Joseph E. Shepherd, Ph.D.  
*C. L. "Kelly" Johnson Professor of  
Aeronautics and Professor of  
Mechanical Engineering*  
Yu-Chong Tai, Ph.D.  
*Electrical Engineering and  
Mechanical Engineering*  
Sandra M. Troian, Ph.D.  
*Applied Physics, Aeronautics, and  
Mechanical Engineering*  
Kerry J. Vahala, Ph.D.  
*Ted and Ginger Jenkins Professor  
of Information Science and  
Technology and Professor of Applied  
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*Electrical Engineering*  
Paul O. Wennberg, Ph.D.  
*R. Stanton Avery Professor of  
Atmospheric Chemistry and  
Environmental Science and  
Engineering*

Amnon Yariv, Ph.D.  
*Martin and Eileen Summerfield  
Professor of Applied Physics and  
Professor of Electrical Engineering*

#### Associate Professors

Jess F. Adkins, Ph.D.  
*Geochemistry and Global  
Environmental Science*  
Mathieu Desbrun, Ph.D.  
*Computer Science*  
Jared R. Leadbetter, Ph.D.  
*Environmental Microbiology*  
Hideo Mabuchi, Ph.D.  
*Physics and Control and  
Dynamical Systems*  
Oskar J. Painter, Ph.D.  
*Applied Physics*  
Niles A. Pierce, D.Phil.  
*Applied and Computational  
Mathematics and Bioengineering*  
Tapio Schneider, Ph.D.  
*Environmental Science and  
Engineering*  
Christopher Umans, Ph.D.  
*Computer Science*  
Erik Winfree, Ph.D.  
*Computer Science, Computation  
and Neural Systems, and  
Bioengineering*

#### Assistant Professors

Marc W. Bockrath, Ph.D.  
*Applied Physics*  
John O. Dabiri, Ph.D.  
*Aeronautics and Bioengineering*  
Chiara Daraio, Ph.D.  
*Aeronautics and Applied Physics*  
Michael Elowitz, Ph.D.  
*Biology and Applied Physics  
Bren Scholar*  
Azita Emami-Neyestanak, Ph.D.  
*Electrical Engineering*  
Julia R. Greer, Ph.D.  
*Materials Science*  
Chin-Lin Guo, Ph.D.  
*Bioengineering and Applied Physics*  
Tracey C. Ho, Ph.D.  
*Electrical Engineering and  
Computer Science*  
Swaminathan Krishnan, Ph.D.  
*Civil Engineering and Geophysics*

Nadia Lapusta, Ph.D.  
*Mechanical Engineering and  
Geophysics*  
Beverley J. McKeon, Ph.D.  
*Aeronautics*  
Houman Owhadi, Ph.D.  
*Applied and Computational  
Mathematics and Control and  
Dynamical Systems*  
Athanassios G. Siapas, Ph.D.  
*Computation and Neural Systems*  
Joel A. Tropp, Ph.D.  
*Applied and Computational  
Mathematics*  
Axel van de Walle, Ph.D.  
*Materials Science*  
Adam Wierman, Ph.D.  
*Computer Science*  
Changhuei Yang, Ph.D.  
*Electrical Engineering and  
Bioengineering*

#### Instructors

Pak-Wing Fok, Ph.D.  
*Theodore von Kármán Instructor  
in Applied and Computational  
Mathematics*  
Anders C. Hansen, Ph.D.  
*Theodore von Kármán Instructor  
in Applied and Computational  
Mathematics*  
Pengchong Yan, Ph.D.  
*Theodore von Kármán Instructor  
in Applied and Computational  
Mathematics*

#### Lecturers

Channing Ahn, Ph.D.  
*Materials Science*  
Nathan L. Albin, Ph.D.<sup>1</sup>  
*Applied and Computational  
Mathematics*  
Aaron D. Ames, Ph.D.<sup>1</sup>  
*Control and Dynamical Systems*  
Dimitros Antsos, Ph.D.  
*Electrical Engineering*  
David A. Boyd, Ph.D.  
*Mechanical Engineering*  
James B. Breckinridge, Ph.D.  
*Aeronautics*  
Curtis L. Collins, Ph.D.  
*Mechanical Engineering*

Gregory L. Davis, Ph.D.  
*Aeronautics*  
Antony R. H. Fender, B.S.  
*Engineering*  
Glen A. George, M.S.  
*Computer Science and Electrical  
Engineering*  
Alireza Ghaffari, B.S.  
*Applied Physics*  
Alex D. Groce, Ph.D.  
*Computer Science*  
Jon Hamkins, Ph.D.<sup>1</sup>  
*Electrical Engineering*  
Matthew C. Heverly, Ph.D.<sup>1</sup>  
*Mechanical Engineering*  
David J. Hill, Ph.D.<sup>1</sup>  
*Aeronautics*  
Gerard J. Holzmann, Ph.D.  
*Computer Science*  
Russell D. Lansford, Ph.D.  
*Bioengineering*  
Eugene Lavretsky, Ph.D.  
*Control and Dynamical Systems*  
Barry B. Megdal, Ph.D.  
*Electrical Engineering*  
Leonard Mlodinow, Ph.D.<sup>1</sup>  
*Computation and Neural Systems*  
Bruce Moision, Ph.D.<sup>1</sup>  
*Electrical Engineering*  
Sujit Nair, Ph.D.<sup>1</sup>  
*Control and Dynamical Systems*  
Jeffrey Ovall, Ph.D.<sup>1</sup>  
*Applied and Computational  
Mathematics*  
Michael T. Pauken, Ph.D.<sup>1</sup>  
*Mechanical Engineering*  
Danny Petrusek, Ph.D.  
*Bioengineering*  
Donald Pinkston III, B.S.  
*Computer Science*  
James E. Polk, Ph.D.  
*Aeronautics*  
Bruno M. Quadrelli, Ph.D.  
*Aeronautics*  
Kevin J. Quirk, Ph.D.<sup>1</sup>  
*Electrical Engineering*  
Carol W. Readhead, Ph.D.  
*Engineering*  
Rodney Rojas  
*Mechanical Engineering*  
Melissa Saenz, Ph.D.<sup>1</sup>  
*Computation and Neural Systems*  
Peter C. Sercel, Ph.D.<sup>1</sup>  
*Applied Physics*  
John P. Van Deusen, B.S.  
*Mechanical Engineering*

Michael C. Vanier, Ph.D.  
*Computer Science*  
Jakob J. Van Zyl, Ph.D.  
*Electrical Engineering and  
Planetary Science*  
Michael Watkins, Ph.D.  
*Aeronautics*

<sup>1</sup> In residence 2007–08

#### Senior Research Associates

Channing C. Ahn, Ph.D.  
*Materials Science*  
Agustin J. Colussi, Ph.D.  
*Environmental Science and  
Engineering*  
Douglas G. MacMynowski, Ph.D.  
*Control and Dynamical Systems*  
Paul W. K. Rothmund, Ph.D.  
*Bioengineering, Computer Science,  
and Computation and Neural  
Systems*

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Marios D. Demetriou, Ph.D.  
*Materials Science*  
William B. Dickson, Ph.D.  
*Bioengineering*  
David J. Hill, Ph.D.  
*Aeronautics*  
Michael Hucka, Ph.D.  
*Control and Dynamical Systems*

#### Faculty Associates

Christoph C. Adami, Ph.D.  
*Computation and Neural Systems*  
Carol Carmichael, Ph.D.  
*Engineering and Applied Science*  
Gerard J. Holzmann, Ph.D.  
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Sander Weinreb, Ph.D.  
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*Applied Physics*  
Kenneth A. Pickar, Ph.D.  
*Mechanical Engineering*  
Vilupanur A. Ravi, Ph.D.  
*Bioengineering and Materials Science*

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Simon L. Clegg, Ph.D.  
*Environmental Science and Engineering*  
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*Computation and Neural Systems*  
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Aaron Drake, Ph.D.  
*Aeronautics*  
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*Aeronautics*  
Jacqueline G. Gish, Ph.D.  
*Aeronautics*  
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*Electrical Engineering*  
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*Applied Physics*

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*Applied and Computational Mathematics and Bioengineering*  
James E. Polk, Ph.D.  
*Aeronautics*  
Edmond Rambod, Ph.D.  
*Aeronautics*  
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Tomoo Saito, Ph.D.  
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*Geological and Planetary Science and Environmental Engineering Science*  
Tina Salmassi, Ph.D.  
*Environmental Science and Engineering*  
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*Materials Science*  
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*Center for Advanced Computing Research*  
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*Center for Advanced Computing Research*

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*Civil Engineering*  
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*Materials Science*  
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*Center for Advanced Computing Research*

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*Social and Information Sciences Laboratory*  
David Soloveichik, Ph.D.  
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*Center for the Mathematics of Information*  
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*Beckman Institute Postdoctoral Scholar in Materials Science*  
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*Chandler Family Professor of  
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Environmental Science*

Oded Aharonson, Ph.D.  
*Planetary Science*

Paul D. Asimow, Ph.D.  
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Re'em Sari, Ph.D.  
*Astrophysics and Planetary Science*

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*Environmental Science and  
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*Environmental Science and  
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*Planetary Science*

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*Geobiology*

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Kathryn Bikle, M.A.  
*Geology*

**Senior Research Associate**

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*Geophysics*

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*Geochemistry*

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*Geobiology*

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*Geophysics*

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*Geophysics*

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*Planetary Science*

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*Planetary Science*

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*Geology*

John R. Beckett, Ph.D.  
*Geology*

Ma Chi, Ph.D.  
*Geochemistry*

Joachim Genrich, Ph.D.  
*Geology*

Yunbin Guan, Ph.D.  
*Geochemistry*

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*Geophysics*

Sally Newman, Ph.D.  
*Geology*

**Postdoctoral Scholars**

Alon Amrani, Ph.D.  
*Geochemistry*

Jake Bailey, Ph.D.  
*Agouron Postdoctoral Scholar*

Melinda Beaver, Ph.D.  
*Environmental Science and  
Engineering*

Pierre-Henri Blard, Ph.D.  
*Geology*

Maren Boese, Ph.D.  
*Geophysics*

Magali Bonifacie, Ph.D.  
*Geochemistry*

Tomaso Bontognali, Ph.D.  
*Geobiology*

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*O. K. Earl Postdoctoral Scholar*

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*Geology*

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*Geochemistry*

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*Economics*

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*Philosophy*  
Andrea Mattozzi, Ph.D.  
*Economics*  
Erik Snowberg, Ph.D.  
*Economics and Political Science*  
Jiji Zhang, Ph.D.  
*Philosophy*

#### Caltech-Huntington Mellon Postdoctoral Instructors

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*English*  
Gregory O'Malley, Ph.D.  
*History*  
Richard Squibbs, Ph.D.  
*English*

#### Weisman Postdoctoral Instructor

Matthew C. Hunter, Ph.D.  
*Art History*

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Michiko Ueda, Ph.D.  
*Political Science*

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*Art History*  
Charles de Bedts, Ph.D.  
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*Anthropology*  
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*Spanish*  
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*Chinese*  
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*Art History*  
Vanessa Woods, Ph.D.  
*Psychology*

#### Senior Research Associate

Tilman Sauer, Ph.D.  
*History*

#### Senior Research Fellow

Lynn K. Paul, Ph.D.  
*Psychology*

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Stuart A. Ende, Ph.D.  
*Literature*

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*History*  
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*Humanities*

#### Eleanor Searle Visiting Professor

Gerhard J. M. Krige, Ph.D.  
*History*

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Anthony M. Kwasnica, Ph.D.  
*Economics*

#### Visiting Assistant Professor

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*Philosophy*

#### Mellon Visiting Instructor

Nicholas S. Popper, Ph.D.  
*History*

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*Finance*  
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*Economics*  
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*History*  
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*Economics*

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*Psychology and Neuroscience*  
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*Neuroscience, Psychology*  
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*Economics*  
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*Neuroeconomics*

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Ze'ev Rosenkranz, M.L.S.

#### Postdoctoral Scholars

Elina Birmingham, Ph.D.  
*Psychology*  
Mickael Camus, Ph.D.  
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*Neuroscience*  
Jan Glascher, Ph.D.  
*Psychology*  
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*Neuroeconomics*  
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*Neuroscience*  
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*Neuroeconomics*  
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*Economics*  
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*Astrophysics*

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*Physics*

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Theoretical Physics*

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*Francis L. Moseley Professor of  
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*IBM Professor of Mathematics and  
Theoretical Physics*

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*Lee A. DuBridge Professor of  
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*Physics*

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D.h.c., D.Univ.h.c., D.Phil.h.c.,  
LL.D.h.c., Nobel Laureate  
*Limus Pauling Professor of  
Chemistry and Professor of Physics*

Jonas Zmuidzinas, Ph.D.  
*Physics*

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Thomas Graber, Ph.D.  
*Mathematics*

Lynne Anne Hillenbrand, Ph.D.  
*Astronomy*

Anton Kapustin, Ph.D.  
*Theoretical Physics*

Hideo Mabuchi, Ph.D.  
*Physics and Control and  
Dynamical Systems*

Gil Refael, Ph.D.  
*Theoretical Physics*

Re'em Sari, Ph.D.  
*Astrophysics and Planetary Science*

Maria Spiropulu, Ph.D.  
*Physics*

#### Assistant Professors

Rana Adhikari, Ph.D.  
*Physics*

Andrew W. Blain, Ph.D.  
*Astronomy*

Yanbei Chen, Ph.D.  
*Physics*

Sunil Golwala, Ph.D.  
*Physics*

Christopher Hirata, Ph.D.  
*Astrophysics*

Elena Montovan, Ph.D.  
*Mathematics*

Olexei Motrunich, Ph.D.  
*Theoretical Physics*

#### Instructors

Baskar Balasubramanyam, Ph.D.  
*Harry Bateman Research  
Instructor in Mathematics*

Niranjan Blaachandran, Ph.D.  
*Harry Bateman Research  
Instructor in Mathematics*

Andres E. Caicedo, Ph.D.  
*Harry Bateman Research  
Instructor in Mathematics*

Jacob S. Christiansen, Ph.D.  
*Harry Bateman Research  
Instructor in Mathematics*

Maurice Duits, Ph.D.  
*Olga Taussky and John Todd  
Instructor in Mathematics*

Amin Gholampour  
*Olga Taussky and John Todd  
Instructor in Mathematics*

Adrian Ioana  
*Olga Taussky and John Todd  
Instructor in Mathematics*

Nam-Gyu Kang  
*Olga Taussky and John Todd  
Instructor in Mathematics*

Babtiste Morin, Ph.D.  
*Harry Bateman Research  
Instructor in Mathematics*

Eric Ryckman, Ph.D.  
*Harry Bateman Research  
Instructor in Mathematics*

Fokko Van De Bult, Ph.D.  
*Harry Bateman Research  
Instructor in Mathematics*

Jiajun Wang, Ph.D.  
*Olga Taussky and John Todd  
Instructor in Mathematics*

Maksym Zinchenko, Ph.D.  
*Harry Bateman Research  
Instructor in Mathematics*

#### Lecturers

Eric D. Black, Ph.D.  
*Physics*

Thomas Gottschalk, Ph.D.  
*Physics*

Lee A. Lindblom, Ph.D.  
*Physics*

Chris Mach, B.S.  
*Physics*  
Frank Rice, M.S.  
*Physics*  
Virginio Sannibale, Ph.D.  
*Physics*  
Mark Scheel, Ph.D.  
*Physics*

#### Senior Research Associates

John Carpenter, Ph.D.  
*Astronomy*  
Sean Carroll, Ph.D.  
*Physics*  
George Helou, Ph.D.  
*Physics*  
Lee A. Lindblom, Ph.D.  
*Physics*  
Dariusz C. Lis, Ph.D.  
*Physics*  
Jay Marx, Ph.D.  
*Physics*  
Richard A. Mewaldt, Ph.D.  
*Physics*  
Timothy J. Pearson, Ph.D.  
*Radio Astronomy*

#### Senior Research Fellows

Andrew Benson, Ph.D.  
*Theoretical Cosmology*  
Kieran A. Cleary, Ph.D.  
*Astronomy*  
Andrei Mikhailov, Ph.D.  
*Physics*  
Ehud Nakar, Ph.D.  
*Astrophysics*  
Mark Scheel, Ph.D.  
*Physics*

#### Senior Faculty Associates

Charles Beichman, Ph.D.  
*Astronomy*  
James J. Bock, Ph.D.  
*Physics*  
Curt Cutler, Ph.D.  
*Physics*

#### Faculty Associate

I. Juliana Sackmann, Ph.D.  
*Physics*

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Takao Aoki, Ph.D.  
*Quantum Optics*  
Igor Bilenko, Ph.D.  
*Physics*  
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*Physics*  
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*Astronomy*  
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*Physics*  
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*Physics*  
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*Physics*  
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*Physics*  
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*Astronomy*  
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*Physics*  
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*Mathematics*  
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*Physics*

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*Physics*  
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*Physics*  
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*Physics*  
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*Astronomy*  
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*Physics*  
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*Physics*  
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*Astronomy*  
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*Astrophysics*  
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*LIGO*  
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*Physics*  
Michael D. Seiffert, Ph.D.  
*Physics*  
Eugene Serabyn, Ph.D.  
*Physics*  
Drora Shevy, Ph.D.  
*Physics*  
David H. Shoemaker, Ph.D.  
*LIGO*  
Kirill Shtengel, Ph.D.  
*Physics*

David O. Siegmund, Ph.D.  
*Mathematics*  
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*Astronomy*  
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*Astronomy*  
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*LIGO*  
Massimo Tinto, Ph.D.  
*Theoretical Physics*  
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*Astronomy*  
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*Astronomy*  
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*Mathematics*  
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*Physics*  
Sanichiro Yoshida, Ph.D.  
*Physics*

#### Members of the Professional Staff

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Stuart Anderson, Ph.D.  
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Hiroaki Yamamoto, Ph.D.  
Ren-Yuan Zhu, Ph.D.  
Michael Zucker, Ph.D.  
John Zweizig, Ph.D.

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Denis Barcats, Ph.D.  
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*Astrophysics*  
Kipp Cannon, Ph.D.  
*Physics*  
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*Physics*

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*Astronomy*  
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*Physics*

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*Astrophysics*  
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*Astrophysics, IPAC*  
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*Physics*  
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*Astrophysics, IPAC*  
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*Theoretical Relativity*  
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*Astrophysics, IPAC*

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*Astrophysics, IPAC*

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*Astronomy, IPAC*

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*Astronomy, IPAC*

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*Astronomy*

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*Experimental Physics*

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*Physics*

Christina V. Torres, Ph.D.  
*Physics*

Tanya C. Urrutia, Ph.D.  
*IPAC*

Ramon Van Handel, Ph.D.  
*Physics*

Jeremie Vaubaillon, Ph.D.  
*IPAC*

Jing Xia, Ph.D.  
*Experimental Physics*

Jie Yang, Ph.D.  
*Physics*

Michel Zamojski, Ph.D.  
*Astronomy, IPAC*

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*University Archivist, Faculty Associate*

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*University Librarian*

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*Library Operations Administrator*

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*Business Manager*

Sandra S. Garstang, B.S.  
*Manager, Circulation Services*

Jim O'Donnell, M.S. (L.S.)  
*Head, Collections, Information and Research Services*

Eric F. Van de Velde, Ph.D.  
*Director, Library Information Technology*

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Betsy Coles, B.A.  
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Dana Roth, M.S., M.S. (L.S.)  
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Laura Smart, M.S. (L.I.S.)  
Daniel Taylor, M.A., M.A. (L.S.)  
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*Director of Student Information  
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TBA  
*Dean of Graduate Studies*

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 California State University = Cal State L.A.

**Jean-Lou Chameau, Ph.D.**, *President;*  
*Professor of Civil Engineering, Environmental  
 Science and Engineering, and Mechanical  
 Engineering*  
 Ing., École Nationale Supérieure d'Arts et  
 Métiers, 1976; M.S., Stanford University,  
 1977; Ph.D., 1981. Professor of Civil  
 Engineering, Environmental Science and  
 Engineering, and Mechanical Engineering  
 2006-. President, 2006-.

**John Norman Abelson, Ph.D.**, *George  
 Beadle Professor of Biology, Emeritus*  
 B.S., Washington State University, 1960;  
 Ph.D., Johns Hopkins University, 1965.  
 Professor, Caltech, 1982-91; Beadle  
 Professor, 1991-2002; Beadle Professor  
 Emeritus, 2002-. Chair, Division of  
 Biology, 1989-95.

**Yaser S. Abu-Mostafa, Ph.D.**, *Professor of  
 Electrical Engineering and Computer Science*  
 B.Sc., Cairo University, 1979; M.S.E.E.,  
 Georgia Institute of Technology, 1981;  
 Ph.D., Caltech, 1983. Garrett Research  
 Fellow in Electrical Engineering, 1983;  
 Assistant Professor, 1983-89; Associate  
 Professor, 1989-94; Professor, 1994-.

**Allan James Acosta, Ph.D.**, *Richard L. and  
 Dorothy M. Hayman Professor of Mechanical  
 Engineering, Emeritus*  
 B.S., Caltech, 1945; M.S., 1949; Ph.D.,  
 1952. Assistant Professor, 1954-58;  
 Associate Professor, 1958-66; Professor,  
 1966-90; Hayman Professor, 1990-93.  
 Hayman Professor Emeritus, 1993-.  
 Executive Officer for Mechanical  
 Engineering, 1988-93.

**Christoph Carl Adami, Ph.D.**, *Faculty  
 Associate in Computation and Neural Systems;*  
*Lecturer in Computation and Neural Systems*  
 B.S., University of Bonn, 1982; Dipl., 1988;  
 M.A., State University of New York (Stony  
 Brook), 1988; Ph.D., 1991. Division  
 Research Fellow, Caltech, 1992-95;  
 Lecturer, 1996-2004; 2006-07; Senior  
 Research Fellow, 1995-2000; Faculty  
 Associate, 2001-.

**Rana Adhikari, Ph.D.**, *Assistant Professor of  
 Physics*  
 B.S., University of Florida (Gainesville),  
 1998; Ph.D., Massachusetts Institute of  
 Technology, 2004. Caltech, 2006-.

**Jess F. Adkins, Ph.D.**, *Associate Professor of  
 Geochemistry and Global Environmental  
 Science*  
 B.S., Haverford College, 1990; Ph.D.,  
 Massachusetts Institute of Technology,  
 1998. Assistant Professor, Caltech, 2000-06;  
 Associate Professor, 2006-.

**Ralph Adolphs, Ph.D.**, *Bren Professor of  
 Psychology and Neuroscience and Professor of  
 Biology; Director, Brain Imaging Center*  
 B.S., Stanford University, 1986; M.S., 1986;  
 Ph.D., Caltech, 1992. Professor of  
 Psychology and Neuroscience, 2004-05;  
 Bren Professor, 2005-; Professor of Biology,  
 2005-. Director, 2008-.

**Andreas Aebi, Ph.D.**, *Lecturer in German  
 M.A., University of Southern California,  
 1970; Ph.D., 1974. Lecturer in French,  
 Caltech, 1978; Lecturer in German,  
 1978-83; 1986-; Instructor in German,  
 1983-86.*

**Theodor Agapic, Ph.D.**, *Assistant Professor  
 of Chemistry*  
 B.S., Massachusetts Institute of Technology,  
 2001; Ph.D., Caltech, 2007. Assistant  
 Professor, 2009-.

**Oded Aharonson, Ph.D.**, *Associate Professor  
 of Planetary Science*  
 B.S., Cornell University, 1994; M.Eng.,  
 1995; Ph.D., Massachusetts Institute of  
 Technology, 2002. Assistant Professor,  
 Caltech, 2002-08; Associate Professor,  
 2008-.

**Channing C. Ahn, Ph.D.**, *Senior Research  
 Associate in Materials Science; Lecturer in  
 Materials Science*  
 B.S., University of California, 1979; M.S.,  
 1981; Ph.D., University of Bristol, 1985.  
 Senior Research Fellow, Caltech, 1987-92;  
 Senior Research Associate, 1992-; Lecturer,  
 1988; 1990-2007.

**Thomas J. Ahrens, Ph.D.**, *Fletcher Jones  
 Professor of Geophysics, Emeritus*  
 B.S., Massachusetts Institute of Technology,  
 1957; M.S., Caltech, 1958; Ph.D.,  
 Rensselaer Polytechnic Institute, 1962.  
 Associate Professor of Geophysics, Caltech,  
 1967-76; Professor, 1976-2004; W. M.  
 Keck Foundation Professor of Earth  
 Sciences, 1996-2001; Jones Professor,  
 2004-05; Jones Professor Emeritus, 2005-.

**Arden Leroy Albee, Ph.D.**, *Professor of  
 Geology and Planetary Science, Emeritus*  
 A.B., Harvard College, 1950; A.M., Harvard  
 University, 1951; Ph.D., 1957. Visiting  
 Assistant Professor, Caltech, 1959-60;  
 Associate Professor of Geology, 1960-66;  
 Professor, 1966-99; Professor of Geology  
 and Planetary Science, 1999-2002;  
 Professor Emeritus, 2002-. Academic  
 Officer, Geological and Planetary Sciences,

1971–79; Chief Scientist, Jet Propulsion Laboratory, 1979–84; Dean of Graduate Studies, 1984–2000.

**Nathan L. Albin, Ph.D.**, *Lecturer in Applied and Computational Mathematics*  
B.S., University of Hawaii, 2001; M.S., University of Utah, 2004; Ph.D., 2006. Caltech, 2008.

**Clarence R. Allen, Ph.D.**, *Professor of Geology and Geophysics, Emeritus*  
B.A., Reed College, 1949; M.S., Caltech, 1951; Ph.D., 1954. Assistant Professor, 1955–59; Associate Professor, 1959–64; Professor, 1964–90; Professor Emeritus, 1990–. Interim Director, Seismological Laboratory, 1965–67; Acting Chairman, Division of Geology, 1967–68.

**Mark Andrew Allen, Ph.D.**, *Visiting Associate in Planetary Science*  
B.A., Columbia University, 1971; Ph.D., Caltech, 1976. Member of the Technical Staff, Jet Propulsion Laboratory, 1984–. Research Fellow, Caltech, 1978–81; Institute Visiting Associate, 1987–88; Visiting Associate, 1981–86; 1988–96; 2001–08; Faculty Associate, 1996–2001.

**John Morgan Allman, Ph.D.**, *Frank P. Hixon Professor of Neurobiology*  
B.A., University of Virginia, 1965; A.M., University of Chicago, 1968; Ph.D., 1971. Assistant Professor, Caltech, 1974–77; Associate Professor, 1977–84; Professor, 1984–89; Hixon Professor, 1989–.

**R. Michael Alvarez, Ph.D.**, *Professor of Political Science*  
B.A., Carleton College, 1986; M.A., Duke University, 1990; Ph.D., 1992. Assistant Professor, Caltech, 1992–95; Associate Professor, 1995–2002; Professor, 2002–.

**Marcio Alves Ferreira, Ph.D.**, *Visiting Associate in Biology*  
M.S., Federal University of Rio de Janeiro, 1993; Ph.D., 1997. Professor, 2005–. Caltech, 2003–05; 2007.

**Aaron D. Ames, Ph.D.**, *Lecturer in Control and Dynamical Systems*  
B.S., University of St. Thomas, 2001; M.S., University of California, 2006; Ph.D., 2006. Caltech, 2007.

**Jean-Paul Ampuero, Ph.D.**, *Assistant Professor of Seismology*  
B.S., University of Paris VII, 1997; M.S., 1998; Ph.D., 2002. Caltech, 2008–.

**Richard A. Andersen, Ph.D.**, *James G. Boswell Professor of Neuroscience*  
B.S., University of California (Davis), 1973; Ph.D., University of California (San Francisco), 1979. Caltech, 1993–.

**David Jeffrey Anderson, Ph.D.**, *Roger W. Sperry Professor of Biology; Investigator, Howard Hughes Medical Institute*  
A.B., Harvard University, 1978; Ph.D., Rockefeller University, 1983. Assistant Professor, Caltech, 1986–92; Associate Professor, 1992–96; Professor, 1996–2004; Sperry Professor, 2004–. Assistant Investigator, 1989–92; Associate Investigator, 1992–97; Investigator, 1997–.

**Don Lynn Anderson, Ph.D.**, *Crafoord Laureate, Eleanor and John R. McMillan Professor of Geophysics, Emeritus*  
B.S., Rensselaer Polytechnic Institute, 1955; M.S., Caltech, 1958; Ph.D., 1962. Research Fellow, 1962–63; Assistant Professor, 1963–64; Associate Professor, 1964–68; Professor, 1968–89; McMillan Professor, 1989–2002; McMillan Professor Emeritus, 2002–. Director, Seismological Laboratory, 1967–89.

**Robert Charles Anderson, Ph.D.**, *Lecturer in Geology*  
B.S., Old Dominion University, 1979; M.S., 1985; Ph.D., University of Pittsburgh, 1995. Caltech, 2008.

**Fred Colvig Anson, Ph.D., D.h.c.**, *Elizabeth W. Gilloon Professor of Chemistry, Emeritus*  
B.S., Caltech, 1954; Ph.D., Harvard University, 1957; D.h.c., University of Paris VII, 1993. Instructor, Caltech, 1957–58; Assistant Professor, 1958–62; Associate Professor, 1962–68; Professor, 1968–95; Gilloon Professor, 1995–2001; Gilloon Professor Emeritus, 2001–. Executive Officer for Chemistry, 1973–77; Chairman, Division of Chemistry and Chemical Engineering, 1984–94.

**Erik Karl Antonsson, Ph.D.**, *Professor of Mechanical Engineering*  
B.S., Cornell University, 1976; M.S., Massachusetts Institute of Technology, 1978; Ph.D., 1982. Assistant Professor, Caltech, 1984–90; Associate Professor, 1990–97; Professor, 1997–. Executive Officer for Mechanical Engineering, 1998–2002; Chief Technologist, Jet Propulsion Laboratory, 2002–.

**Dimitrios Antsos, Ph.D.**, *Lecturer in Electrical Engineering*  
B.S., Caltech, 1990; M.S., 1991; Ph.D., 1994. Lecturer, 1994–99; 2004–08.

**Takao Aoki, Ph.D.**, *Visiting Associate in Quantum Optics*  
B.E., University of Tokyo, 1997; M.E., 1999; Ph.D., 2001. Research Associate, 2001–. Caltech, 2006–09.

**Tom M. Apostol, Ph.D.**, *Professor of Mathematics, Emeritus*  
B.S., University of Washington, 1944; M.S., 1946; Ph.D., University of California, 1948. Assistant Professor, Caltech, 1950–56; Associate Professor, 1956–62; Professor, 1962–92; Professor Emeritus, 1992–.

**Jasmina Arifovic, Ph.D.**, *Visiting Associate in Economics*  
B.A., University of Sarajevo, 1981; M.A., University of Chicago, 1988; Ph.D., 1991. Professor, Simon Fraser University (Canada), 2002–. Visiting Associate Professor, Caltech, 1999–2001; Visiting Associate, 2002–08.

**Dmytro Arinkin, Ph.D.**, *Scott Russell Johnson Senior Research Fellow in Mathematics; Lecturer in Mathematics*  
B.A., Kharkov State University (Ukraine), 1997; Ph.D., Harvard University, 2002. Johnson Senior Research Fellow, Caltech, 2005–08; Lecturer, 2005–07.

**Gloria Arjona, Ph.D.**, *Lecturer in Spanish*  
B.A., California State University, 1993; M.A., University of Southern California, 1997; Ph.D., University of Southern California, 2002. Caltech, 2000–08.

**Frances Hamilton Arnold, Ph.D.**, *Dick and Barbara Dickinson Professor of Chemical Engineering and Biochemistry*  
B.S., Princeton University, 1979; Ph.D., University of California, 1985. Visiting Associate, Caltech, 1986; Assistant Professor of Chemical Engineering, 1987–92; Associate Professor, 1992–96; Professor, 1996–99; Professor of Chemical Engineering and Biochemistry, 1999–2000; Dickinson Professor, 2000–.

**Michael Aschbacher, Ph.D.**, *Shaler Arthur Hanisch Professor of Mathematics*  
B.S., Caltech, 1966; Ph.D., University of Wisconsin, 1969. Bateman Research Instructor, Caltech, 1970–72; Assistant Professor, 1972–74; Associate Professor, 1974–76; Professor, 1976–96; Hanisch Professor, 1996–. Executive Officer for Mathematics, 1991–94.

**Paul David Asimow, Ph.D.**, *Associate Professor of Geology and Geochemistry*  
A.B., Harvard University, 1991; M.S., Caltech, 1993; Ph.D., 1997. Assistant Professor, 1999–2005; Associate Professor, 2005–.

**Anand R. Asthagiri, Ph.D.**, *Assistant Professor of Chemical Engineering*  
B.S., Cornell University, 1995; Ph.D., Massachusetts Institute of Technology, 2000. Caltech, 2002–.

**Harry A. Atwater, Jr., Ph.D.**, *Howard Hughes Professor and Professor of Applied Physics and Materials Science*  
B.S., Massachusetts Institute of Technology, 1982; M.S., 1983; Ph.D., 1987. Assistant Professor of Applied Physics, Caltech, 1988–94; Associate Professor, 1994–99; Professor of Applied Physics and Materials Science, 1999–; Howard Hughes Professor, 2002–.

**Jean-Philippe Avouac, Doctorat, Habil.**, *Professor of Geology; Director, Tectonics Observatory*  
Dipl., École Polytechnique, 1987; Doctorat, University of Paris VII, 1991; Habil., 1992. Professor, Caltech, 2003–. Director, 2004–.

**John Dickson Baldeschwieler, Ph.D.**, *J. Stanley Johnson Professor and Professor of Chemistry, Emeritus*  
B.Chem.E., Cornell University, 1956; Ph.D., University of California, 1959. Professor, Caltech, 1973–96; Johnson Professor and Professor of Chemistry, 1996–99; Johnson Professor and Professor Emeritus, 1999–. Chairman, Division of Chemistry and Chemical Engineering, 1973–78.

**David Baltimore, Ph.D., D.Sc.h.c., D.Phil.h.c., Nobel Laureate**, *Robert Andrews Millikan Professor of Biology*  
B.A., Swarthmore College, 1960; Ph.D., Rockefeller University, 1963; D.Sc.h.c., Swarthmore College; Mount Holyoke College; Mount Sinai Medical Center; Bard College; University of Helsinki; Cold Spring Harbor Laboratory; University of Alabama; California Polytechnic State University; Columbia University; Yale University; Rockefeller University; Harvard University; D.Phil.h.c., Weizmann Institute of Science. Professor, Caltech, 1997–2006; Millikan Professor, 2006–. President, 1997–2006; President Emeritus, 2006–.

**Mladen Barbic, Ph.D.**, *Visiting Associate in Physics*  
Ph.D., University of California (San Diego), 2000. Assistant Professor, California State University (Long Beach), 2003–. Caltech, 2003–08.

**Barry Clark Barish, Ph.D., Laurea h.c., Ronald and Maxine Linde Professor of Physics, Emeritus  
B.A., University of California, 1957; Ph.D., 1962; Laurea h.c., University of Bologna. Research Fellow, Caltech, 1963–66; Assistant Professor, 1966–69; Associate Professor, 1969–72; Professor, 1972–91; Linde Professor, 1991–2005; Linde Professor Emeritus, 2005–. Principal Investigator of LIGO, 1994–97; Director, LIGO, 1997–2006.**



**Rennan Barkana, Ph.D., Moore**  
*Distinguished Scholar*  
B.A., University of Pennsylvania, 1993;  
Ph.D., Massachusetts Institute of  
Technology, 1997. Senior Lecturer, Tel Aviv  
University, 2001–. Caltech, 2008.

**Charles Andrew Barnes, Ph.D., Professor**  
*of Physics, Emeritus*  
B.A., McMaster University, 1943; M.A.,  
University of Toronto, 1944; Ph.D.,  
University of Cambridge, 1950. Research  
Fellow, Caltech, 1953–54; Senior Research  
Fellow, 1954–58; Associate Professor,  
1958–62; Professor, 1962–92; Professor  
Emeritus, 1992–.

**Alan Barr, Ph.D., Professor of Computer**  
*Science*  
B.S., Rensselaer Polytechnic Institute, 1973;  
M.S., 1976; Ph.D., 1983. Research Fellow,  
Caltech, 1984; Assistant Professor, 1984–90;  
Associate Professor, 1990–98; Professor,  
1998–. Executive Officer for Computer  
Science, 2000–01.

**Jim Barry, B.A., Lecturer in Art—Drawing,**  
*Painting, Silkscreen, Airbrush*  
B.A., University of California (Santa  
Barbara), 1972. Caltech, 1999–2008.

**Yair Bartal, Ph.D., Visiting Associate in**  
*Computer Science*  
Ph.D., Tel Aviv University, 1995. Associate  
Professor, Hebrew University of Jerusalem,  
2000–. Caltech, 2006–08.

**Jacqueline K. Barton, Ph.D., D.Sc.h.c.,**  
**D.L.h.c., Arthur and Marian Hanisch**  
*Memorial Professor and Professor of Chemistry*  
A.B., Barnard College, 1974; Ph.D.,  
Columbia University, 1978; D.Sc.h.c., New  
Jersey Institute; Kenyon College; Yale  
University; Hamilton College; Williams  
College; Lawrence University; D.L.h.c.,  
Skidmore College. Visiting Associate,  
Caltech, 1989; Professor, 1989–; Hanisch  
Professor, 1997–.

**Elaine L. Bearer, M.D., Ph.D., Visiting**  
*Associate in Biology*  
B.M., Manhattan School of Music, 1970;  
M.A., New York University, 1973; M.D.,  
University of California (San Francisco),  
1983; Ph.D., 1983. Professor, Brown  
University, 2004–. Visiting Associate in  
Biology, Caltech, 2004; 2005–09; Moore  
Distinguished Scholar, 2004–05.

**Jesse Lee Beauchamp, Ph.D., Mary and**  
*Charles Ferkel Professor of Chemistry*  
B.S., Caltech, 1964; Ph.D., Harvard  
University, 1967. Noyes Research  
Instructor, Caltech, 1967–69; Assistant  
Professor, 1969–71; Associate Professor,  
1971–74; Professor, 1974–2000, Ferkel  
Professor, 2000–.

**James L. Beck, Ph.D., Professor of**  
*Engineering and Applied Science*  
B.Sc., University of Auckland, 1969; M.Sc.,  
1970; Ph.D., Caltech, 1979. Assistant  
Professor of Civil Engineering, 1981–87;  
Associate Professor, 1987–96; Professor of  
Applied Mechanics and Civil Engineering,  
1996–2005; Professor of Engineering and  
Applied Science, 2005–. Executive Officer  
for Applied Mechanics and Civil  
Engineering, 1993–98.

**Charles Beichman, Ph.D., Senior Faculty**  
*Associate in Astronomy*  
A.B., Harvard College, 1973; M.S.  
(Astronomy), University of Hawaii, 1975;  
M.S. (Physics), 1976; Ph.D., 1979. Visiting  
Associate, Caltech, 1991–99; 2003–05;  
Senior Faculty Associate, 2005–09.

**Josette Bellan, Ph.D., Visiting Associate in**  
*Mechanical Engineering*  
B.S., Lycee Jules Ferry, 1964; M.S.,  
University of Sciences (Paris), 1969; M.S.,  
Princeton University, 1972; Ph.D., 1974.  
Member of the Technical Staff, Jet  
Propulsion Laboratory, 1994–. Lecturer in  
Jet Propulsion, Caltech, 1992–93; Visiting  
Associate in Aeronautics, 1995–2006;  
Visiting Associate in Mechanical  
Engineering, 2006–09.

**Paul Murray Bellan, Ph.D., Professor of**  
*Applied Physics*  
B.Sc., University of Manitoba, 1970; M.A.,  
Princeton University, 1972; Ph.D., 1976.  
Assistant Professor, Caltech, 1977–83;  
Associate Professor, 1983–89; Professor,  
1990–.

**Serge Belongie, Ph.D., Visiting Associate in**  
*Electrical Engineering*  
B.S., Caltech, 1995; M.S., University of  
California, 1997; Ph.D., 2000. Associate  
Professor, University of California (San  
Diego), 1996–. Visiting Associate, Caltech,  
2008.

**Shelley M. Bennett, Ph.D., Lecturer in Art**  
*History*  
B.A., University of California (Riverside),  
1969; M.A., University of California (Los  
Angeles), 1975; Ph.D., 1977. Caltech,  
1986–2008.

**Andrew Benson, Ph.D., Senior Research**  
*Fellow in Theoretical Cosmology*  
M.Phys., University of Leicester, 1997;  
Ph.D., University of Durham, 2000.  
Caltech, 2006–09.

**John Edward Bercaw, Ph.D., Centennial**  
*Professor of Chemistry*  
B.S., North Carolina State University, 1967;  
Ph.D., University of Michigan, 1971.  
Arthur Amos Noyes Research Fellow,  
Caltech, 1972–74; Assistant Professor,  
1974–77; Associate Professor, 1977–79;

Professor, 1979–93; Shell Distinguished  
Professor, 1985–90; Centennial Professor,  
1993–. Executive Officer for Chemistry,  
1999–2002.

**Kaushik Bhattacharya, Ph.D., Professor of**  
*Mechanics and Materials Science; Executive*  
*Officer for Mechanical Engineering*  
B.Tech., Indian Institute of Technology,  
1986; Ph.D., University of Minnesota,  
1991. Assistant Professor of Applied  
Mechanics, Caltech, 1993–97; Assistant  
Professor of Applied Mechanics and  
Mechanical Engineering, 1997–99;  
Associate Professor, 1999–2000; Professor,  
2000–03; Professor of Mechanics and  
Materials Science, 2003–. Executive Officer,  
2007–.

**Ronald L. Biegel, Ph.D., Visiting Associate**  
*in Aeronautics*  
B.A., Northern Illinois University, 1975;  
J.D., Loyola University (Chicago), 1985;  
M.S., State University of New York (Stony  
Brook), 1985; Ph.D., University of  
Southern California, 1989. Assistant  
Research Professor, 2004–. Caltech,  
2005–08.

**Kathryn Bikle, M.A., Lecturer in Chemistry;**  
*Lecturer in Geology*  
B.A., University of California (Santa Cruz),  
1981; M.A., University of California, 1984.  
Lecturer in Chemistry, Caltech, 2000–08;  
Lecturer in Geology, 2000–08.

**Igor Bilenko, Ph.D., Visiting Associate in**  
*Physics*  
Ph.D., Moscow State University, 1991.  
Associate Professor, 1999–. Caltech,  
2005–08.

**Delores M. Bing, M.M., Lecturer in**  
*Chamber Music; Coordinator of the Performing*  
*and Visual Arts Faculty and Program*  
B.M., Drake University, 1970; M.M.,  
University of Southern California, 1972.  
Lecturer, Caltech, 1999–2007. Coordinator,  
2007–10.

**Richard J. Bing, M.D., M.D.h.c., D.h.c.,**  
*Visiting Associate in Chemistry*  
M.D., University of Munich, 1934; M.D.,  
University of Bern, 1935; M.D.h.c.,  
University of Düsseldorf; D.h.c., University  
of Bologna. Professor of Medicine,  
University of Southern California, 1969–;  
Director, Cardiology and Intramural  
Medicine, Huntington Memorial Hospital,  
1969–. Research Associate in Engineering  
Science, Caltech, 1970–72; Visiting  
Associate in Biomedical Engineering,  
1972–78; Visiting Associate in Chemistry  
and Chemical Engineering, 1978–83;  
Visiting Associate in Chemistry, 1984–2007.

**William W. Bing, M.M., Lecturer in**  
*Concert Band and Jazz Band*  
B.M., University of Michigan, 1965; M.M.,  
University of Southern California, 1971.  
Caltech, 2000–.

**Pamela Bjorkman, Ph.D., Max Delbrück**  
*Professor of Biology; Investigator, Howard*  
*Hughes Medical Institute*  
B.A., University of Oregon, 1978; Ph.D.,  
Harvard University, 1984. Assistant  
Professor, Caltech, 1988–95; Associate  
Professor, 1995–98; Professor, 1998–2004;  
Delbrück Professor, 2004–. Assistant  
Investigator, 1989–95; Associate  
Investigator, 1995–98; Investigator,  
1998–2000; 2005–; Full Investigator,  
2000–05. Executive Officer for Biology,  
2000–06.

**Eric D. Black, Ph.D., Lecturer in Physics**  
B.S., University of Tennessee, 1991; M.S.,  
University of Colorado, 1994; Ph.D., 1996.  
Caltech, 2000–08.

**Andrew W. Blain, Ph.D., Assistant Professor**  
*of Astronomy*  
B.S., University of Cambridge, 1990; M.S.,  
1991; Ph.D., 1995. Caltech, 2001–.

**Geoffrey A. Blake, Ph.D., Professor of**  
*Cosmochemistry and Planetary Sciences and*  
*Professor of Chemistry*  
B.S., Duke University, 1981; Ph.D.,  
Caltech, 1986. Assistant Professor of  
Cosmochemistry, 1987–93; Associate  
Professor of Cosmochemistry and Planetary  
Sciences, 1993–97; Professor, 1997–99;  
Professor of Cosmochemistry and Planetary  
Sciences and Professor of Chemistry, 1999–.  
Deputy Director, Owens Valley Radio  
Observatory, 2000–06.

**Roger David Blandford, Ph.D., Visiting**  
*Associate in Physics*  
B.A., University of Cambridge (Magdalene  
College), 1970; Ph.D., 1974. Director, Kavli  
Institute, Stanford University, 2004–.  
Assistant Professor, Caltech, 1976–79;  
Professor, 1979–89; Tolman Professor,  
1989–2004; Visiting Associate, 2004–08.  
Executive Officer for Astronomy, 1992–95.

**Douglas Carl-Johan Bock, Ph.D., Visiting**  
*Associate in Astronomy*  
B.Sc., University of Sydney, 1992; B.E.,  
1994; Ph.D., 1998. Assistant Director,  
Radio Astronomy Laboratory, University of  
California, 2003–. Caltech, 2004–08.

**James J. Bock, Ph.D., Visiting Associate in**  
*Physics*  
B.S., Duke University, 1987; M.A.,  
University of California, 1990; Ph.D., 1990.  
Research Scientist, Jet Propulsion  
Laboratory, 1994–. Caltech, 1994–2008.

**Marc W. Bockrath, Ph.D.,** *Assistant Professor of Applied Physics*  
B.S., Massachusetts Institute of Technology, 1993; Ph.D., University of California, 1999. Visiting Associate, Caltech, 2002; Assistant Professor, 2002–.

**Felix Hans Boehm, Ph.D.,** *William L. Valentine Professor of Physics, Emeritus*  
Dipl., Federal Institute of Technology (Zurich), 1948; Ph.D., 1951. Research Fellow, Caltech, 1953–55; Senior Research Fellow, 1955–58; Assistant Professor, 1958–59; Associate Professor, 1959–61; Professor, 1961–85; Valentine Professor, 1985–95; Valentine Professor Emeritus, 1995–.

**John Richard Bond, Ph.D.,** *Visiting Associate in Theoretical Astrophysics*  
B.Sc., University of Toronto, 1973; M.S., Caltech, 1975; Ph.D., 1979. Professor, University of Toronto, 2000–. Moore Distinguished Scholar, Caltech, 2002; Visiting Associate, 2008.

**Kim Christian Border, Ph.D.,** *Professor of Economics*  
B.S., Caltech, 1974; Ph.D., University of Minnesota, 1979. Assistant Professor, Caltech, 1979–83; Associate Professor, 1983–95; Professor, 1995–. Executive Officer for the Social Sciences, 1995–99.

**Simona Bordoni, Ph.D.,** *Assistant Professor of Environmental Science and Engineering*  
Dipl., University of Rome Tor Vergata, 1996; M.S., University of California (Los Angeles), 2003; Ph.D., 2007. Caltech, 2009–.

**Alexei Borodin, Ph.D.,** *Professor of Mathematics*  
M.Sc., Moscow State University, 1997; M.S.E., University of Pennsylvania, 2001; Ph.D., 2001. Caltech, 2003–.

**Peter L. Bossaerts, Ph.D.,** *William D. Hacker Professor of Economics and Management and Professor of Finance*  
Doctorandus, Universitaire Faculteiten Sint Ignatius (Belgium), 1982; Ph.D., University of California (Los Angeles), 1986. Assistant Professor of Finance, Caltech, 1990–94; Associate Professor, 1994–98; Professor, 1998–; Hacker Professor, 2003–. Executive Officer for the Social Sciences, 2002–05; Chair, Division of the Humanities and Social Sciences, 2006–07.

**Robert C. Bowman, Jr., Ph.D.,** *Visiting Associate in Materials Science*  
B.S., Miami University, 1967; M.S., Massachusetts Institute of Technology, 1969; Ph.D., Caltech, 1983. Member of the Technical Staff, Jet Propulsion Laboratory, 1997–. Visiting Associate, Caltech, 1991; 2001–08.

**David A. Boyd, Ph.D.,** *Lecturer in Mechanical Engineering*  
M.S., University of Alabama, 1990; Ph.D., University of Virginia, 1997. Visiting Associate in Applied Physics, Caltech, 2001; Lecturer, 2007; 2008.

**Charles Mathias Bradford, Ph.D.,** *Visiting Associate in Physics*  
B.S., Stanford University, 1994; Ph.D., Cornell University, 2001. Research Scientist, Jet Propulsion Laboratory, 2003–. Caltech, 2004–08.

**John F. Brady, Ph.D.,** *Chevron Professor of Chemical Engineering and Professor of Mechanical Engineering*  
B.S., University of Pennsylvania, 1975; M.S., Stanford University, 1977; Ph.D., 1981. Associate Professor, Caltech, 1985–89; Professor, 1990–99; Chevron Professor, 1999–; Professor of Mechanical Engineering, 2005–. Executive Officer for Chemical Engineering, 1993–99.

**Vladimir B. Braginsky, Ph.D.,** *Visiting Associate in Physics*  
M.S., Moscow University, 1954; Ph.D., 1959. Professor, Moscow State University, 1986–. Sherman Fairchild Distinguished Scholar, Caltech, 1990–91; Visiting Associate, 1994–2010.

**Fred J. Brechtel, Ph.D.,** *Visiting Associate in Environmental Science and Engineering*  
B.S., University of California, 1987; M.S., 1992; Ph.D., Colorado State University, 1998. Research Scientist, Brechtel Manufacturing, Inc., 2002–. Caltech, 2002–09.

**James B. Breckinridge, Ph.D.,** *Lecturer in Aeronautics*  
B.Sc., Case Institute of Technology, 1961; M.Sc., University of Arizona, 1970; Ph.D., 1976. Lecturer in Applied Physics, Caltech, 1982; 1984–1991; 1993–96; 1998; Lecturer in Aeronautics, 2008.

**Louis Breger, Ph.D.,** *Professor of Psychoanalytic Studies, Emeritus*  
B.A., University of California (Los Angeles), 1957; M.A., Ohio State University, 1959; Ph.D., 1961. Visiting Associate Professor of Psychology, Caltech, 1970–71; Associate Professor, 1971–80; Associate Professor of Psychology and the Humanities, 1980–83; Professor of Psychoanalytic Studies, 1983–94; Professor Emeritus, 1994–.

**Christopher E. Brennen, D.Phil.,** *Richard L. and Dorothy M. Hayman Professor of Mechanical Engineering*  
B.A., University of Oxford, 1963; M.A., D.Phil., 1966. Research Fellow, Caltech, 1969–72; Senior Research Fellow, 1972–75; Research Associate, 1975–76; Associate Professor, 1976–82; Professor, 1982–2005;

Hayman Professor, 2005–. Master of Student Houses, 1983–87; Dean of Students, 1988–92; Executive Officer for Mechanical Engineering, 1993–97; Vice President for Student Affairs, 1997–2002.

**John Brewer, Ph.D.,** *Eli and Edye Broad Professor of Humanities and Social Sciences and Professor of History and Literature*  
B.A., University of Cambridge, 1968; M.A., 1972; Ph.D., 1973. Moore Distinguished Scholar, Caltech, 2001; Professor, 2002–; Broad Professor, 2003–.

**William Bruce Bridges, Ph.D.,** *Carl F. Braun Professor of Engineering, Emeritus*  
B.S., University of California, 1956; M.S., 1957; Ph.D., 1962. Sherman Fairchild Distinguished Scholar, Caltech, 1974–75; Professor of Electrical Engineering and Applied Physics, 1977–83; Braun Professor, 1983–2002; Braun Professor Emeritus, 2002–. Executive Officer for Electrical Engineering, 1978–81.

**Roy J. Britten, Ph.D.,** *Distinguished Carnegie Senior Research Associate in Biology, Emeritus*  
B.S., University of Virginia, 1940; Ph.D., Princeton University, 1951. Visiting Associate, Caltech, 1971–73; Senior Research Associate, 1973–81; Distinguished Carnegie Senior Research Associate, 1981–99; Carnegie Senior Research Associate Emeritus, 1999–.

**Charles Jacob Brokaw, Ph.D.,** *Professor of Biology, Emeritus*  
B.S., Caltech, 1955; Ph.D., University of Cambridge, 1958. Visiting Assistant Professor, Caltech, 1960; Assistant Professor, 1961–63; Associate Professor, 1963–68; Professor, 1968–2000; Professor Emeritus, 2000–. Executive Officer for Biology, 1976–80; 1985–89; Associate Chairman of the Division of Biology, 1980–85.

**Marianne Bronner-Fraser, Ph.D.,** *Albert Billings Ruddock Professor of Biology*  
Sc.B., Brown University, 1975; Ph.D., Johns Hopkins University, 1979. Professor, Caltech, 1996–2000; Ruddock Professor, 2000–.

**Norman Herrick Brooks, Ph.D.,** *James Irvine Professor of Environmental and Civil Engineering, Emeritus*  
A.B., Harvard College, 1949; M.S., Harvard University, 1950; Ph.D., Caltech, 1954. Instructor in Civil Engineering, 1953–54; Assistant Professor, 1954–58; Associate Professor, 1958–62; Professor, 1962–70; Professor of Environmental Science and Civil Engineering, 1970–76; Irvine Professor of Environmental Engineering Science, 1976–77; Irvine Professor of Environmental and Civil Engineering,

1977–95; Irvine Professor Emeritus, 1995–. Academic Officer for Environmental Engineering Science, 1972–74; Director, Environmental Quality Laboratory, 1974–93; Executive Officer for Environmental Engineering Science, 1985–93.

**Garry L. Brown, D.Phil.,** *Visiting Associate in Aeronautics*  
B.E., University of Adelaide (Australia), 1964; D.Phil., University of Oxford, 1967. Robert Porter Patterson Professor and Chair, Princeton University, 1990–. Research Fellow, Caltech, 1967–70; Senior Research Fellow, 1970–71; Visiting Associate, 1974–75; 2002–03; 2008; Professor, 1978–83; Millikan Visiting Professor, 1998.

**Harold Brown, Ph.D., D.Eng.h.c., LL.D.h.c., Sc.D.h.c., D.h.c.,** *President Emeritus*  
A.B., Columbia College, 1945; A.M., Columbia University, 1946; Ph.D., 1949; D.Eng.h.c., Stevens Institute; LL.D.h.c., Long Island University; Gettysburg College; Occidental College; University of California; Sc.D.h.c., University of Rochester; Brown University; University of South Carolina; Franklin and Marshall College; Chung-Ang University (Seoul); D.h.c., RAND Graduate School. President, Caltech, 1969–77; President Emeritus, 1992–.

**Jim L. Brown, Ph.D.,** *Olga Taussky and John Todd Instructor in Mathematics*  
B.S., Michigan State University, 1999; Ph.D., University of Michigan, 2005. Caltech, 2007–10.

**Michael E. Brown, Ph.D.,** *Richard and Barbara Rosenberg Professor of Planetary Astronomy*  
A.B., Princeton University, 1987; M.A., University of California, 1990; Ph.D., 1994. Visiting Associate, Caltech, 1995; Assistant Professor, 1997–2002; Associate Professor, 2002–04; Professor, 2005–08; Rosenberg Professor, 2008–.

**Warren C. Brown, Ph.D.,** *Associate Professor of History*  
B.S., Tufts University, 1985; M.A., University of Cincinnati, 1993; Ph.D., University of California (Los Angeles), 1997. Assistant Professor, Caltech, 1997–2003; Associate Professor, 2003–.

**Lee F. Browne, M.S.,** *Lecturer in Education, Emeritus*  
B.S., West Virginia State College, 1944; M.S., New York University, 1950. Director of Secondary School Relations, Caltech, 1969–77; Director of Secondary School Relations and Special Student Programs, 1977–90; Lecturer, 1971–90; Lecturer Emeritus, 1990–.

**Jehoshua Bruck, Ph.D.**, *Gordon and Betty Moore Professor of Computation and Neural Systems and Electrical Engineering* B.Sc., Technion—Israel Institute of Technology, 1982; M.Sc., 1985; Ph.D., Stanford University, 1989. Associate Professor, Caltech, 1994–98; Professor, 1998–2001; Moore Professor, 2001–. Director, Information Science and Technology, 2003–05.

**Todd A. Brun, Ph.D.**, *Visiting Associate in Theoretical Physics* Ph.D., Caltech, 1994. Professor, University of Southern California, 2003–. Visiting Associate, Caltech, 2007–09.

**Oscar P. Bruno, Ph.D.**, *Professor of Applied and Computational Mathematics* Lic., University of Buenos Aires, 1982; Ph.D., New York University (Courant Institute of Mathematical Sciences), 1989. Associate Professor, Caltech, 1995–98; Professor, 1998–. Executive Officer for Applied Mathematics, 1998–2000.

**Alejandro Buchmann, Ph.D.**, *Visiting Associate in Computer Science* Ph.D., University of Texas (Austin), 1980. Professor, Technische Universität Darmstadt, 1991–. Caltech, 2008.

**Jed Z. Buchwald, Ph.D.**, *Doris and Henry Dreyfus Professor of History* B.A., Princeton University, 1971; M.A., Harvard University, 1973; Ph.D., 1974. Caltech, 2001–.

**Alessandra Buonanno, Ph.D.**, *Visiting Associate in Physics* Ph.D., University of Pisa, 1996. Associate Professor, University of Maryland, 2005–. Caltech, 2002–03; 2005–08.

**Joel W. Burdick, Ph.D.**, *Professor of Mechanical Engineering and Bioengineering* B.S., Duke University, 1981; M.S., Stanford University, 1982; Ph.D., 1988. Assistant Professor, Caltech, 1988–94; Associate Professor, 1994–2000; Professor of Mechanical Engineering, 2000–02; Professor of Mechanical Engineering and Bioengineering, 2002–. Executive Officer for Bioengineering, 2006–07.

**Donald Stacy Burnett, Ph.D.**, *Professor of Nuclear Geochemistry, Emeritus* B.S., University of Chicago, 1959; Ph.D., University of California, 1963. Research Fellow in Physics, Caltech, 1963–65; Assistant Professor of Nuclear Geochemistry, 1965–68; Associate Professor, 1968–75; Professor, 1975–2006; Professor Emeritus, 2006–. Academic Officer, Division of Geological and Planetary Sciences, 1979–87.

**Karsten Buse, Ph.D.**, *Visiting Associate in Electrical Engineering* Dipl., University of Osnabrück (Germany), 1991; Ph.D., 1993. Professor, University of Bonn, 2000–. Caltech, 1997–2007.

**Andres E. Caicedo, Ph.D.**, *Harry Bateman Research Instructor in Mathematics* B.S., University of the Andes (Bogotá), 1996; Ph.D., University of California, 2003. Caltech, 2005–08.

**Danny Calegari, Ph.D.**, *Richard Merkin Distinguished Professor of Mathematics* B.A., University of Melbourne, 1994; Ph.D., University of California, 2000. Assistant Professor, Caltech, 2002–03; Associate Professor, 2003–06; Professor, 2007; Merkin Distinguished Professor, 2007–.

**Colin F. Camerer, Ph.D.**, *Robert Kirby Professor of Behavioral Economics* B.A., Johns Hopkins University, 1976; M.B.A., University of Chicago, 1979; Ph.D., 1981. Visiting Associate, Caltech, 1993; Rea A. and Lela G. Axline Professor of Business Economics, 1994–2008; Kirby Professor of Behavioral Finance and Economics, 2008; Kirby Professor, 2008–.

**Robert Andrew Cameron, Ph.D.**, *Senior Research Associate in Biology* B.A., San Jose State College, 1968; Ph.D., University of California (Santa Cruz), 1975. Visiting Associate, Caltech, 1984–85; Senior Research Fellow, 1985–89; Senior Research Associate, 1989–.

**Christina Julie Campbell, Ph.D.**, *Lecturer in Anthropology* B.Sc., University of Canterbury (New Zealand), 1994; M.A., University of California, 1996; Ph.D., 2000. Caltech, 2007–08.

**Judith Lynn Campbell, Ph.D.**, *Professor of Chemistry and Biology* B.A., Wellesley College, 1965; Ph.D., Harvard University, 1974. Assistant Professor of Chemistry, Caltech, 1977–83; Associate Professor, 1983–85; Associate Professor of Chemistry and Biology, 1985–89; Professor, 1989–.

**Emmanuel J. D. Candes, Ph.D.**, *Ronald and Maxine Linde Professor of Applied and Computational Mathematics* Dipl., École Polytechnique, 1993; D.E.A., University of Paris IV and University of Paris IX, 1994; Ph.D., Stanford University, 1998. Assistant Professor of Applied Mathematics, Caltech, 2000; Assistant Professor of Applied and Computational Mathematics, 2000–03; Associate Professor, 2003–05; Professor, 2005–06; Linde Professor, 2006–.

**Carol Carmichael, Ph.D.**, *Faculty Associate in Engineering and Applied Science* B.S., University of Wisconsin (Madison), 1985; M.S., Georgia Institute of Technology, 1988; Ph.D., University of Georgia, 2004. Caltech, 2006–.

**John M. Carpenter, Ph.D.**, *Senior Research Associate in Astronomy; Deputy Director, Owens Valley Radio Observatory* B.S., University of Wisconsin (Madison), 1988; Ph.D., University of Massachusetts (Amherst), 1994. Senior Research Fellow, Caltech, 2002–05; Senior Research Associate, 2005–. Deputy Director, 2006–.

**Sean M. Carroll, Ph.D.**, *Senior Research Associate in Physics* B.S., Villanova University, 1988; Ph.D., Harvard University, 1993. Caltech, 2006–08.

**Andre W. Carus, Ph.D.**, *Lecturer in Philosophy* M.A., University of St. Andrews, 1977; Ph.D. (History), University of Cambridge, 1981; M.B.A., University of Chicago, 1989; Ph.D. (Philosophy), 2007. Caltech, 2008.

**Fulvia Castelli, Ph.D.**, *Lecturer in Psychology* B.A., University of Milan, 1995; M.Sc., University College London, 1997; Ph.D., 2001. Caltech, 2005–08.

**Christopher P. Chambers, Ph.D.**, *Associate Professor of Economics* B.S., University of Maryland, 1998; M.A., University of Rochester, 2001; Ph.D., 2003. Assistant Professor, Caltech, 2003–06; Associate Professor, 2006–.

**Jean-Lou Chameau, Ph.D.**, *President; Professor of Civil Engineering, Environmental Science and Engineering, and Mechanical Engineering* (See page 571)

**David C. Chan, M.D., Ph.D.**, *Associate Professor of Biology* A.B., Harvard College, 1988; M.D., Harvard Medical School, 1996; Ph.D., 1996. Assistant Professor, Caltech, 2000–06; Associate Professor, 2006–; Bren Scholar, 2000–06.

**Sunney Ignatius Chan, Ph.D.**, *George Grant Hoag Professor of Biophysical Chemistry, Emeritus* B.S., University of California, 1957; Ph.D., 1961. Assistant Professor of Chemical Physics, Caltech, 1963–64; Associate Professor, 1964–68; Professor, 1968–76; Professor of Chemical Physics and Biophysical Chemistry, 1976–92; Hoag Professor, 1992–2001; Hoag Professor Emeritus, 2002–. Acting Executive Officer for Chemistry, 1977–78; Executive Officer,

1978–80; 1989–94; Master of Student Houses, 1980–83.

**K. Mani Chandy, Ph.D.**, *Simon Ramo Professor and Professor of Computer Science* B.Tech., Indian Institute of Technology, 1965; M.S., Polytechnic Institute of Brooklyn, 1966; Ph.D., Massachusetts Institute of Technology, 1969. Sherman Fairchild Distinguished Scholar, Caltech, 1988; Visiting Professor, 1988–89; Professor, 1989–; Ramo Professor, 1997–. Executive Officer for Computer Science, 1997–2000.

**Goutam Chattopadhyay, Ph.D.**, *Visiting Associate in Physics* Ph.D., Caltech, 1999. Senior Member of the Engineering Staff, Jet Propulsion Laboratory, 2005–. Caltech, 2006–09.

**Jui-Lin Chen, Ph.D.**, *Visiting Associate in Mechanical Engineering* B.S., National Taiwan University, 1986; M.S., 1988; Ph.D., 1991. Assistant Professor, 2004–. Caltech, 2007–08.

**Pin Chen, Ph.D.**, *Visiting Associate in Chemistry* B.S., University of California, 1991; Ph.D., Caltech, 1999. Scientist, Jet Propulsion Laboratory, 2000–. Visiting Associate, Caltech, 2006–09.

**Tirong Chen, M.S.**, *Visiting Associate in Applied Physics* M.S., Wuhan University (China), 1962. Senior Scientist, Archem Technology Inc., 2001–. Caltech, 1980–82; 1985–2008.

**Yanbei Chen, Ph.D.**, *Assistant Professor of Physics* B.S., Peking University, 1999; Ph.D., Caltech, 2003. Visiting Associate, 2005–07; Assistant Professor, 2007–.

**Jae Hyoung Cho, Ph.D.**, *Senior Research Fellow in Biology* B.S., Korea University, 1998; M.S., Pohang University of Science and Technology, 1996; Ph.D., 2001. Caltech, 2007–08.

**Anne Chomyn, Ph.D.**, *Senior Research Associate in Biology, Emeritus* B.S., Drexel University, 1972; Ph.D., Caltech, 1978. Research Fellow, 1978–82; Senior Research Fellow, 1982–87; Senior Research Associate, 1989–2007; Senior Research Associate Emeritus, 2007–; Lecturer, 2007.

**Jacob S. Christiansen, Ph.D.**, *Harry Bateman Research Instructor in Mathematics* M.S., University of Copenhagen, 2000; Ph.D., 2004. Caltech, 2005–08.

**Robert Frederick Christy, Ph.D.**, *Institute Professor of Theoretical Physics, Emeritus*  
B.A., University of British Columbia, 1935; Ph.D., University of California, 1941. Associate Professor of Physics, Caltech, 1946–50; Professor of Theoretical Physics, 1950–83; Institute Professor, 1983–85; Institute Professor Emeritus, 1986–. Executive Officer for Physics, 1968–70; Vice President and Provost, 1970–80; Acting President, 1977–78.

**Ara Chutjian, Ph.D.**, *Visiting Associate in Chemistry*  
B.S., Brown University, 1962; Ph.D., University of California, 1966. Senior Research Scientist, Jet Propulsion Laboratory, 1990–. Caltech, 1998–2008.

**Francis H. Clauser, Ph.D.**, *Clark Blanchard Millikan Professor of Engineering, Emeritus*  
B.S., Caltech, 1934; M.S., 1935; Ph.D., 1937. Clark Blanchard Millikan Professor of Engineering, 1969–80; Millikan Professor Emeritus, 1980–. Chairman, Division of Engineering and Applied Science, 1969–74.

**Robert Webster Clayton, Ph.D.**, *Professor of Geophysics; Divisional Academic Officer for Geological and Planetary Sciences; Acting Director, Seismological Laboratory*  
B.A.Sc., University of Toronto, 1973; M.Sc., University of British Columbia, 1976; Ph.D., Stanford University, 1981. Assistant Professor of Exploration Geophysics, Caltech, 1981–85; Associate Professor, 1985–89; Professor of Geophysics, 1989–. Executive Officer for Geophysics, 1987–94; Acting Director, Seismological Laboratory, 1989; 2008–09; Deputy Director, 1989–90; Academic Officer, 2008–.

**Kieran A. Cleary, Ph.D.**, *Senior Research Fellow in Astronomy*  
M.Sc., University College Dublin, 1993; Ph.D., University of Manchester, 2003. Caltech, 2007–10.

**Simon L. Clegg, Ph.D.**, *Visiting Associate in Environmental Science and Engineering*  
B.S., University of East Anglia (United Kingdom), 1982; Ph.D., 1987. Reader, 1993–. Caltech, 2002; 2004–08.

**William M. Clemons, Jr., Ph.D.**, *Assistant Professor of Biochemistry*  
B.S., Virginia Polytechnic Institute and State University, 1995; Ph.D., University of Utah, 2000. Assistant Professor of Chemistry, Caltech, 2005–07; Assistant Professor of Biochemistry, 2007–.

**Donald S. Cohen, Ph.D.**, *Charles Lee Powell Professor of Applied Mathematics, Emeritus*  
Sc.B., Brown University, 1956; M.S., Cornell University, 1959; Ph.D., New York University (Courant Institute), 1962. Assistant Professor of Mathematics, Caltech, 1965–67; Associate Professor of Applied Mathematics, 1967–71; Professor, 1971–98; Powell Professor, 1998–2003; Powell Professor Emeritus, 2003–. Executive Officer for Applied Mathematics, 1988–93; Chairman, Division of Engineering and Applied Science, 1990.

**Judith G. Cohen, Ph.D.**, *Kate Van Nuy's Page Professor of Astronomy*  
B.A., Radcliffe College, 1967; M.S., Caltech, 1969; Ph.D., 1971; B.S., University of Arizona, 1978. Associate Professor, Caltech, 1979–88; Professor, 1988–2005; Page Professor, 2005–. Executive Officer for Astronomy, 1995–96.

**Marshall Harris Cohen, Ph.D.**, *Professor of Astronomy, Emeritus*  
B.E.F., Ohio State University, 1948; M.S., 1949; Ph.D., 1952. Visiting Associate Professor, Caltech, 1965; Professor of Radio Astronomy, 1968–90; Professor of Astronomy, 1990–95; Professor Emeritus, 1995–. Executive Officer for Astronomy, 1981–85.

**Donald Earl Coles, Ph.D.**, *Professor of Aeronautics, Emeritus*  
B.S., University of Minnesota, 1947; M.S., Caltech, 1948; Ph.D., 1953. Research Fellow, 1953–55; Senior Research Fellow, 1955–56; Assistant Professor, 1956–59; Associate Professor, 1959–64; Professor, 1964–96; Professor Emeritus, 1996–.

**Andres Collazo, Ph.D.**, *Visiting Associate in Biology*  
B.S., Cornell University, 1985; Ph.D., University of California, 1990. Scientist II, Section Chief, House Ear Institute, 2000–. Research Fellow, Caltech, 1991–94; Senior Research Fellow, 1994–96; Visiting Associate, 2005–08.

**Curtis L. Collins, Ph.D.**, *Lecturer in Mechanical Engineering*  
B.S., University of California (San Diego), 1990; M.S., University of California (Irvine), 1993; Ph.D., 1997. Instructor, Caltech, 1997–98; Visiting Associate, 2002–03; Lecturer, 2003–08.

**Michael Collins, Ph.D.**, *Visiting Associate in Biology*  
M.S.P., University of Missouri (Columbia), 1981; Ph.D., 1982. Professor, University of California (Los Angeles), 2002–. Caltech, 2008–09.

**Timothy E. Colonius, Ph.D.**, *Professor of Mechanical Engineering*  
B.S., University of Michigan (Ann Arbor), 1987; M.S., Stanford University, 1988; Ph.D., 1994. Assistant Professor, Caltech, 1994–2000; Associate Professor, 2000–05; Professor, 2005–.

**Agustin J. Colussi, Ph.D.**, *Senior Research Associate in Environmental Science and Engineering*  
Lic., University of Buenos Aires, 1968; Ph.D., 1972. Visiting Associate, Caltech, 1997–98; Senior Research Fellow, 1998–2004; Senior Research Associate, 2004–08.

**R. Dale Conner, Ph.D.**, *Visiting Associate in Materials Science*  
B.S., California State Polytechnic University, 1989; M.S., Caltech, 1994; Ph.D., 1998. Assistant Professor, California State University (Northridge), 2006–. Visiting Associate, Caltech, 2001–02; 2006–09; Lecturer, 2002–04; Senior Research Fellow, 2003–06.

**Asantha Cooray, Ph.D.**, *Visiting Associate in Physics*  
B.S., Massachusetts Institute of Technology, 1997; M.S., 1997; M.S., University of Chicago, 1998; Ph.D., 2001. Assistant Professor, University of California (Irvine), 2005–. Sherman Fairchild Senior Research Fellow, Caltech, 2001–05; Visiting Associate, 2005–08.

**Bradford Cornell, Ph.D.**, *Visiting Professor of Finance*  
A.B., Stanford University, 1970; M.S., 1974; Ph.D., 1975. Professor, Anderson School of Management, University of California (Los Angeles); Director, Bank of America Research Center, University of California (Los Angeles), 1987–. Visiting Associate Professor, Caltech, 1984; Visiting Professor, 2006–07; 2008.

**Noel Robert Corngold, Ph.D.**, *Professor of Applied Physics, Emeritus*  
A.B., Columbia College, 1949; A.M., Harvard University, 1950; Ph.D., 1954. Professor of Applied Science, Caltech, 1966–74; Professor of Applied Physics, 1974–2002; Professor Emeritus, 2002–.

**Eugene Woodville Cowan, Ph.D.**, *Professor of Physics, Emeritus*  
B.S., University of Missouri, 1941; S.M., Massachusetts Institute of Technology, 1943; Ph.D., Caltech, 1948. Research Fellow, 1948–50; Assistant Professor, 1950–54; Associate Professor, 1954–61; Professor, 1961–86; Professor Emeritus, 1986–.

**Fiona Cowie, Ph.D.**, *Associate Professor of Philosophy*  
B.A., University of Sydney, 1987; M.A., Princeton University, 1991; Ph.D., 1993. Instructor, Caltech, 1992–93; Assistant Professor, 1993–98; Associate Professor, 1998–.

**Bruno Crosignani, Lib.Doc.**, *Visiting Professor of Applied Physics*  
Laurea, University of Rome, 1962; Lib.Doc., 1971. Professor, University of Aquila, 1987–. Research Fellow, Caltech, 1970–71; Visiting Associate in Electrical Engineering, 1976–78; 1980; 1982–84; Visiting Associate in Applied Physics, 1985–87; 1988–2004; Visiting Professor, 2001–08.

**Michael Clifford Cross, Ph.D.**, *Professor of Theoretical Physics*  
B.A., University of Cambridge, 1972; Ph.D., 1975. Caltech, 1984–.

**Fred E. C. Culick, Ph.D.**, *Richard L. and Dorothy M. Hayman Professor of Mechanical Engineering and Professor of Jet Propulsion, Emeritus*  
S.B., S.M., Massachusetts Institute of Technology, 1957; Ph.D., 1961. Research Fellow in Jet Propulsion, Caltech, 1961–63; Assistant Professor, 1963–66; Associate Professor, 1966–71; Professor, 1971–78; Professor of Applied Physics and Jet Propulsion, 1978–88; Professor of Mechanical Engineering and Jet Propulsion, 1988–97; Hayman Professor, 1997–2004; Professor of Jet Propulsion, 1997–2004; Hayman Professor and Professor, Emeritus, 2004–.

**Curt J. Cutler, Ph.D.**, *Senior Faculty Associate in Physics*  
B.S., Yale University, 1983; Ph.D., 1989. Visiting Associate, Caltech, 1999–2006; Senior Faculty Associate, 2006–.

**Jaksa Cvitanic, Ph.D.**, *Professor of Mathematical Finance*  
B.A., University of Zagreb (Croatia), 1985; M.S., 1988; M.Phil., Columbia University, 1991; Ph.D., 1992. Caltech, 2005–.

**John O. Dabiri, Ph.D.**, *Assistant Professor of Aeronautics and Bioengineering*  
B.S., Princeton University, 2001; M.S., Caltech, 2003; Ph.D., 2005. Assistant Professor, 2005–.

**Christine M. Daley, Ph.D.**, *Lecturer in Writing*  
B.A., Boston College, 1991; M.A., Loyola Marymount University, 1997; Ph.D., City University of New York Graduate School, 2006. Caltech, 2007–08.

**Shtefan L. Danilishin, Ph.D.**, *Visiting Associate in Theoretical Astrophysics*  
Ph.D., Moscow State University, 2004.  
Associate Professor, Research Fellow,  
2006–. Caltech, 2008.

**Chiara Daraio, Ph.D.**, *Assistant Professor of Aeronautics and Applied Physics*  
B.S., M.S., University of Ancona (Italy),  
2001; M.S., University of California (San Diego), 2003; Ph.D., 2006. Caltech, 2006–.

**Andrew F. Daugherty, Ph.D.**, *Visiting Associate in Economics*  
B.S., Case Institute of Technology, 1969;  
M.S., Case Western Reserve University,  
1971; M.A., University of Southern  
California, 1975; Ph.D., Case Western  
Reserve University, 1972. Professor,  
Vanderbilt University, 1995–. Caltech, 2008.

**John M. D'Auria, M.A.**, *Coach*  
A.A., Pasadena City College, 1972; B.A.,  
California State University, 1974; M.A.,  
Azusa Pacific University, 1988. Caltech,  
1989–.

**Eric Harris Davidson, Ph.D.**, *Norman Chandler Professor of Cell Biology*  
B.A., University of Pennsylvania, 1958;  
Ph.D., Rockefeller University, 1963.  
Visiting Assistant Professor of Biology,  
Caltech, 1970; Associate Professor,  
1971–74; Professor, 1974–81; Chandler  
Professor, 1982–.

**Gregory L. Davis, Ph.D.**, *Lecturer in Aeronautics*  
B.S., University of Akron, 1982; M.S., 1982;  
Ph.D., Rice University, 1998. Caltech,  
2006–08.

**Lance Edwin Davis, Ph.D.**, *Mary Stillman Harkness Professor of Social Science, Emeritus*  
B.A., University of Washington, 1950;  
Ph.D., Johns Hopkins University, 1956.  
Professor of Economics, Caltech, 1968–80;  
Harkness Professor, 1980–2005; Harkness  
Professor Emeritus, 2005–. Executive  
Officer for the Social Sciences, 1982–85.

**Mark E. Davis, Ph.D.**, *Warren and Katharine Schlinger Professor of Chemical Engineering*  
B.S., University of Kentucky, 1977; M.S.,  
1978; Ph.D., 1981. Professor, Caltech,  
1991–93; Schlinger Professor, 1993–.  
Executive Officer for Chemical  
Engineering, 1999–2004.

**Peter K. Day, Ph.D.**, *Visiting Associate in Physics*  
B.S., University of California, 1988; Ph.D.,  
Caltech, 1993. Senior Engineer, Jet  
Propulsion Laboratory, 2003–. Lecturer,  
Caltech, 1993; Research Fellow, 1993–04;  
Visiting Associate, 2005–09.

**Richard Albert Dean, Ph.D.**, *Professor of Mathematics, Emeritus*  
B.S., Caltech, 1945; A.B., Denison  
University, 1947; M.S., Ohio State  
University, 1948; Ph.D., 1953. Harry  
Bateman Research Fellow, Caltech,  
1954–55; Assistant Professor, 1955–59;  
Associate Professor, 1959–66; Professor,  
1966–86; Professor Emeritus, 1987–.

**Charles de Bedts, Ph.D.**, *Lecturer in French*  
A.A., Pasadena City College, 1980; B.A.,  
University of California (Los Angeles),  
1982; M.A., 1985; Ph.D., 1994. Caltech,  
1996–99; 2001–08.

**Weibing Deng, Ph.D.**, *Visiting Associate in Applied and Computational Mathematics*  
B.S., Nanjing University, 1992; M.S., 1995;  
Ph.D., 2002. Associate Professor, 2003–.  
Caltech, 2007–08.

**Tracy K. Dennison, Ph.D.**, *Assistant Professor of History*  
B.A., Bucknell University, 1992; M.Phil.,  
University of Oxford, 1999; Ph.D.,  
University of Cambridge, 2004. Caltech,  
2006–.

**Peter B. Dervan, Ph.D.**, *D.Sc.h.c., Bren Professor of Chemistry*  
B.S., Boston College, 1967; Ph.D., Yale  
University, 1972; D.Sc.h.c., Boston College.  
Assistant Professor, Caltech, 1973–79;  
Associate Professor, 1979–82; Professor,  
1982–88; Bren Professor, 1988–. Chair,  
Division of Chemistry and Chemical  
Engineering, 1994–99.

**Mathieu Desbrun, Ph.D.**, *Associate Professor of Computer Science*  
M.Eng., National Engineering School of  
Computer Science and Applied  
Mathematics (Grenoble), 1994; M.S.,  
University of Grenoble, 1994; Ph.D.,  
National Polytechnic Institute of Grenoble,  
1997. Visiting Associate, Caltech, 2000–04;  
Associate Professor, 2004–.

**Stanley Deser, Ph.D.**, *Visiting Associate in Theoretical Physics*  
M.A., Harvard University, 1950; Ph.D.,  
1953. Ansell Professor, Brandeis University,  
1980–. Caltech, 2005–08.

**Raymond Deshaies, Ph.D.**, *Professor of Biology; Investigator, Howard Hughes Medical Institute; Executive Officer for Molecular Biology*  
B.S., Cornell University, 1983; Ph.D.,  
University of California, 1988. Assistant  
Professor, Caltech, 1994–1999; Associate  
Professor, 2000–05; Professor, 2005–.  
Assistant Investigator, Howard Hughes  
Medical Institute, 2000–05; Investigator,  
2005–; Executive Officer, 2006–.

**Michael H. Dickinson, Ph.D.**, *Esther M. and Abe M. Zarem Professor of Bioengineering*  
Sc.B., Brown University, 1984; Ph.D.,  
University of Washington, 1989. Visiting  
Associate, Caltech, 2001–02; Professor,  
2002–03; Zarem Professor, 2003–.

**Paul Emmanuel Dimotakis, Ph.D.**, *John K. Northrop Professor of Aeronautics and Professor of Applied Physics; Chief Technologist, Jet Propulsion Laboratory*  
B.S., Caltech, 1968; M.S., 1969; Ph.D.,  
1973. Research Fellow, 1973–74; Research  
Fellow and Lecturer, 1974–75; Assistant  
Professor, 1975–81; Associate Professor,  
1981–85; Professor, 1986–; Northrop  
Professor, 1995–. Chief Technologist,  
2006–.

**S. George Djorgovski, Ph.D.**, *Professor of Astronomy*  
B.A., University of Belgrade, 1979; M.A.,  
University of California, 1981; Ph.D., 1985.  
Assistant Professor, Caltech, 1987–90;  
Associate Professor, 1990–97; Professor,  
1997–.

**Clinton Dean Dodd, B.A.**, *Coach*  
B.A., Humboldt State University, 1978.  
Caltech, 1980–.

**Samuel J. Dolinar, Ph.D.**, *Lecturer in Electrical Engineering*  
B.S., Massachusetts Institute of Technology,  
1973; M.S., 1973; Ph.D., 1976. Caltech,  
1999; 2001; 2003; 2005; 2007.

**Dennis A. Dougherty, Ph.D.**, *George Grant Hoag Professor of Chemistry*  
B.S., M.S., Bucknell University, 1974;  
Ph.D., Princeton University, 1978. Assistant  
Professor, Caltech, 1979–85; Associate  
Professor, 1985–89; Professor, 1989–2001;  
Hoag Professor, 2002–. Executive Officer  
for Chemistry, 1994–99.

**Kimberly Douglas, M.S.**, *University Librarian*  
M.A., Freie Universität (Germany), 1976;  
M.S., Long Island University, 1977.  
Caltech, 2003–.

**Roy Dow, B.A.**, *Coach*  
B.A., Colby College, 1984. Caltech, 2002–.

**C. Darren Dowell, Ph.D.**, *Visiting Associate in Physics; Lecturer in Physics*  
B.S., Rice University, 1991; M.S.,  
University of Chicago, 1992; Ph.D., 1997.  
Scientist, Jet Propulsion Laboratory, 2003–.  
Visiting Associate, Caltech, 2003–09;  
Lecturer, 2007.

**John C. Doyle, Ph.D.**, *John G. Braum Professor of Control and Dynamical Systems, Electrical Engineering, and Bioengineering, Emeritus*  
B.S., M.S., Massachusetts Institute of  
Technology, 1977; Ph.D., University of  
California, 1984. Visiting Assistant  
Professor of Electrical Engineering,  
Caltech, 1985; Visiting Associate Professor,  
1986; Visiting Associate in Chemistry,  
1986–87; Associate Professor of Electrical  
Engineering, 1987–91; Professor,  
1991–2001; Professor of Control and  
Dynamical Systems, Electrical Engineering,  
and Bioengineering, 2002–04; Braum  
Professor, 2004–08; Braum Professor  
Emeritus, 2008–.

**Ronald William Prest Drever, Ph.D.**,  
*Professor of Physics, Emeritus*  
B.Sc., Glasgow University, 1953; Ph.D.,  
1958. Visiting Associate, Caltech, 1977;  
Professor, 1979–2002; Professor Emeritus,  
2002–.

**Robert V. Duncan, Ph.D.**, *Visiting Associate in Physics*  
B.S., Massachusetts Institute of Technology,  
1982; Ph.D., University of California (Santa  
Barbara), 1988. Associate Dean for Research  
and Professor of Physics, University of New  
Mexico, 2002–. Visiting Associate, Caltech,  
1998–2004; 2005–08; Moore Distinguished  
Scholar, 2004–05.

**William G. Dunphy, Ph.D.**, *Professor of Biology*  
A.B., Harvard College, 1980; Ph.D.,  
Stanford University, 1985. Assistant  
Professor, Caltech, 1989–95; Associate  
Professor, 1995–2001; Professor, 2001–.  
Assistant Investigator, Howard Hughes  
Medical Institute, 1994–98; Associate  
Investigator, 1998–2004.

**Federico Echenique, Ph.D.**, *Associate Professor of Economics*  
M.A., University of the Republic (Uruguay),  
1995; Ph.D., University of California, 2000.  
Instructor, Caltech, 2002–03; Assistant  
Professor, 2004; Associate Professor, 2004–.

**Michelle Effros, Ph.D.**, *Professor of Electrical Engineering*  
B.S., Stanford University, 1989; M.S., 1990;  
Ph.D., 1994. Assistant Professor, Caltech,  
1994–2000; Associate Professor, 2000–05;  
Professor, 2005–.

**Gerald Eigen, Ph.D.**, *Visiting Associate in Physics*  
Dipl., University of Freiburg (Germany),  
1980; Ph.D., University of Munich, 1985.  
Professor, University of Bergen (Norway),  
1995–. Research Fellow, Caltech, 1984–87;  
Senior Research Fellow, 1987–94; Lecturer,  
1991; 1993; Visiting Associate, 1994–2008.

**John M. Eiler, Ph.D.**, *Robert P. Sharp Professor of Geology and Professor of Geochemistry*  
B.S., University of Iowa, 1989; M.S., University of Wisconsin (Madison), 1991; Ph.D., 1994. Research Fellow in Geochemistry, Caltech, 1994–97; Senior Research Fellow, 1997–98; Assistant Professor, 1998–2003; Associate Professor, 2003–06; Professor, 2006–; Sharp Professor, 2008–.

**James P. Eisenstein, Ph.D.**, *Frank J. Roshek Professor of Physics and Applied Physics*  
A.B., Oberlin College, 1974; Ph.D., University of California, 1980. Professor of Physics, Caltech, 1996–2004; Roshek Professor, 2004–05; Roshek Professor of Physics and Applied Physics, 2005–.

**Charles Elachi, Ph.D.**, *Vice President; Director of the Jet Propulsion Laboratory; Professor of Electrical Engineering and Planetary Science*  
B.Sc., University of Grenoble, 1968; Dipl.Ing., National Polytechnic Institute (Grenoble), 1968; M.S., Caltech, 1969; Ph.D., 1971; M.B.A., University of Southern California, 1978. Research Fellow, Caltech, 1971–73; Lecturer in Electrical Engineering, 1982–88; Lecturer in Electrical Engineering and Planetary Science, 1988–2001; Professor, 2002–. Vice President and Director, 2001–.

**James Bradley Elder, Ph.D.**, *Visiting Associate in Chemical Engineering*  
B.S., Massachusetts Institute of Technology, 1997; M.D., Columbia University, 2002. Neurological Surgery Internship, University of Southern California, 2003–. Caltech, 2007–08.

**Heinz E. Ellersieck, Ph.D.**, *Associate Professor of History, Emeritus*  
A.B., University of California (Los Angeles), 1942; M.A., 1948; Ph.D., 1955. Instructor, Caltech, 1950–55; Assistant Professor, 1955–60; Associate Professor, 1960–88; Associate Professor Emeritus, 1988–.

**Richard S. Ellis, D.Phil., D.Sc.h.c.**, *Steele Family Professor of Astronomy*  
B.Sc., University College London, 1971; D.Phil., University of Oxford, 1974; D.Sc.h.c., University of Durham. Visiting Associate, Caltech, 1997–98; Professor, 1999–2002; Steele Professor, 2002–. Deputy Director, Palomar Observatory, 1999–2000; Director, 2000–02; Director, Caltech Optical Observatories, 2002–05.

**Michael Elowitz, Ph.D.**, *Assistant Professor of Biology and Applied Physics; Bren Scholar*  
B.A., University of California, 1992; M.A., Ph.D., Princeton University, 1999. Assistant Professor, Caltech, 2003–; Bren Scholar, 2003–09.

**Azita Emami-Neyestanak, Ph.D.**, *Assistant Professor of Electrical Engineering*  
B.S., Sharif University of Technology, 1969; M.S., Stanford University, 1999; Ph.D., 2004. Caltech, 2007–.

**Stuart Alan Ende, Ph.D.**, *Faculty Associate in Literature*  
A.B., Cornell University, 1965; M.A., New York University, 1966; Ph.D., Cornell University, 1970. Assistant Professor of English, Caltech, 1970–74; Associate Professor, 1974–80; Associate Professor of Literature, 1980–90; Faculty Associate, 1990–.

**Hermann Engelhardt, Dr.rer.Nat.**, *Senior Research Associate in Geophysics, Emeritus*  
Dipl., Technical University of Munich, 1960; Dr.rer.Nat., 1974. Senior Research Fellow, Caltech, 1976–79; Visiting Associate, 1981; Senior Research Associate, 1988–2002; Senior Research Associate Emeritus, 2002–.

**Jan E. Ensminger, Ph.D.**, *Edie and Lew Wasserman Professor of Anthropology*  
B.A., Cornell University, 1974; M.A., Northwestern University, 1976; Ph.D., 1984. Professor, Caltech, 2000–07; Wasserman Professor, 2007–. Chair, Division of the Humanities and Social Sciences, 2002–06.

**Marionne Epalle, B.S.**, *Lecturer in Engineering*  
B.S., New School for Social Research, 1983. Caltech, 2005–08.

**Elsa Ermer, Ph.D.**, *Lecturer in Psychology*  
B.A., Franklin and Marshall College, 2000; M.A., University of California (Santa Barbara), 2002; Ph.D., 2007. Caltech, 2008.

**Susan Ernst, Ph.D.**, *Visiting Associate in Biology*  
B.S., Louisiana State University, 1968; Ph.D., University of Massachusetts, 1975. Professor, Tufts University, 1994–. Research Fellow, Caltech, 1975–79; Visiting Associate, 2007–09.

**Jeffrey D. Evanseck, Ph.D.**, *Visiting Associate in Chemistry*  
B.S. (Chemistry), Purdue University, 1986; B.S. (Computer Science), 1986; Ph.D., University of California (Los Angeles), 1990. Professor, Chair, Duquesne University, 2005–. Caltech, 2007–08.

**Thomas Eugene Everhart, Ph.D., D.L.h.c., D.h.c.**, *President Emeritus; Professor of Electrical Engineering and Applied Physics, Emeritus*  
A.B., Harvard College, 1953; M.Sc., University of California (Los Angeles), 1955; Ph.D., University of Cambridge, 1958; D.L.h.c., Illinois Wesleyan

University; Pepperdine University; D.h.c., Colorado School of Mines. Professor, Caltech, 1987–99; Professor Emeritus, 1999–. President, 1987–97; President Emeritus, 1997–.

**Yeshaiahu Fainman, Ph.D.**, *Visiting Associate in Electrical Engineering*  
B.S., M.Sc., Lvov Polytech Institute (USSR), 1970; M.Sc., Technion—Israel Institute of Technology, 1979; Ph.D., 1983. Professor, University of California (San Diego), 1995–. Caltech, 2007–08.

**Jonathan D. Farley, Ph.D.**, *Visiting Professor of Mathematics*  
Ph.D., University of Oxford, 1995. Professor University of West Indies, 2006–. Caltech, 2007–08.

**Kenneth A. Farley, Ph.D.**, *W. M. Keck Foundation Professor of Geochemistry; Chair, Division of Geological and Planetary Sciences*  
B.S., Yale University, 1986; Ph.D., University of California (San Diego), 1991. Assistant Professor, Caltech, 1993–96; Associate Professor, 1996–98; Professor, 1998–2003; Keck Foundation Professor, 2003–. Director, Tectonics Observatory, 2003–04. Chair, 2004–.

**Mordechai Feingold, D.Phil.**, *Professor of History*  
B.A., Hebrew University of Jerusalem, 1972; M.A., 1976; D.Phil., University of Oxford, 1980. Visiting Associate Professor, Caltech, 1994; Professor, 2002–.

**Antony R. H. Fender, B.S.**, *Lecturer in Engineering*  
B.S., University of California (Los Angeles), 1970. Caltech, 1996–2008.

**Sebastian Jose Ferraro, Ph.D.**, *Visiting Associate in Control and Dynamical Systems*  
B.S., Universidad Nacional del Sur (Argentina), 2000; Ph.D., 2005. Adjunct Professor, 2006–. Caltech, 2008.

**Ila Fiete, Ph.D.**, *Broad Senior Research Fellow in Brain Circuitry*  
B.S., University of Michigan, 1997; A.M., Harvard University, 2000; Ph.D., 2004. Caltech, 2006–09.

**Bradley Ward Filippone, Ph.D.**, *Professor of Physics*  
B.S., Pennsylvania State University, 1977; M.S., University of Chicago, 1979; Ph.D., 1982. Research Fellow, Caltech, 1983–84; Assistant Professor, 1984–90; Associate Professor, 1990–95; Professor, 1995–.

**Caleb Finch, Ph.D.**, *Visiting Associate in Biology*  
B.S., Yale University, 1961; Ph.D., 1969. Professor, University of Southern California, 1989–. Caltech, 2007–08.

**Igor Fineman, M.D.**, *Visiting Associate in Biology*  
B.S., University of California (Los Angeles), 1990; M.D., 1994. Neurosurgery Residency, 1995–. Caltech, 2000–08.

**Wolfgang Fink, Ph.D.**, *Visiting Associate in Physics*  
Ph.D., University of Tübingen, 1997. Senior Member of the Technical Staff, Jet Propulsion Laboratory, 2000–. Caltech, 2001–09.

**Matthias Flach, Ph.D.**, *Professor of Mathematics; Executive Officer for Mathematics*  
Dipl., Johann-Wolfgang von Goethe University (Frankfurt), 1986; Ph.D., St. John's College, 1991. Associate Professor, Caltech, 1995–99; Professor, 1999–. Executive Officer, 2006–.

**Richard Charles Flagan, Ph.D.**, *Irma and Ross McCollum–William H. Corcoran Professor of Chemical Engineering and Professor of Environmental Science and Engineering; Executive Officer for Chemical Engineering*  
B.S.E., University of Michigan, 1969; S.M., Massachusetts Institute of Technology, 1971; Ph.D., 1973. Assistant Professor of Environmental Engineering Science, Caltech, 1975–81; Associate Professor, 1981–84; Associate Professor of Environmental Engineering and Mechanical Engineering, 1984–85; Professor, 1986–90; Professor of Chemical Engineering, 1990–2000; McCollum Professor of Chemical Engineering, 2000–03; McCollum Professor of Chemical Engineering and Professor of Environmental Science and Engineering, 2003–04; McCollum–Corcoran Professor of Chemical Engineering and Professor of Environmental Science and Engineering, 2004–. Acting Executive Officer, 1996; Executive Officer, 1997; 2004–.

**Pak-Wing Fok, Ph.D.**, *von Kármán Instructor in Applied and Computational Mathematics*  
M.S., University of London (Imperial College), 2001; Ph.D., Massachusetts Institute of Technology, 2006. Caltech, 2006–08.

**Stephen J. Forman, M.D.**, *Visiting Associate in Chemical Engineering*  
B.A., St. John's College, 1970; M.D., University of Southern California, 1974. Staff Physician and Chairman of the Board of Directors, City of Hope, 2001–. Caltech, 2005–08.

**Rebecca E. Frank, Ph.D.**, *Lecturer in Anthropology*  
B.A., University of California (San Diego), 1996; M.A., University of California (Los Angeles), 2001; Ph.D., 2007. Caltech, 2008–09.

**Joel N. Franklin, Ph.D.**, *Professor of Applied Mathematics, Emeritus*  
B.S., Stanford University, 1950; Ph.D., 1953. Associate Professor of Applied Mechanics, Caltech, 1957–65; Professor of Applied Science, 1965–69; Professor of Applied Mathematics, 1969–2000; Professor Emeritus, 2000–.

**Iain D. C. Fraser, Ph.D.**, *Senior Research Associate in Biology*  
B.Sc., Heriot-Watt University, 1990; Ph.D., University of London, 1995. Senior Research Fellow, Caltech, 2002; Senior Research Associate, 2002–08.

**Scott E. Fraser, Ph.D.**, *Anna L. Rosen Professor of Biology and Professor of Bioengineering*  
B.S., Harvey Mudd College, 1976; Ph.D., Johns Hopkins University, 1979. Professor of Biology, Caltech, 1991; Rosen Professor, 1991–; Professor of Bioengineering, 2005–. Director, Magnetic Resonance Imaging Center, 2002–08.

**Fernando Fraternali, M.S.**, *Visiting Associate in Aeronautics*  
B.S., University of Salerno (Italy), 1986; M.S., 1986. Associate Professor, 2001–. Caltech, 2005–09.

**Steven Clark Frautschi, Ph.D.**, *Professor of Theoretical Physics, Emeritus*  
A.B., Harvard College, 1954; Ph.D., Stanford University, 1958. Assistant Professor, Caltech, 1962–64; Associate Professor, 1964–66; Professor, 1966–2006; Professor Emeritus, 2006–. Executive Officer for Physics, 1988–97; Master of Student Houses, 1997–2002.

**Stuart Freed, B.A.**, *Lecturer in Art—Ceramics*  
B.A., California State University (Northridge), 1979. Caltech, 1999–2008.

**Koji Fujiwara, Ph.D.**, *Visiting Associate in Mathematics*  
Ph.D., University of Tokyo, 1993. Professor, Tohoku University, 2007–. Caltech, 2008.

**Francis Brock Fuller, Ph.D.**, *Professor of Mathematics, Emeritus*  
A.B., Princeton University, 1949; M.A., 1950; Ph.D., 1952. Research Fellow, Caltech, 1952–55; Assistant Professor, 1955–59; Associate Professor, 1959–66; Professor, 1966–94; Professor Emeritus, 1994–.

**Brent Thomas Fultz, Ph.D.**, *Professor of Materials Science and Applied Physics*  
B.Sc., Massachusetts Institute of Technology, 1975; M.Sc., University of California, 1978; Ph.D., 1982. Assistant Professor of Materials Science, Caltech, 1985–90; Associate Professor, 1990–97; Professor, 1997–2003; Professor of Materials Science and Applied Physics, 2003–.

**Todd C. Gaier, Ph.D.**, *Visiting Associate in Astronomy*  
Ph.D., University of California (Santa Barbara), 1993. Principal Staff, Jet Propulsion Laboratory, 1996–. Caltech, 2004–08.

**Avishay Gal-Yam, Ph.D.**, *Visiting Associate in Astronomy*  
Ph.D., Tel Aviv University, 2003. Senior Scientist, Weizmann Institute of Science, 2007–. Caltech, 2007–.

**Mandy Gamble, M.A.**, *Coach*  
B.A., California State University, 1995; M.A., 1997. Caltech, 2002–.

**Daniel A. Garcia, M.A.**, *Lecturer in Spanish Lic.*, National University of Colombia, 1988; M.A., University of Southern California, 1991. Caltech, 1996–97; 1997–2009.

**Jorge Garcia-Ojalvo, Ph.D.**, *Visiting Associate in Biology*  
M.Sc., University of Barcelona, 1991; Ph.D., 1995. Associate Professor, Technical University of Catalonia, 2003–. Caltech, 2006–09.

**George Rousetos Gavalas, Ph.D.**, *Professor of Chemical Engineering, Emeritus*  
B.S., Technical University of Athens, 1958; M.S., University of Minnesota, 1962; Ph.D., 1964. Assistant Professor, Caltech, 1964–67; Associate Professor, 1967–75; Professor, 1975–2002; Professor Emeritus, 2002–.

**John B. Geasland, B.S.F.S.**, *Lecturer in English as a Second Language*  
B.S.F.S., Georgetown University, 1966. Caltech, 2001–08.

**Murray Gell-Mann, Ph.D., Sc.D.h.c., D.Sc.h.c., Nobel Laureate, Robert Andrews Millikan Professor of Theoretical Physics, Emeritus  
B.S., Yale University, 1948; Ph.D., Massachusetts Institute of Technology, 1950; Sc.D.h.c., Columbia University; University of Cambridge; University of Chicago; University of Illinois; University of Utah; Wesleyan University; Yale University; D.Sc.h.c., University of Turin (Italy). Associate Professor, Caltech, 1955–56; Professor, 1956–67; Millikan Professor, 1967–93; Millikan Professor Emeritus, 1993–.**

**Glen Arthur George, M.S.**, *Lecturer in Computer Science and Electrical Engineering*  
B.S. (Engineering and Applied Science), Caltech, 1981; B.S. (Electrical Engineering), 1982; M.S., University of California (Los Angeles), 1984. Lecturer in Applied Science, Caltech, 1986–91; Lecturer in Computer Science and Electrical Engineering, 1992–2010.

**Merrill Joan Gerber, M.A.**, *Lecturer in Creative Writing*  
B.A., University of Florida, 1959; M.A., Brandeis University, 1980. Caltech, 1989–2008.

**Alireza Ghaffari, B.S.**, *Lecturer in Applied Physics*  
B.S., California State University, 1986. Caltech, 2005–08.

**Morteza Gharib, Ph.D.**, *Hans W. Liepmann Professor of Aeronautics and Professor of Bioengineering*  
B.S., Teheran University, 1976; M.S., Syracuse University, 1978; Ph.D., Caltech, 1983. Professor of Aeronautics, 1992–2001; Professor of Aeronautics and Bioengineering, 2001–02; Liepmann Professor of Aeronautics and Bioengineering, 2002–06; Professor of Bioengineering, 2006–; Liepmann Professor, 2006–.

**Paolo Ghiggini, Ph.D.**, *Sherman Fairchild Senior Research Fellow in Mathematics*  
Ph.D., Scuola Normale Superiore (Pisa), 2004. Caltech, 2007–10.

**Amin Gholampour, Ph.D.**, *Olga Tausky and John Todd Instructor in Mathematics*  
M.S., Sharif University of Technology (Iran), 2002; Ph.D., University of British Columbia, 2007. Caltech, 2008–10.

**Konstantinos P. Giapis, Ph.D.**, *Associate Professor of Chemical Engineering*  
Dipl., National Technical University of Athens, 1984; Ph.D., University of Minnesota, 1989. Lacey Instructor, Caltech, 1992–93; Assistant Professor, 1993–98; Associate Professor, 1999–.

**Vernon Charles Gibson, Ph.D.**, *Visiting Associate in Chemistry*  
B.S., University of Sheffield, 1980; Ph.D., University of Oxford, 1984. Frankland BP Professor, Imperial College of Science, Technology and Medicine (London), 2001–. Caltech, 2006–09.

**Kevin Michael Gilmartin, Ph.D.**, *Professor of English*  
B.A., Oberlin College, 1985; M.A., University of Chicago, 1986; Ph.D., 1991. Assistant Professor of Literature, Caltech, 1991–97; Associate Professor, 1997–2004; Associate Professor of English, 2004–07; Professor, 2007–.

**Jacqueline G. Gish, Ph.D.**, *Visiting Associate in Aeronautics*  
B.A., University of California (Los Angeles), 1972; Ph.D., Caltech, 1976; M.B.A., University of Southern California, 2003. Director, Directed Energy Technology, Northrop Grumman Space Technology, 2001–. Visiting Associate, Caltech, 2008.

**John E. Gizis, Ph.D.**, *Visiting Associate in Astronomy at the Infrared Processing and Analysis Center*  
Ph.D., Caltech, 1998. Associate Professor, University of Delaware, 2007–. Visiting Associate, Caltech, 2008–09.

**M. Michael Glovsky, M.D.**, *Visiting Associate in Chemical Engineering*  
B.S., Tufts University, 1957; M.D., Tufts Medical School, 1962. Head, Asthma and Allergy Center, Huntington Memorial Hospital, 1989–. Caltech, 1999–2008.

**William Andrew Goddard III, Ph.D.**, *Charles and Mary Ferkel Professor of Chemistry, Materials Science, and Applied Physics*  
B.S., University of California (Los Angeles), 1960; Ph.D., Caltech, 1965. Noyes Research Fellow in Chemistry, 1964–66; Noyes Research Instructor, 1966–67; Assistant Professor of Theoretical Chemistry, 1967–71; Associate Professor, 1971–74; Professor, 1974–78; Professor of Chemistry and Applied Physics, 1978–84; Ferkel Professor of Chemistry, 1984–2001; Ferkel Professor of Chemistry, Materials Science, and Applied Physics, 2001–.

**Jacob K. Goeree, Ph.D.**, *Professor of Economics*  
B.S., Utrecht University (Netherlands), 1989; Ph.D. (Theoretical Physics), 1993; B.A., University of Amsterdam, 1994; Ph.D. (Economics), 1997. Visiting Associate, Caltech, 1999; Visiting Professor, 2003; Professor, 2004–.

**Shana Goffredi, Ph.D.**, *Senior Research Fellow in Environmental Science and Engineering*  
B.S., University of San Diego, 1993; Ph.D., University of California (Santa Barbara), 1998. Caltech, 2004–08.

**Moshe Goldberg, Ph.D.**, *Visiting Associate in Mathematics*  
B.Sc., Tel Aviv University, 1965; M.Sc., 1970; Ph.D., 1973. Professor, Technion—Israel Institute of Technology, 1998–. Caltech, 1985; 1990–99; 2001–07.

**Marvin Leonard Goldberger, Ph.D., Sc.D.h.c., D.H.L.h.c., LL.D.h.c.,** *President Emeritus*  
B.S., Carnegie Institute of Technology, 1943; Ph.D., University of Chicago, 1948; Sc.D.h.c., Carnegie Mellon University; University of Notre Dame; D.H.L.h.c., Hebrew Union College; University of Judaism; LL.D.h.c., Occidental College. President and Professor of Theoretical Physics, Caltech, 1978–87; President Emeritus, 1991–.

**Peter Martin Goldreich, Ph.D.,** *Lee A. DuBridge Professor of Astrophysics and Planetary Physics, Emeritus*  
B.S., Cornell University, 1960; Ph.D., 1963. Associate Professor of Planetary Science and Astronomy, Caltech, 1966–69; Professor, 1969–81; DuBridge Professor of Astrophysics and Planetary Physics, 1981–2002; DuBridge Professor Emeritus, 2002–. Acting Chairman, Division of Geological and Planetary Sciences, 1989.

**Paul F. Goldsmith, Ph.D.,** *Visiting Associate in Astronomy*  
A.B., University of California, 1969; Ph.D., 1975. Principal Scientist, Jet Propulsion Laboratory, 2005–. Caltech, 2006–08.

**Sunil Golwala, Ph.D.,** *Assistant Professor of Physics*  
B.A., University of Chicago, 1993; M.A., University of California, 1995; Ph.D., 2000. Caltech, 2003–.

**Frank A. Gomez, Ph.D.,** *Visiting Associate in Applied Physics*  
B.S., California State University, 1986; Ph.D., University of California (Los Angeles), 1991. Professor, California State University, 2002–. Caltech, 2003–08.

**Gabriela Gonzales, Ph.D.,** *Visiting Associate in Physics*  
Ph.D., Syracuse University, 1995. Associate Professor, Louisiana State University, 2004–. Caltech, 2007–08.

**David Louis Goodstein, Ph.D.,** *Professor of Physics and Applied Physics; Frank J. Gilloon Distinguished Teaching and Service Professor*  
B.S., Brooklyn College, 1960; Ph.D., University of Washington, 1965. Research Fellow in Physics, Caltech, 1966–67; Assistant Professor, 1967–71; Associate Professor, 1971–75; Associate Professor of Physics and Applied Physics, 1975–76; Professor, 1976–; Gilloon Professor, 1995–. Vice Provost, 1987–2007.

**Judith R. Goodstein, Ph.D.,** *Faculty Associate in History; University Archivist; Lecturer*  
B.A., Brooklyn College, 1960; Ph.D., University of Washington, 1969. Faculty Associate, Caltech, 1982–; Lecturer, 1989;

2001; 2002; 2007. Registrar, 1989–2003; Institute Archivist, 1968–95; University Archivist, 1995–.

**David George Goodwin, Ph.D.,** *Professor of Mechanical Engineering and Applied Physics*  
B.S., Harvey Mudd College, 1979; M.S., Stanford University, 1980; Ph.D., 1986. Assistant Professor of Mechanical Engineering, Caltech, 1988–93; Associate Professor of Mechanical Engineering and Applied Physics, 1993–2000; Professor, 2000–.

**Krzysztof Marian Gorski, Ph.D.,** *Visiting Associate in Physics*  
M.Sc., Nicolaus Copernicus University (Poland), 1975; Ph.D., Warsaw University, 1987. Senior Research Scientist, Jet Propulsion Laboratory, 2003–. Caltech, 2003–08.

**Thomas D. Gottschalk, Ph.D.,** *Lecturer in Physics*  
B.S., Michigan State University, 1973; Ph.D., University of Wisconsin, 1978. Research Fellow, Caltech, 1980–84; Senior Research Fellow, 1984–85; Senior Research Associate, 1985–87; Lecturer, 1992–97; 2004–06; 2008.

**Roy Walter Gould, Ph.D.,** *Simon Ramo Professor of Engineering, Emeritus*  
B.S., Caltech, 1949; M.S., Stanford University, 1950; Ph.D., Caltech, 1956. Assistant Professor of Electrical Engineering, 1955–58; Associate Professor, 1958–60; Associate Professor of Electrical Engineering and Physics, 1960–62; Professor, 1962–74; Professor of Applied Physics, 1974–80; Ramo Professor of Engineering, 1980–96; Ramo Professor Emeritus, 1996–. Executive Officer for Applied Physics, 1973–79; Chairman, Division of Engineering and Applied Science, 1979–85.

**Thomas Graber, Ph.D.,** *Associate Professor of Mathematics*  
A.B., Harvard University, 1994; M.A., University of California (Los Angeles); Ph.D., 1998. Caltech, 2005–.

**Keith J. B. Grainge, Ph.D.,** *Visiting Associate in Physics*  
Ph.D., University of Cambridge, 1996. Senior Research Associate, 2004–. Caltech, 2008–09.

**Christine Grant, Ph.D.,** *Visiting Associate in Chemical Engineering*  
B.S., Brown University, 1984; M.S., Georgia Institute of Technology, 1986; Ph.D., 1989. Professor, North Carolina State University, 2005–. Caltech, 2007.

**Harry Barkus Gray, Ph.D., D.Sc.h.c., Laurea h.c., D.L.h.c.,** *Arnold O. Beckman Professor of Chemistry; Founding Director, Beckman Institute*  
B.S., Western Kentucky College, 1957; Ph.D., Northwestern University, 1960; D.Sc.h.c., Northwestern University; University of Rochester; University of Chicago; Göteborg University; University of Pennsylvania; Bowling Green State University; University of Arizona; Laurea h.c., University of Florence; D.L.h.c., Illinois Wesleyan University. Visiting Professor of Inorganic Chemistry, Caltech, 1965; Professor of Chemistry, 1966–81; William R. Kenan Professor, 1976–81; Beckman Professor, 1981–. Chairman, Division of Chemistry and Chemical Engineering, 1978–84; Director, Beckman Institute, 1986–2001; Founding Director, 2001–.

**Julia R. Greer, Ph.D.,** *Assistant Professor of Materials Science*  
B.S., Massachusetts Institute of Technology, 1997; M.S., Stanford University, 2000; Ph.D., 2005. Caltech, 2007–.

**David M. Grether, Ph.D.,** *Professor of Economics*  
B.S., University of California, 1960; Ph.D., Stanford University, 1969. Associate Professor, Caltech, 1970–75; Professor, 1975–. Executive Officer for Social Sciences, 1978–82; Chairman, Division of the Humanities and Social Sciences, 1982–92; Interim Chair, Division of the Humanities and Social Sciences, 2006–07.

**Fred J. Grieman, Ph.D.,** *Visiting Associate in Chemistry*  
A.B., University of California (Irvine), 1974; M.A., University of California, 1976; Ph.D., 1979. Moss Professor, Pomona College, 2007–. Caltech, 2008.

**Alex D. Groce, Ph.D.,** *Lecturer in Computer Science*  
B.S. (Computer Science), B.S. (Multidisciplinary Studies), North Carolina State University, 1999; Ph.D., Carnegie Mellon University, 2003. Caltech, 2008.

**Allen R. Gross, D.M.A.,** *Lecturer in Symphony Orchestra*  
A.B., Queens College, 1965; M.A., University of California, 1967; D.M.A., Stanford University, 1978. Caltech, 1999–2008.

**John P. Grotzinger, Ph.D.,** *Fletcher Jones Professor of Geology*  
B.S., Hobart College, 1979; M.S., University of Montana, 1981; Ph.D., Virginia Polytechnic Institute and State University, 1985. Visiting Associate Professor, Caltech, 1996; Moore Distinguished Scholar, 2004; Jones Professor, 2005–.

**Robert H. Grubbs, Ph.D., Nobel Laureate,** *Victor and Elizabeth Atkins Professor of Chemistry*  
B.S., University of Florida, 1963; M.S., 1965; Ph.D., Columbia University, 1968. Professor, Caltech, 1978–90; Atkins Professor, 1990–.

**Sergei Gukov, Ph.D.,** *Professor of Theoretical Physics and Mathematics*  
B.S., Moscow Institute of Physics and Technology, 1997; M.S., Princeton University, 2001; Ph.D., 2001. Associate Professor, Caltech, 2005–07; Professor, 2007–.

**Joshua Ott Gundersen, Ph.D.,** *Visiting Associate in Physics*  
Ph.D., University of California (Santa Barbara), 1995. Associate Professor, University of Miami, 2006–. Caltech, 2007–08.

**Chin-Lin Guo, Ph.D.,** *Assistant Professor of Bioengineering and Applied Physics*  
B.S., National Taiwan University, 1994; M.S., 1996; Ph.D., University of California (San Diego), 2001. Caltech, 2006–.

**Ming Guo, M.D., Ph.D.,** *Visiting Associate in Biology*  
M.D., Shanghai Medical University, 1989; Ph.D., University of California (San Francisco), 1996. Assistant Professor, University of California (Los Angeles), 2002–. Caltech, 2005–09.

**Michael C. Gurnis, Ph.D.,** *John E. and Hazel S. Smits Professor of Geophysics*  
B.S., University of Arizona, 1982; Ph.D., Australian National University, 1987. Associate Professor, Caltech, 1994–96; Professor, 1996–2005; Smits Professor, 2005–. Associate Director, Seismological Laboratory, 1995–2003.

**Herold Richard Gustafson, Ph.D.,** *Visiting Associate in Physics*  
B.S., Caltech, 1959; M.S., University of Washington, 1961; Ph.D., 1968. Senior Research Scientist, University of Michigan, 1968–. Visiting Associate, Caltech, 1997–2009.

**Sossina M. Haile, Ph.D.,** *Professor of Materials Science and Chemical Engineering*  
B.S., Massachusetts Institute of Technology, 1986; M.S., University of California, 1988; Ph.D., Massachusetts Institute of Technology, 1992. Assistant Professor of Materials Science, Caltech, 1996–2001; Associate Professor, 2001–02; Associate Professor of Materials Science and Chemical Engineering, 2003–06; Professor, 2006–.



**Seyed-Ali Hajimiri, Ph.D.**, *Professor of Electrical Engineering*  
B.S., Sharif University of Technology, 1994; M.S., Stanford University, 1996; Ph.D., 1998. Assistant Professor, Caltech, 1998–2003; Associate Professor, 2003–06; Professor, 2006–.

**John Franklin Hall, Ph.D.**, *Professor of Civil Engineering; Dean of Students*  
B.S., West Virginia University, 1972; M.S., University of Illinois, 1973; Ph.D., University of California, 1980. Research Fellow, Caltech, 1980–83; Lecturer, 1981–83; Assistant Professor, 1983–89; Associate Professor, 1989–97; Professor, 1997–. Executive Officer for Civil Engineering and Applied Mechanics, 1998–2005; Dean, 2005–; Acting Vice President for Student Affairs, 2006–07.

**Judith Hall, M.A.**, *Lecturer in Creative Writing*  
A.B., Clark University, 1973; M.A., Johns Hopkins University, 1979. Caltech, 1999–2006; 2008.

**Jon Hamkins, Ph.D.**, *Lecturer in Electrical Engineering*  
B.S., Caltech, 1990; M.S., University of Illinois (Urbana-Champaign), 1993; Ph.D., 1999. Caltech, 2008.

**David Garrison Harkrider, Ph.D.**, *Professor of Geophysics, Emeritus*  
B.A., Rice University, 1953; M.A., 1957; Ph.D., Caltech, 1963. Associate Professor, 1970–79; Professor, 1979–95; Professor Emeritus, 1995–. Associate Director, Seismological Laboratory, 1977–79.

**John M. Harris, Ph.D.**, *Visiting Associate in Geology*  
B.S., University of Leicester (United Kingdom), 1964; M.A., University of Texas (Austin), 1967; Ph.D., University of Bristol, 1970. Chief Curator, George C. Page Museum, 1993–. Caltech, 2001–08.

**Cecily Jill Harrison, Ph.D.**, *Visiting Associate in Biology*  
B.Sc., University of St. Andrews (Scotland), 1996; M.Sc., 1998; Ph.D., Edinburgh University, 2002. Postdoctoral Researcher, University of Oxford, 2003–. Caltech, 2007.

**Fiona A. Harrison, Ph.D.**, *Professor of Physics and Astronomy*  
A.B., Dartmouth College, 1985; Ph.D., University of California, 1993. Robert Millikan Research Fellow, Caltech, 1993–95; Assistant Professor of Physics, 1996–99; Assistant Professor of Physics and Astronomy, 1999–2001; Associate Professor, 2001–05; Professor, 2005–.

**Babak Hassibi, Ph.D.**, *Professor of Electrical Engineering*  
B.S., University of Tehran, 1989; M.S., Stanford University, 1993; Ph.D., 1996. Assistant Professor, Caltech, 2001–03; Associate Professor, 2003–08; Professor, 2008–.

**Kristine Haugen, Ph.D.**, *Assistant Professor of English*  
B.A., University of Chicago, 1996; M.A., Princeton University, 1998; Ph.D., 2001. Caltech, 2005–.

**Egill Hauksson, Ph.D.**, *Senior Research Associate in Geophysics*  
M.S., University of Trondheim (Norway), 1974; M.A., Columbia University, 1978; M.Phil., 1980; Ph.D., 1981. Research Fellow, Caltech, 1989–92; Senior Research Associate, 1992–.

**Klaus Havelund, Ph.D.**, *Lecturer in Computer Science*  
M.S., University of Copenhagen, 1994; Ph.D., 1994. Caltech, 2008.

**Stephen W. Hawking, Ph.D.**, *Sherman Fairchild Distinguished Scholar*  
B.A., University of Oxford, 1962; Ph.D., University of Cambridge, 1965. Lucasian Professor of Mathematics, 1979–. Caltech, 1976; 1992–93; 1995–98; 2003; 2005–08.

**Bruce A. Hay, Ph.D.**, *Associate Professor of Biology*  
B.A., Claremont McKenna College, 1982; Ph.D., University of California (San Francisco), 1989. Assistant Professor, Caltech, 1996–2002; Associate Professor, 2002–.

**Wanzhong He, Ph.D.**, *Visiting Associate in Biology*  
B.S., Chengdu University of Technology, 1991; M.S., University of Geosciences, 1994; Ph.D., Chinese Academy of Sciences, 1997. Assistant Professor, National University of Singapore, 2007–. Caltech, 2007–08.

**Ian Head, Ph.D.**, *Visiting Associate in Geobiology*  
B.A.Sc., University of Strathclyde (Glasgow), 1986; Ph.D., University of Newcastle, 1989. Professor, University of Newcastle upon Tyne, 2005–. Caltech, 2008.

**James R. Heath, Ph.D.**, *Elizabeth W. Gilloon Professor and Professor of Chemistry*  
B.Sc., Baylor University, 1984; M.A., Rice University, 1988; Ph.D., 1988. Caltech, 2003–.

**Thomas Harrison Heaton, Ph.D.**, *Professor of Engineering Seismology*  
B.S., Indiana University, 1972; Ph.D., Caltech, 1978. Visiting Associate in Geophysics, Caltech, 1980–91; Faculty Associate, 1991–95; Lecturer in Geophysics, 1993–94; Lecturer in Engineering Seismology, 1995; Professor, 1995–.

**Jeremy Heidel, Ph.D.**, *Visiting Associate in Chemical Engineering*  
B.S., Massachusetts Institute of Technology, 1999; Ph.D., Caltech, 2005. Chief Scientific Officer, Calando Pharmaceuticals, 2005–. Visiting Associate, Caltech, 2006–08.

**Marcus G. B. Heisler, Ph.D.**, *Senior Research Associate in Biology*  
B.Sc., University of Melbourne, 1990; Ph.D., Monash University, 2000. Caltech, 2007–11.

**Donald Vincent Helmberger, Ph.D.**, *Smits Family Professor of Geological and Planetary Sciences*  
B.S., University of Minnesota, 1961; M.S., University of California (San Diego), 1965; Ph.D., 1967. Assistant Professor, Caltech, 1970–74; Associate Professor, 1974–79; Professor, 1979–2000; Smits Family Professor, 2000–. Director, Seismological Laboratory, 1998–2003.

**George Helou, Ph.D.**, *Senior Research Associate in Physics; Executive Director of the Infrared Processing and Analysis Center*  
B.S., American University of Beirut, 1975; Ph.D., Cornell University, 1980. Senior Research Associate, Caltech, 1998–. Executive Director, 1999–.

**Janet G. Hering, Ph.D.**, *Professor of Environmental Science and Engineering; Executive Officer for Keck Laboratories*  
A.B., Cornell University, 1979; A.M., Harvard University, 1981; Ph.D., Massachusetts Institute of Technology, 1988. Visiting Associate, Caltech, 1995–96; Associate Professor of Environmental Engineering Science, 1996–2002; Professor of Environmental Science and Engineering, 2002–. Executive Officer, 2002–.

**Matthew C. Heverly, M.S.**, *Lecturer in Mechanical Engineering*  
B.S., California Polytechnic State University (San Luis Obispo), 1999; M.S., Boston University, 2005. Caltech, 2008.

**Jason J. Hickey, Ph.D.**, *Assistant Professor of Computer Science*  
B.S., Caltech, 1985; M.Eng., Cornell University, 1987; Ph.D., 2000. Instructor, Caltech, 1999–2000; Assistant Professor, 2000–.

**James C. Higdon, Ph.D.**, *Visiting Associate in Physics*  
Ph.D., University of California (Los Angeles), 1974. Professor, Claremont McKenna, Pitzer, and Scripps Colleges, 1987–. Caltech, 2001–02; 2008–09.

**David J. Hill, Ph.D.**, *Senior Research Fellow in Aeronautics; Lecturer in Applied and Computational Mathematics*  
B.S., Reed College, 1991; Ph.D., Caltech, 1998. Lecturer, 2007; 2008; Senior Research Fellow, 2007–09.

**Michael G. Hill, Ph.D.**, *Visiting Associate in Chemistry; Lecturer in Chemistry*  
B.A., Macalester College, 1987; Ph.D., University of Minnesota, 1992. Assistant Professor, Occidental College, 1994–. Research Fellow, Caltech, 1992–94; Visiting Associate, 1995–2010; Lecturer, 2008.

**Lynne Anne Hillenbrand, Ph.D.**, *Associate Professor of Astronomy; Executive Officer for Astronomy*  
A.B., Princeton University, 1989; M.S., 1989; Ph.D., University of Massachusetts, 1995. Assistant Professor, Caltech, 2000–06; Associate Professor, 2006–. Executive Officer, 2007–.

**Christopher M. Hirata, Ph.D.**, *Assistant Professor of Astrophysics*  
B.S., Caltech, 2001; Ph.D., Princeton University, 2005. Caltech, 2007–.

**Kayoko Hirata, Ph.D.**, *Lecturer in Japanese*  
B.A., Kitakyushu University (Japan), 1966; M.A., University of Oregon, 1978; M.A., University of Arizona (Tucson), 1987; Ph.D., 1989. Caltech, 1990–.

**Rudy Hirschmann, Ph.D.**, *Lecturer in German*  
B.A., Valparaiso University, 1963; M.A., University of Colorado, 1966; Ph.D., 1969. Caltech, 2008.

**David A. Hirshleifer, Ph.D.**, *Visiting Associate in Finance*  
B.A., University of California (Los Angeles), 1980; M.A., University of Chicago, 1983; Ph.D., 1985. Professor, University of California (Irvine), 2007–. Caltech, 2008–09.

**Christopher Read Hitchcock, Ph.D.**, *Professor of Philosophy*  
A.B., Princeton University, 1986; M.A. (Philosophy), M.A. (Mathematics), University of Pittsburgh, 1990; Ph.D., 1993. Associate Professor, Caltech, 1998–2002; Professor, 2002–.

**David George Hitlin, Ph.D.**, *Professor of Physics*  
B.A., Columbia University, 1963; M.A., 1965; Ph.D., 1968. Associate Professor, Caltech, 1979–85; Professor, 1986–.

**Tracey C. Ho, Ph.D.**, *Assistant Professor of Electrical Engineering and Computer Science*  
S.B., Massachusetts Institute of Technology, 1999; M.Eng., 1999; Ph.D., 2004. Caltech, 2004–.

**Stefan Hoderlein, Ph.D.**, *Visiting Assistant Professor of Economics*  
M.A., Bonn University, 1997; Ph.D., 2002. Assistant Professor, University of Mannheim, 2005–. Caltech, 2008.

**Philip Thomas Hoffman, Ph.D.**, *Rea A. and Lela G. Axline Professor of Business Economics and Professor of History*  
A.B., Harvard College, 1969; M.A., University of California, 1971; Ph.D., Yale University, 1979. Lecturer in History, Caltech, 1980–81; Instructor, 1981–82; Assistant Professor, 1982–84; Associate Professor of History and Social Science, 1984–95; Professor, 1995–2003; Richard and Barbara Rosenberg Professor of History and Social Science, 2003–08; Axline Professor, 2008–. Executive Officer for the Humanities, 1995–2000.

**Michael Robert Hoffmann, Ph.D.**, *James Irvine Professor of Environmental Science; Dean of Graduate Studies*  
B.A., Northwestern University, 1968; Ph.D., Brown University, 1974. Research Fellow, Caltech, 1973–76; Associate Professor, 1980–85; Professor of Environmental Engineering Science, 1986–90; Professor of Environmental Chemistry, 1990–96; Irvine Professor of Environmental Science, 1996–. Executive Officer for Environmental Engineering Science, 1996–2002; Dean of Graduate Studies, 2002–.

**Susan Hojnacki, Ph.D.**, *Visiting Associate in Chemistry*  
M.S., Rochester Institute of Technology, 2000; Ph.D., 2005. Senior Member, Engineering and Space Directorate, Jet Propulsion Laboratory, 2007–. Caltech, 2008–10.

**Virginia Iris Holmes, Ph.D.**, *Senior Research Fellow in History*  
B.A., University of Massachusetts, 1980; M.A., Tufts University, 1988; M.A., University of Michigan (Ann Arbor), 1993; Ph.D., Binghamton University, 2001. Caltech, 2002–08.

**Gerard J. Holzmann, Ph.D.**, *Faculty Associate in Computer Science*  
B.S., Delft University of Technology (Netherlands), 1973; M.S., 1976; Ph.D., 1979. Lecturer, Caltech, 2003–06; Faculty Associate, 2007–10.

**Narimon Honarpour, Ph.D., M.D.**, *Visiting Associate in Biology*  
B.S., University of Texas (Austin), 1996; Ph.D., University of Texas Southwestern Medical Center, 2001; M.D., University of California (Los Angeles), 2003. STAR Postdoctoral Fellow, 2005–. Caltech, 2006–09.

**John H. Hong, Ph.D.**, *Faculty Associate in Information Science and Technology*  
B.S., Massachusetts Institute of Technology, 1982; M.S., Caltech, 1983; Ph.D., 1987. Chief Technologist for Astronomy and Physics, Jet Propulsion Laboratory, 2003–. Research Fellow, Caltech, 1987–88; Lecturer, 1994; Visiting Associate in Electrical Engineering, 2003–04; Faculty Associate, 2005–08.

**Leroy E. Hood, M.D., Ph.D., D.Sc.h.c., D.h.c.**, *Visiting Associate in Biology*  
B.S., Caltech, 1960; M.D., Johns Hopkins University, 1964; Ph.D., Caltech, 1968; D.Sc.h.c., Montana State University; Mount Sinai School of Medicine of the City University of New York; University of British Columbia; University of Southern California; D.h.c., Johns Hopkins University. President and Director, Institute for Systems Biology, 1999–. Assistant Professor of Biology, Caltech, 1970–73; Associate Professor, 1973–75; Professor, 1975–77; Ethel Wilson Bowles and Robert Bowles Professor of Biology, 1977–92; Visiting Associate in Biology, 1992–2007. Chairman, Division of Biology, 1980–89; Director, Center for the Development of an Integrated Protein and Nucleic Acid Biotechnology, 1989–92.

**John J. Hopfield, Ph.D.**, *Roscoe G. Dickinson Professor of Chemistry and Biology, Emeritus*  
A.B., Swarthmore College, 1954; Ph.D., Cornell University, 1958. Dickinson Professor, Caltech, 1980–97; Dickinson Professor Emeritus, 1997–.

**Hans G. Hornung, Ph.D.**, *C. L. “Kelly” Johnson Professor of Aeronautics, Emeritus*  
B.S., University of Melbourne, 1960; M.S., 1962; Ph.D., University of London (Imperial College), 1965. Johnson Professor, Caltech, 1987–2005; Johnson Professor Emeritus, 2005–. Director, Graduate Aeronautical Laboratories, 1987–2004.

**Yizhao Thomas Hou, Ph.D.**, *Charles Lee Powell Professor of Applied and Computational Mathematics*  
B.S., South China University of Technology, 1982; M.S., University of California (Los Angeles), 1985; Ph.D., 1987. Associate Professor of Applied Mathematics, Caltech, 1993–98; Professor, 1998–2000; Professor of Applied and Computational Mathematics, 2000–04; Powell Professor, 2004–. Executive Officer for Applied and Computational Mathematics, 2000–06.

**James Morrow House, M.D.**, *Visiting Associate in Chemical Engineering*  
B.S., University of Kansas, 1962; M.D., 1966. Staff Physician, Huntington Memorial Hospital, 1971–. Assistant Professor, University of California (Los Angeles), 1973–. Caltech, 2002–08.

**George W. Housner, Ph.D.**, *Carl F. Braun Professor of Engineering, Emeritus*  
B.S., University of Michigan, 1933; M.S., Caltech, 1934; Ph.D., 1941. Assistant Professor, 1945–49; Associate Professor, 1949–53; Professor, 1953–74; Braun Professor, 1974–81; Braun Professor Emeritus, 1981–.

**James B. Howard, Ph.D.**, *Visiting Associate in Chemistry*  
B.A., DePauw University, 1964; Ph.D., University of California (Los Angeles), 1968. Professor, University of Minnesota, 1982–. Caltech, 1996–2008.

**Linda C. Hsieh-Wilson, Ph.D.**, *Associate Professor of Chemistry; Investigator, Howard Hughes Medical Institute*  
B.S., Yale University, 1990; Ph.D., University of California, 1996. Assistant Professor, Caltech, 2000–06; Associate Professor, 2006–. Investigator, 2005–.

**Rong-gui Hu, Ph.D.**, *Senior Research Fellow in Biology*  
B.S., Anhui Normal University, 1995; Ph.D., Shanghai Institute of Biochemistry and Cell Biology, 2001. Caltech, 2007–09.

**Alice Shih-hou Huang, Ph.D., M.A.h.c., D.Sc.h.c.**, *Senior Faculty Associate in Biology*  
B.A., Johns Hopkins University, 1961; M.S., 1963; Ph.D., 1966. M.A.h.c., Harvard University; D.Sc.h.c., Wheaton College; Mt. Holyoke College; Medical College of Pennsylvania. Faculty Associate, Caltech, 1997–2007; Senior Faculty Associate, 2007–09.

**Michael Hucka, Ph.D.**, *Senior Research Fellow in Control and Dynamical Systems*  
B.S., University of Utah, 1987; M.S., University of Michigan, 1991; Ph.D., 1989. Caltech, 2005–.

**Kenneth W. Hudnut, Ph.D.**, *Visiting Associate in Geophysics*  
A.B., Dartmouth College, 1983; M.A., Columbia University, 1986; Ph.D., 1989. Geophysicist and Project Chief, U.S. Geological Survey, 1992–. Research Fellow, Caltech, 1989–92; Visiting Associate, 1997–2009.

**Emlyn W. Hughes, Ph.D.**, *Visiting Associate in Physics*  
B.S., Stanford University, 1982; M.A., Columbia University, 1984; M.Phil, 1985; Ph.D., 1987. Associate Professor, Caltech, 1995–99; Professor, 1999–2008; Visiting Associate, 2008–.

**Melany L. Hunt, Ph.D.**, *Professor of Mechanical Engineering; Vice Provost*  
B.S., University of Minnesota, 1983; M.S., University of California, 1985; Ph.D., 1987. Assistant Professor, Caltech, 1988–95; Associate Professor, 1995–2001; Professor, 2001–. Executive Officer for Mechanical Engineering, 2002–07; Vice Provost, 2007–.

**Matthew C. Hunter, Ph.D.**, *Weisman Postdoctoral Instructor in Art History*  
B.A., Reed College, 1997; M.A., University of Chicago, 1999; Ph.D., 2007. Caltech, 2008–10.

**Sonjong Hwang, Ph.D.**, *Lecturer in Chemistry*  
B.S., Sogang University (Korea), 1987; Ph.D., Iowa State University, 1994. Caltech, 2001–08.

**Matias Jose Iaryczower, Ph.D.**, *Assistant Professor of Economics and Political Science*  
B.A., University of Buenos Aires, 1997; M.A., University of San Andres (Buenos Aires), 1997; Ph.D., University of California (Los Angeles), 2005. Caltech, 2005–.

**Jozsef Illy, Ph.D.**, *Visiting Associate in History*  
Ph.D., Szeged University and Hungarian Academy of Sciences, 1982. Contributing Editor of Collected Papers of Albert Einstein, Princeton University Press, 1991–. Senior Research Associate, Retired, Hungarian Academy of Sciences (Institute of Isotopes), 1993–. Caltech, 2000–08.

**Myungshin Im, Ph.D.**, *Visiting Associate in Astronomy*  
Ph.D., Johns Hopkins University, 1995. Assistant Professor, Seoul National University, 2003–. Caltech, 2007–08.

**Andrew Perry Ingersoll, Ph.D.**, *Earle C. Anthony Professor of Planetary Science*  
B.A., Amherst College, 1960; A.M., Harvard University, 1961; Ph.D., 1966. Assistant Professor, Caltech, 1966–71; Associate Professor, 1971–76; Professor, 1976–2003; Anthony Professor, 2003–. Executive Officer for Planetary Science, 1987–94.

**Yoku Inoue, Ph.D.**, *Visiting Associate in Electrical Engineering*  
B.S., Kobe University, 1993; M.S., 1995; Ph.D., 2000. Associate Professor, Shizouka University, 2007–. Caltech, 2008.

**Adrian Ioana, Ph.D.**, *Olga Taussky and John Todd Instructor in Mathematics*  
B.S., University of Bucharest, 2003; Ph.D., University of California (Los Angeles), 2007. Caltech, 2007–10.

**Sandra S. Irani, Ph.D.**, *Visiting Associate in Computer Science*  
B.S., Princeton University, 1986; Ph.D., University of California, 1991. Chair, Computer Science Department, University of California (Irvine), 2004–. Caltech, 2008–09.

**Mitsuhiko Itakura, Ph.D.**, *Visiting Associate in Aeronautics*  
B.S., Tokyo University, 1992; M.S., 1994; Ph.D., 1997. Research Staff, Japan Atomic Energy Research Institute, 1997–. Caltech, 2006–07.

**Wilfred Dean Iwan, Ph.D.**, *Professor of Applied Mechanics, Emeritus*  
B.S., Caltech, 1957; M.S., 1958; Ph.D., 1961. Assistant Professor, 1964–67; Associate Professor, 1967–72; Professor, 1972–2004; Professor Emeritus, 2004–. Executive Officer for Civil Engineering and Applied Mechanics, 1980–86.

**Wendell P. Jack, Ed.D.**, *Director of Athletics and Physical Education*  
B.A., California State University (Long Beach), 1979; M.A., 1982; Ed.D., Concordia University, 2004. Coach, Caltech, 1989–92; Director, 2005–.

**Jennifer Mae Jackson, Ph.D.**, *Assistant Professor of Geophysics*  
B.S., University of Illinois (Urbana-Champaign), 1999; M.S., University of Notre Dame, 2000; Ph.D., University of Illinois, 2005. Caltech, 2007–.

**Joanna Jankowsky, Ph.D.**, *Senior Research Fellow in Biology*  
B.A., Amherst College, 1991; Ph.D., Caltech, 1999. Senior Research Fellow, 2003–09.

**Marc Javoy, Ph.D.**, *Visiting Associate in Geochemistry*  
A.S.P., Ecole Normale Supérieure, 1961; Ph.D., University of Paris, 1970. Professor Emeritus, Université Denis Diderot and Institut de Physique du Globe de Paris, 2006–. Research Fellow, Caltech, 1966; Visiting Associate, 2008.

**Paul Christian Jennings, Ph.D.**, *Professor of Civil Engineering and Applied Mechanics, Emeritus*  
B.S., Colorado State University, 1958; M.S., Caltech, 1960; Ph.D., 1963. Research Fellow in Civil Engineering, 1965; Assistant Professor of Applied Mechanics, 1966–68; Associate Professor, 1968–72; Professor, 1972–77; Professor of Civil Engineering and Applied Mechanics, 1977–2002; 2004–07; Professor Emeritus, 2002–04; 2007–. Executive Officer for Civil Engineering and Applied Mechanics, 1975–80; Chairman, Division of Engineering and Applied Science, 1985–89; Vice President and Provost, 1989–95; Acting Vice President for Business and Finance, 1995; 1998–99; Provost, 2004–07.

**Grant J. Jensen, Ph.D.**, *Associate Professor of Biology*  
B.S., Brigham Young University, 1994; Ph.D., Stanford University, 1999. Assistant Professor, Caltech, 2002–08; Associate Professor, 2008–.

**Warren Johnson, Ph.D.**, *Visiting Associate in Physics*  
Ph.D., Reed College, 1974. Associate Professor, Louisiana State University, 1992–. Caltech, 2000–08.

**William Lewis Johnson, Ph.D.**, *Ruben F. and Donna Mettler Professor of Engineering and Applied Science*  
B.A., Hamilton College, 1970; Ph.D., Caltech, 1975. Assistant Professor of Materials Science, 1977–80; Associate Professor, 1980–84; Professor, 1984–89; Mettler Professor, 1989–.

**Alexander Raymond Jones, Ph.D.**, *Francis Bacon Visiting Professor of History*  
B.A., University of British Columbia, 1981; Ph.D., Brown University, 1985. Professor, University of Toronto, 1997–. Caltech, 2008.

**Lucile Merrill Jones, Ph.D.**, *Visiting Associate in Geophysics*  
A.B., Brown University, 1976; Ph.D., Massachusetts Institute of Technology, 1981. Research Associate, U.S. Geological Survey, 1984–. Caltech, 1984–2008.

**Rajeev Joshi, Ph.D.**, *Lecturer in Computer Science*  
B.S., Indian Institute of Technology (Bombay), 1990; M.S., University of Texas (Austin), 1994; Ph.D., 1999. Caltech, 2008.

**Catherine Jurca, Ph.D.**, *Associate Professor of English; Master of Student Houses*  
B.A., University of California, 1987; M.A., Johns Hopkins University, 1992; Ph.D., 1995. Instructor in Literature, Caltech, 1995; Assistant Professor, 1995–2001; Associate Professor, 2001–04; Associate

Professor of English, 2004–. Master of Student Houses, 2002–.

**Daniel Kahn, Ph.D., M.D.**, *Visiting Associate in Biology*  
B.S., Ohio State University, 1994; Ph.D., University of California (San Diego), 2001; M.D., 2002. Residency, University of California (Los Angeles), 2003–. Caltech, 2008.

**W. Barclay Kamb, Ph.D.**, *Barbara and Stanley R. Rawn Jr. Professor of Geology and Geophysics, Emeritus*  
B.S., Caltech, 1952; Ph.D., 1956. Assistant Professor of Geology, 1956–60; Associate Professor, 1960–62; Professor, 1962–63; Professor of Geology and Geophysics, 1963–90; Rawn Professor, 1990–99; Rawn Professor Emeritus, 1999–. Chairman, Division of Geological and Planetary Sciences, 1972–83; Vice President and Provost, 1987–89.

**Marc Kamionkowski, Ph.D.**, *Robinson Professor of Theoretical Physics and Astrophysics*  
B.A., Washington University (St. Louis), 1987; Ph.D., University of Chicago, 1991. Professor, Caltech, 1999–2006; Robinson Professor, 2006–.

**Hiroo Kanamori, Ph.D.**, *John E. and Hazel S. Smits Professor of Geophysics, Emeritus*  
B.S., University of Tokyo, 1959; M.S., 1961; Ph.D., 1964. Research Fellow, Caltech, 1965–66; Professor, 1972–89; Smits Professor, 1989–2005; Smits Professor Emeritus, 2005–. Director, Seismological Laboratory, 1990–98.

**Keiko Kanamori, Ph.D.**, *Visiting Associate in Chemistry*  
B.A., University of Tokyo, 1962; B.S., California State University, 1976; Ph.D., Caltech, 1981. Postdoctoral Research Chemist, University of California (Los Angeles), 1982–. Visiting Associate, Caltech, 1984–.

**Nam-Gyu Kang, Ph.D.**, *Olga Taussky and John Todd Instructor in Mathematics*  
B.S., Seoul National University, 1993; Ph.D., Yale University, 2004. Caltech, 2007–10.

**Anton Kapustin, Ph.D.**, *Associate Professor of Theoretical Physics*  
M.S., Moscow State University, 1993; Ph.D., Caltech, 1997. Assistant Professor, 2001–04; Associate Professor, 2004–.

**Emil P. Kartalov, Ph.D.**, *Visiting Associate in Electrical Engineering*  
B.S., Caltech, 1998; M.S., 2004; Ph.D., 2004. Assistant Professor, University of Southern California, 2007–. Visiting Associate, Caltech, 2008–09.

**Jonathan N. Katz, Ph.D.**, *Professor of Political Science; Chair, Division of the Humanities and Social Sciences*  
S.B., Massachusetts Institute of Technology, 1990; M.A., University of California (San Diego), 1992; Ph.D., 1995. Assistant Professor, Caltech, 1995–98; Associate Professor, 1998; 1999–2003; Professor, 2003–. Executive Officer for the Social Sciences, 2007; Chair, 2007–.

**Ralph William Kavanagh, Ph.D.**, *Professor of Physics, Emeritus*  
B.A., Reed College, 1950; M.A., University of Oregon, 1952; Ph.D., Caltech, 1956. Research Fellow, 1956–58; Senior Research Fellow, 1958–60; Assistant Professor, 1960–65; Associate Professor, 1965–70; Professor, 1970–2000; Professor Emeritus, 2000–.

**Alexander Sotirios Kechris, Ph.D., D.h.c.**, *Professor of Mathematics*  
M.S., National Technological University (Athens), 1969; Ph.D., University of California (Los Angeles), 1972; D.h.c., University of Athens. Assistant Professor, Caltech, 1974–76; Associate Professor, 1976–81; Professor, 1981–. Executive Officer for Mathematics, 1994–97.

**Mary B. Kennedy, Ph.D.**, *Allen and Lenabelle Davis Professor of Biology*  
B.S., St. Mary's College, 1969; Ph.D., Johns Hopkins University, 1975. Assistant Professor, Caltech, 1981–84; Associate Professor, 1984–92; Professor, 1992–2002; Davis Professor, 2002–.

**Daniel Jerome Kevles, Ph.D.**, *J. O. and Juliette Koepfli Professor of the Humanities, Emeritus*  
A.B., Princeton University, 1960; Ph.D., 1964. Assistant Professor of History, Caltech, 1964–68; Associate Professor, 1968–78; Professor, 1978–86; Koepfli Professor of the Humanities, 1986–2001; Koepfli Professor Emeritus, 2001–. Executive Officer for the Humanities, 1978–81.

**Farid Ya Khalili, Ph.D.**, *Visiting Associate in Physics*  
Ph.D., Moscow State University, 1979. Professor, 1997–. Caltech, 2001–08.

**Ali Khoshnan, Ph.D.**, *Senior Research Fellow in Biology*  
M.A., California State University, 1988; Ph.D., University of Texas Health Science Center (San Antonio), 1995. Caltech, 2002–08.

**Haseo Ki, Ph.D.**, *Visiting Associate in Mathematics*  
Ph.D., Caltech, 1995. Professor, Yonsei University, 2007–. Visiting Associate, Caltech, 2008–09.

**D. Roderick Kiewiet, Ph.D.**, *Professor of Political Science*  
B.A., University of Iowa, 1974; Ph.D., Yale University, 1980. Assistant Professor, Caltech, 1979–82; Associate Professor, 1982–89; Professor, 1989–. Dean of Students, 1992–96; Dean of Graduate Studies, 2000–02.

**Paul Choong Kim, Ph.D.**, *Visiting Associate in Materials Science*  
B.S., University of South Florida, 1992; Ph.D., Caltech, 2001. Vice President, Liquidmetal Technologies, 2002–. Visiting Associate, Caltech, 2006–08.

**H. Jeff Kimble, Ph.D.**, *William L. Valentine Professor and Professor of Physics*  
B.S., Abilene Christian University, 1971; M.S., University of Rochester, 1973; Ph.D., 1978. Professor, Caltech, 1989–; Valentine Professor, 1997–.

**Richard E. Kipling, Ph.D.**, *Lecturer in Journalism*  
B.A., University of California (Santa Barbara), 1966; M.A., 1968; Ph.D., Claremont Graduate School, 1971. Caltech, 2008.

**Joseph Lynn Kirschvink, Ph.D.**, *Nico and Marilyn Van Wingen Professor of Geobiology*  
B.S., M.S., Caltech, 1975; M.A., Princeton University, 1978; Ph.D., 1979. Assistant Professor, Caltech, 1981–87; Associate Professor, 1987–92; Professor, 1992–2004; Van Wingen Professor, 2004–.

**Alexei Kitaev, Ph.D.**, *Professor of Theoretical Physics and Computer Science*  
Dipl., Moscow Institute of Physics and Technology, 1986; Ph.D., Landau Institute for Theoretical Physics, 1989. Visiting Associate, Caltech, 1998–99; Lecturer, 1998–99; Senior Research Associate, 2001–02; Professor, 2002–.

**Henrik Kjaergaard, Ph.D.**, *Visiting Associate in Geochemistry*  
Ph.D., Odense University, 1992. Associate Professor, University of Otago, 2001–. Caltech, 2007–08.

**Burton H. Klein, Ph.D.**, *Professor of Economics, Emeritus*  
A.B., Harvard College, 1940; Ph.D., Harvard University, 1948. Professor, Caltech, 1967–83; Professor Emeritus, 1983–.

**Daniel M. Klerman, J.D., Ph.D.**, *Visiting Professor of Law*  
B.A., Yale University, 1988; J.D., University of Chicago Law School, 1991; Ph.D., University of Chicago, 1998. Professor, University of Southern California, 2001–. Caltech, 2003–08.

**Wolfgang Gustav Knauss, Ph.D.**, *Theodore von Kármán Professor of Aeronautics and Applied Mechanics, Emeritus*  
B.S., Caltech, 1958; M.S., 1959; Ph.D., 1963. Research Fellow in Aeronautics, 1963–65; Assistant Professor, 1965–69; Associate Professor, 1969–78; Professor, 1978–82; Professor of Aeronautics and Applied Mechanics, 1982–2001; von Kármán Professor, 2001–04; von Kármán Professor Emeritus, 2004–.

**James Kenyon Knowles, Ph.D.**, *D.Sc.h.c., William R. Kenan, Jr., Professor and Professor of Applied Mechanics, Emeritus*  
B.S., Massachusetts Institute of Technology, 1952; Ph.D., 1957; D.Sc.h.c., National University of Ireland. Assistant Professor of Engineering and Applied Science, Caltech, 1958–61; Associate Professor, 1961–65; Professor of Applied Mechanics, 1965–; Kenan Professor, 1991–97; Kenan Professor Emeritus, 1997–. Academic Officer for Applied Mechanics, 1971–75; Executive Officer for Civil Engineering and Applied Mechanics, 1986–93; Acting Chairman, Division of Engineering and Applied Science, 1989–90.

**Christof Koch, Ph.D.**, *Lois and Victor Troendle Professor of Cognitive and Behavioral Biology and Professor of Computation and Neural Systems; Executive Officer for Neurobiology*  
M.S., University of Tübingen, 1980; Ph.D., 1982. Assistant Professor of Computation and Neural Systems, Caltech, 1986–91; Associate Professor, 1991–94; Professor, 1994–; Troendle Professor, 2000–. Executive Officer for Computation and Neural Systems, 1997–2005; Executive Officer for Neurobiology, 2006–.

**Masakazu Konishi, Ph.D.**, *Bing Professor of Behavioral Biology*  
B.S., Hokkaido University (Japan), 1956; M.S., 1958; Ph.D., University of California, 1963. Professor of Biology, Caltech, 1975–80; Bing Professor, 1980–. Executive Officer for Biology, 1977–80.

**Wang Sang Koon, Ph.D.**, *Lecturer in Control and Dynamical Systems*  
B.S., University of California, 1968; M.S., 1971; Ph.D., 1997. Caltech, 1997–99; 2001–07.

**Steven Elliot Koonin, Ph.D.**, *Visiting Associate in Physics*  
B.S., Caltech, 1972; Ph.D., Massachusetts Institute of Technology, 1975. Assistant Professor of Theoretical Physics, Caltech, 1975–78; Associate Professor of Physics, 1978–81; Professor of Theoretical Physics, 1981–2008; Visiting Associate, 2008–. Vice President and Provost, 1995–2001; Provost, 2001–04.

**David S. Koos, Ph.D.**, *Senior Research Fellow in Biology*  
B.S., University of Connecticut, 1989; Ph.D., Princeton University, 2000. Lecturer, Caltech, 2003–06; Senior Research Fellow, 2006–08.

**Diana Lena Kormos-Buchwald, Ph.D.**, *Professor of History*  
B.Sc., Technion—Israel Institute of Technology, 1981; M.Sc., Tel Aviv University, 1983; A.M., Harvard University, 1985; Ph.D., 1990. Instructor, Caltech, 1989–90; Assistant Professor, 1990–96; Associate Professor, 1996–2005; Professor, 2005–.

**Julia A. Kornfield, Ph.D.**, *Professor of Chemical Engineering*  
B.S., Caltech, 1983; M.S., 1984; Ph.D., Stanford University, 1988. Assistant Professor, Caltech, 1990–95; Associate Professor, 1995–2001; Professor, 2001–.

**Joseph Morgan Kousser, Ph.D.**, *Professor of History and Social Science*  
A.B., Princeton University, 1965; M.Phil., Yale University, 1968; Ph.D., 1971. Instructor in History, Caltech, 1969–71; Assistant Professor, 1971–74; Associate Professor, 1974–79; Professor, 1979–80; Professor of History and Social Science, 1980–.

**Anne Jacob Kox, Ph.D.**, *Visiting Associate in History*  
M.S., University of Amsterdam, 1972; Ph.D., 1976. Pieter Zeeman Professor, 1998–. Visiting Professor, Caltech, 2003; Visiting Associate, 2005–09.

**Gerhard Jean Marie Krige, Ph.D.**, *Eleanor Searle Visiting Professor of History*  
B.S., University of Pretoria, 1960; M.S., Physical Chemistry, 1962; Ph.D., 1965; B.A., University of South Africa, 1971; M.A., Philosophy, University of Sussex, 1973; Ph.D., 1979. Kranzberg Professor, Georgia Institute of Technology, 2000–. Caltech, 2009.

**Swaminathan Krishnan, Ph.D.**, *Assistant Professor of Civil Engineering and Geophysics*  
B.S., Indian Institute of Technology, 1992; M.S., Rice University, 1994; Ph.D., Caltech, 2003. Assistant Professor of Civil Engineering, 2006–07; Assistant Professor of Civil Engineering and Geophysics, 2007–.

**Shrinivas R. Kulkarni, Ph.D.**, *John D. and Catherine T. MacArthur Professor of Astronomy and Planetary Science; Director, Caltech Optical Observatories*  
M.S., Indian Institute of Technology, 1978; Ph.D., University of California, 1983. Millikan Research Fellow in Radio Astronomy, Caltech, 1985–87; Assistant

Professor of Astronomy, 1987–90; Associate Professor, 1990–92; Professor, 1992–96; Professor of Astronomy and Planetary Science, 1996–2001; MacArthur Professor, 2001–. Executive Officer for Astronomy, 1997–2000; Director, 2006–.

**Akiko Kumagai, Ph.D.**, *Senior Research Associate in Biology*  
B.S., Kyoto University (Japan), 1979; Ph.D., 1986. Senior Research Fellow, Caltech, 1989–95; Senior Research Associate, 1996–.

**Aron Kuppermann, Ph.D.**, *Professor of Chemical Physics*  
M.Sc., University of São Paulo, 1948; Ph.D., University of Notre Dame, 1956. Caltech, 1963–.

**Jenijoy La Belle, Ph.D.**, *Professor of English, Emeritus*  
B.A., University of Washington, 1965; Ph.D., University of California (San Diego), 1969. Assistant Professor of English, Caltech, 1969–76; Associate Professor, 1977–80; Associate Professor of Literature, 1980–88; Professor, 1988–2004; Professor of English, 2004–07; Professor Emeritus, 2007–.

**Jay A. Labinger, Ph.D.**, *Faculty Associate in Chemistry; Lecturer in Chemistry*  
B.S., Harvey Mudd College, 1968; Ph.D., Harvard University, 1974. Lecturer, Caltech, 1988–1996; Faculty Associate, 2006–; Lecturer in Chemistry, 2008.

**Michael P. Lamb, Ph.D.**, *Assistant Professor of Geology*  
B.S., University of Minnesota, 2001; M.S., University of Washington, 2004; Ph.D., University of California, 2008. Caltech, 2009–.

**Maria Polikandritou Lambros, Ph.D.**, *Visiting Associate in Chemical Engineering*  
University of Greece, 1980; M.S., University of Cincinnati, 1983; Ph.D., University of Minnesota, 1991. Adjunct Professor, University of Oklahoma, 1999–. Caltech, 2007–08.

**Andrew E. Lange, Ph.D.**, *Marvin L. Goldberger Professor of Physics; Senior Research Scientist, Jet Propulsion Laboratory; Chair, Division of Physics, Mathematics and Astronomy*  
B.A., Princeton University, 1980; Ph.D., University of California, 1987. Visiting Associate, Caltech, 1993–94; Professor, 1994–2001; Goldberger Professor, 2001–. Senior Research Scientist, 2006–. Chair, 2008–.

**Ralf Langen, Ph.D.**, *Visiting Associate in Chemistry*  
B.S., University of Hannover (Germany), 1988; M.S., University of Southern California, 1994; Ph.D., Caltech, 1995. Assistant Professor, University of Southern California, 1999-. Visiting Associate, Caltech, 1995-2000; 2003-08.

**Thomas A. Langer, Ph.D.**, *Visiting Associate in Economics*  
B.A., University of Kiel, 1993; Ph.D., University of Mannheim, 1998. Professor, University of Münster, 2004-. Caltech, 2008-09.

**Russell Lansford, Ph.D.**, *Lecturer in Bioengineering*  
A.B., University of California, 1986; M.A., Columbia University, 1989; M.S., 1990; Ph.D., 1996. Senior Research Fellow in Biology, Caltech, 1999-2002; Lecturer in Bioengineering, 2003-08.

**Nadia Lapusta, Ph.D.**, *Assistant Professor of Mechanical Engineering and Geophysics*  
Dipl., Kiev State University, 1994; M.S., Harvard University, 1996; Ph.D., 2001. Assistant Professor of Mechanical Engineering, Caltech, 2002-03; Assistant Professor of Mechanical Engineering and Geophysics, 2003-.

**Gilles J. Laurent, Ph.D., D.V.M.**, *Lawrence A. Hanson Jr. Professor of Biology and Computation and Neural Systems*  
B.A., University of Toulouse, 1978; Ph.D., 1985; D.V.M., National School of Veterinary Medicine of Toulouse, 1985. Assistant Professor, Caltech, 1990-95; Associate Professor, 1996-2000; Professor, 2000-02; Hanson Professor, 2002-.

**Desiree LaVertu, M.M.**, *Lecturer in Choral Music*  
B.M., California State University (Fullerton), 1988; M.M., University of Nevada, 1998. Caltech, 2000-.

**Eugene Lavretsky, Ph.D.**, *Lecturer in Control and Dynamical Systems*  
M.S., Saratov State University (Russia), 1983; Ph.D., Claremont Graduate University, 2000. Caltech, 2006-08.

**Jared Renton Leadbetter, Ph.D.**, *Associate Professor of Environmental Microbiology*  
B.S., Goucher College, 1991; Ph.D., Michigan State University, 1997. Assistant Professor, Caltech, 2000-06; Associate Professor, 2006-.

**John O. Ledyard, Ph.D., D.Lit.h.c.**, *Allen and Lenabelle Davis Professor of Economics and Social Sciences*  
A.B., Wabash College, 1963; M.S., Purdue University, 1965; Ph.D., 1967; D.Lit.h.c., Purdue University. Professor, Caltech,

1985-2002; Davis Professor, 2002-. Executive Officer for the Social Sciences, 1989-92; Chair, Division of the Humanities and Social Sciences, 1992-2002.

**Joon-Hyung Lee, Ph.D.**, *Visiting Associate in Materials Science*  
B.S., Yeungnam University, 1989; M.S., Kyungpook National University, 1991; Ph.D., 1995. Associate Professor, 2004-. Caltech, 2008-10.

**Reginald K. Lee, Ph.D.**, *Visiting Associate in Applied Physics*  
B.S., University of Toronto, 1994; M.S., Caltech, 1996; Ph.D., 2000. Scientist, Orbits Lightwave Inc., 2001-. Visiting Associate, Caltech, 2004-08.

**Richard A. M. Lee, Ph.D.**, *Visiting Associate in Physics*  
Ph.D., Lancaster University, 1994. Senior Member, Technical Staff, Jet Propulsion Laboratory, 2007-. Caltech, 2007-09.

**Seng Luan Lee, Ph.D.**, *Visiting Associate in Applied and Computational Mathematics*  
B.S., University of Malaya (Kuala Lumpur), 1969; Ph.D., University of Alberta, 1974. Professor, National University of Singapore, 1987-. Caltech, 2007.

**Soon Bok Lee, Ph.D.**, *Visiting Associate in Aeronautics*  
B.S., Seoul National University, 1974; M.S., Korea Advanced Institute of Science and Technology, 1976; Ph.D., Stanford University, 1980. Professor, Korean Advanced Institute of Science and Technology, 1988-. Caltech, 2008.

**Anthony Leonard, Ph.D.**, *Theodore von Kármán Professor of Aeronautics, Emeritus*  
B.S., Caltech, 1959; M.S., Stanford University, 1960; Ph.D., 1963. Professor, Caltech, 1985-2000; von Kármán Professor, 2000-05; von Kármán Professor Emeritus, 2005-.

**Henry Allen Lester, Ph.D.**, *Bren Professor of Biology*  
A.B., Harvard College, 1966; Ph.D., Rockefeller University, 1971. Assistant Professor, Caltech, 1973-76; Associate Professor, 1976-83; Professor, 1983-2000; Bren Professor, 2000-.

**Henry Levenson, M.D.**, *Visiting Associate in Chemistry*  
B.A., West Virginia University, 1972; M.D., West Virginia School of Medicine, 1976. Pasadena Rehabilitation Institute, 1998-. Caltech, 2006-09.

**Julie Levesque, M.S.**, *Coach*  
B.S., California Polytechnic State University (San Luis Obispo), 1994; M.S., 1996. Caltech, 1997-.

**Nathan S. Lewis, Ph.D.**, *George L. Argyros Professor and Professor of Chemistry*  
B.S., Caltech, 1977; M.S., 1977; Ph.D., Massachusetts Institute of Technology, 1981. Associate Professor, Caltech, 1988-91; Professor, 1991-; Argyros Professor, 2002-.

**Henri J. Lezec, Ph.D.**, *Visiting Associate in Applied Physics*  
B.S., Massachusetts Institute of Technology, 1984; Ph.D., 1992. Senior Researcher, National Institute of Standards and Technology, 2007-. Caltech, 2004-09.

**Bozhong Li, Ph.D.**, *Visiting Professor of History*  
M.A., Xiamen University (China), 1981; Ph.D., 1985. Professor, Tsinghua University, 1998-. Caltech, 2002-03; 2008.

**Tiecheng Li, Ph.D.**, *Visiting Associate in Engineering and Applied Science*  
B.S., Peking University, 1984; M.S., 1987; Ph.D., Tsinghua University, 1999. Associate Professor, 1998-. Caltech, 2008-09.

**Kenneth George Libbrecht, Ph.D.**, *Professor of Physics; Executive Officer for Physics*  
B.S., Caltech, 1980; Ph.D., Princeton University, 1984. Visiting Associate in Solar Astronomy, Caltech, 1984; Assistant Professor of Astrophysics, 1984-89; Associate Professor, 1989-95; Professor of Physics, 1995-. Executive Officer, 1997-.

**Michael Liebling, Ph.D.**, *Visiting Associate in Biology; Lecturer in Biology*  
M.Sc., Swiss Federal Institute of Technology, 2000; Ph.D., 2003. Acting Assistant Professor, University of California (Santa Barbara), 2007-. Visiting Associate, Caltech, 2007-08; Lecturer, 2007.

**Hans Wolfgang Liepmann, Ph.D., Dr.Ing.h.c.**, *Theodore von Kármán Professor of Aeronautics, Emeritus*  
Ph.D., University of Zurich, 1938; Dr.Ing.h.c., University of Aachen. Research Fellow in Aeronautics, Caltech, 1939-44; Assistant Professor, 1945-46; Associate Professor, 1946-49; Professor, 1949-74; Professor of Aeronautics and Applied Physics, 1974-76; Charles Lee Powell Professor of Fluid Mechanics and Thermodynamics, 1976-83; von Kármán Professor of Aeronautics, 1983-85; von Kármán Professor Emeritus, 1985-. Director, Graduate Aeronautical Laboratories, 1972-85; Executive Officer for Aeronautics, 1976-85.

**Lee A. Lindblom, Ph.D.**, *Senior Research Associate in Theoretical Astrophysics; Lecturer in Physics*  
B.S., Caltech, 1972; M.S., University of Maryland, 1975; Ph.D., 1978. Visiting Associate, Caltech, 1992; 1996-2002;

Lecturer, 2000-01; 2003-06; 2008. Senior Research Associate, 2002-.

**Valentina A. Lindholm, M.A.**, *Lecturer in Russian, Emeritus*  
M.A., Moscow State University, 1971. Lecturer, Caltech, 1974-2000; Lecturer Emeritus, 2000-.

**Dariusz C. Lis, Ph.D.**, *Senior Research Associate in Physics*  
Ph.D., University of Massachusetts (Amherst), 1989. Research Fellow, Caltech, 1989-92; Senior Research Fellow, 1992-98; Senior Research Associate, 1998-.

**E. John List, Ph.D.**, *Professor of Environmental Engineering Science, Emeritus*  
B.E., University of Auckland, 1961; M.E., 1962; Ph.D., Caltech, 1965. Research Fellow, 1965-66; Assistant Professor, 1969-72; Associate Professor, 1972-78; Professor, 1978-97; Professor Emeritus, 1997-. Executive Officer for Environmental Science, 1980-85.

**Charles D. Little, Ph.D.**, *Visiting Associate in Biology*  
B.S., California State Polytechnic University (Pomona), 1973; Ph.D., University of Pittsburgh, 1977. Professor, University of Kansas Medical Center, 2000-. Caltech, 2007; 2008.

**Charles Y. Liu, Ph.D., M.D.**, *Visiting Associate in Chemical Engineering*  
B.S.E., University of Michigan (Ann Arbor), 1987; Ph.D., Rice University, 1993; M.D., Yale University School of Medicine, 1996. Resident Physician, University of Southern California, Keck School of Medicine, 1996-. Caltech, 2002-08.

**Minghsun Liu, Ph.D., M.D.**, *Visiting Associate in Biology*  
Ph.D., University of California (Los Angeles), 2002; M.D., University of California School of Medicine (Los Angeles), 2002. Postdoctoral Fellow, Stanford University School of Medicine, Stanford Hospital and Clinic, 2004-. Caltech, 2007-08.

**Martin W. Lo, Ph.D.**, *Visiting Associate in Computer Science*  
B.S., Caltech, 1975; M.S., Cornell University, 1978; Ph.D., 1981. Member of the Technical Staff, Jet Propulsion Laboratory, 1986-. Visiting Associate, Caltech, 2003-08.

**Lyle N. Long, Ph.D.**, *Moore Distinguished Scholar*  
B.S., University of Minnesota, 1976; M.S., Stanford University, 1978; Ph.D., George Washington University, 1983. Distinguished Professor, Pennsylvania State University, 1994-. Caltech, 2007-08.

**Gary Allen Lorden, Ph.D.**, *Professor of Mathematics*  
B.S., Caltech, 1962; Ph.D., Cornell University, 1966. Assistant Professor, Caltech, 1968–71; Associate Professor, 1971–77; Professor, 1977–. Dean of Students, 1984–88; Vice President for Student Affairs, 1989–98; Acting Vice President, 2002; Executive Officer for Mathematics, 2003–06.

**Jonathan Lubin, Ph.D.**, *Visiting Associate in Mathematics*  
Ph.D., Harvard University, 1963. Professor Emeritus, Brown University, 2000–. Caltech, 2003–08.

**Wilhelmus A. J. Luxemburg, Ph.D.**, *Professor of Mathematics, Emeritus*  
B.A., University of Leiden, 1950; M.A., 1953; Ph.D., Delft Institute of Technology, 1955. Assistant Professor, Caltech, 1958–60; Associate Professor, 1960–62; Professor, 1962–2000; Professor Emeritus, 2000–. Executive Officer for Mathematics, 1970–85.

**Peter Yunju Lwigale, Ph.D.**, *Senior Research Fellow in Biology*  
Sc.B., University of Northern Iowa, 1995; Sc.M., 1997; Ph.D., Kansas State University, 2001. Caltech, 2008.

**Hideo Mabuchi, Ph.D.**, *Associate Professor of Physics and Control and Dynamical Systems*  
A.B., Princeton University, 1992; Ph.D., Caltech, 1998. Assistant Professor of Physics, 1998–2001; Associate Professor, 2001–02; Associate Professor of Physics and Control and Dynamical Systems, 2002–.

**Chris Mach, B.S.**, *Lecturer in Physics*  
B.S., California State University (Northridge), 1993. Caltech, 2001–.

**Edouard Machery, Ph.D.**, *Visiting Assistant Professor of Philosophy*  
Ph.D., Paris-Sorbonne University, 2004. Assistant Professor, University of Pittsburgh, 2004–. Caltech, 2009.

**Douglas G. MacMynowski, Ph.D.**, *Senior Research Associate in Control and Dynamical Systems*  
B.A.Sc., University of Toronto, 1987; S.M., Massachusetts Institute of Technology, 1990; Ph.D., 1992. Visiting Associate, Caltech, 2000–02; Lecturer, 2001; 2004; 2005; Senior Research Fellow, 2002–08; Senior Research Associate, 2008–.

**Carol Magun, M.A.**, *Lecturer in Creative Writing*  
B.A., Hebrew University of Jerusalem, 1972; M.A., 1976; M.A., Boston University, 1987. Caltech, 2003–08.

**Hossein Mahdavi, Ph.D.**, *Visiting Associate in Chemistry*  
B.S., Teacher Training University (Iran), 1996; M.S., Shiraz University, 1998; Ph.D., 2002. Associate Professor, University of Tehran, 2002–. Caltech, 2008–09.

**Nikolai G. Makarov, Ph.D.**, *Professor of Mathematics*  
B.A., Leningrad University, 1982; Ph.D., LOMI Mathematics Institute (Leningrad), 1986. Visiting Professor, Caltech, 1991; Professor, 1991–.

**James R. Maloney, M.S.**, *Lecturer in Chemistry*  
B.S., University of Florida, 2002; M.S., Caltech, 2006. Lecturer, 2007–08.

**Oscar Mandel, Ph.D.**, *Professor of Literature, Emeritus*  
B.A., New York University, 1947; M.A., Columbia University, 1948; Ph.D., Ohio State University, 1951. Visiting Associate Professor of English, Caltech, 1961–62; Associate Professor, 1962–68; Professor, 1968–80; Professor of Literature, 1980–2003; Professor Emeritus, 2003–.

**Gideon Manning, Ph.D.**, *Assistant Professor of Philosophy*  
A.B., Harvard University, 1974; Ph.D., University of Chicago, 2006. Caltech, 2007–.

**Elena Mantovan, Ph.D.**, *Assistant Professor of Mathematics*  
Laurea, University of Padua, 1995; M.A., Harvard University, 1998; Ph.D., 2002. Caltech, 2005–.

**Frank Earl Marble, Ph.D.**, *Richard L. and Dorothy M. Hayman Professor of Mechanical Engineering and Professor of Jet Propulsion, Emeritus*  
B.S., Case Institute of Technology, 1940; M.S., 1942; A.E., Caltech, 1947; Ph.D., 1948. Instructor in Aeronautics, 1948–49; Assistant Professor of Jet Propulsion and Mechanical Engineering, 1949–53; Associate Professor, 1953–57; Professor, 1957–80; Hayman Professor of Mechanical Engineering and Professor of Jet Propulsion, 1980–89; Hayman Professor and Professor Emeritus, 1989–. Administrator, Industrial Relations Center, 1986–89.

**Sandra E. Marbut, B.A.**, *Coach*  
B.A., Sheldon Jackson College, 1991. Caltech, 2003–.

**Rudolph Arthur Marcus, Ph.D.**, **D.Sc.h.c.**, **Fil.Dr.h.c.**, **D.h.c.**, **Nobel Laureate**, *Arthur Amos Noyes Professor of Chemistry*  
B.Sc., McGill University, 1943; Ph.D., 1946; D.Sc.h.c., University of Chicago;

McGill University; Polytechnic University; University of Oxford; University of New Brunswick; Queen's University; University of North Carolina (Chapel Hill); University of Illinois; Technion—Israel Institute of Technology; Universidad Politecnica de Valencia; University of Waterloo; Fil.Dr.h.c., Gothenburg University; D.h.c., Yokohama National University; Northwestern University. Caltech, 1978–.

**Shirley A. Marneus, M.A.**, *Lecturer in Theater Arts, Emeritus*  
B.A., San Jose State College, 1959; M.A., State University of Iowa, 1962. Lecturer in Literature, Caltech, 1999–2005; Lecturer in English, 2005–07; Lecturer in Theater Arts, 1999–2008; Lecturer in Theater Arts Emeritus, 2008–.

**Jerrold E. Marsden, Ph.D.**, *Carl F. Braun Professor of Engineering and Control and Dynamical Systems*  
B.S., University of Toronto, 1965; Ph.D., Princeton University, 1968. Sherman Fairchild Distinguished Scholar, Caltech, 1992; Professor, Control and Dynamical Systems, 1995–2003; Braun Professor, 2003–.

**Richard E. Marsh, Ph.D.**, *Senior Research Associate in Chemistry, Emeritus*  
B.S., Caltech, 1943; Ph.D., University of California (Los Angeles), 1950. Research Fellow, Caltech, 1950–55; Senior Research Fellow, 1955–73; Research Associate, 1973–81; Senior Research Associate, 1981–90; Senior Research Associate Emeritus, 1990–.

**Hardy Cross Martel, Ph.D.**, *Professor of Electrical Engineering, Emeritus*  
B.S., Caltech, 1949; M.S., Massachusetts Institute of Technology, 1950; Ph.D., Caltech, 1956. Instructor, 1953–55; Assistant Professor, 1955–58; Associate Professor, 1958–82; Professor, 1982–90; Professor Emeritus, 1990–. Executive Assistant to the President, 1969–83; Secretary of the Board of Trustees, 1973–83; Executive Officer for Electrical Engineering, 1981–86.

**Alain Jean Martin, Ing.**, *Professor of Computer Science*  
B.S., University of Marseille, 1965; Ing., Polytechnic Institute (Grenoble), 1969. Visiting Assistant Professor, Caltech, 1981–83; Visiting Associate Professor, 1983; Associate Professor, 1983–86; Professor, 1986–. Executive Officer for Computer Science, 1994–97.

**D. Christopher Martin, Ph.D.**, *Professor of Physics*  
B.A., Oberlin College, 1978; Ph.D., University of California, 1986. Caltech, 1993–.

**Jay N. Marx, Ph.D.**, *Senior Research Associate in Physics; Executive Director, LIGO*  
M.S., Columbia University, 1969; Ph.D., 1970. Caltech, 2006–.

**Sotiris Masmanidis, Ph.D.**, *Broad Senior Research Fellow in Brain Circuitry*  
B.Sc., University College London, 2001; M.S., Caltech, 2003; Ph.D., 2006. Broad Senior Research Fellow, Caltech, 2006–.

**Peter V. Mason, Ph.D.**, *Visiting Associate in Physics*  
B.S., Caltech, 1951; M.S., 1952; Ph.D., 1962. Technical Staff, Retired, Jet Propulsion Laboratory, 1997–. Assistant Professor, Caltech, 1962–66; Visiting Associate, 1997–2008.

**Kenji Matsumoto, Ph.D.**, *Visiting Associate in Neuroscience*  
B.V.M., Obihiro University of Agriculture and Veterinary Medicine, 1991; M.Sc., Kyoto University, 1993; Ph.D., 1996. Staff Scientist, RIKEN Brain Science Institute, 2004–. Caltech, 2007–08.

**Madoka Matsumoto, Ph.D.**, *Visiting Associate in Neuroscience*  
B.Pharm., Kyoto University, 1992; M.Sc., 1998; Ph.D., 2007. Research Scientist, RIKEN Brain Science Institute, 2007–. Caltech, 2007–08.

**Andrea Mattozzi, Ph.D.**, *Assistant Professor of Economics*  
B.A., Bocconi University (Italy), 1997; Ph.D., University of Pennsylvania, 2004. Caltech, 2004–.

**Stephen Leon Mayo, Ph.D.**, *Bren Professor of Biology and Chemistry; Vice Provost*  
B.S., Pennsylvania State University, 1983; Ph.D., Caltech, 1988. Senior Research Fellow, 1991–92; Assistant Professor, 1992–98; Associate Professor, 1998–2003; Professor, 2003–07; Bren Professor, 2007–. Assistant Investigator, Howard Hughes Medical Institute, 1994–2000; Associate Investigator, 2000–05; Investigator, 2005–07. Executive Officer for Biochemistry and Molecular Biophysics, 2004–07; Vice Provost, 2007–.

**Sarkis Mazmanian, Ph.D.**, *Assistant Professor of Biology*  
B.S., University of Florida, 1998; Ph.D., Massachusetts Institute of Technology, 2004. Caltech, 2006–.

**R. Preston McAfee, Ph.D.**, *J. Stanley Johnson Professor of Business Economics and Management*  
B.A., University of Florida, 1976; M.S., Purdue University, 1978; Ph.D., 1980. Visiting Associate Professor, Caltech, 1988–89; Visiting Professor, 1989–90; Johnson Professor, 2004–. Executive Officer for the Social Sciences, 2005–07.

**Edward J. McCaffery, J.D.**, *Visiting Associate in Law*  
B.A., Yale University, 1980; J.D., Harvard Law School, 1985. Associate Professor, University of Southern California, 1991–. Visiting Associate Professor, Caltech, 1996–97; Visiting Professor, 1997–2008; Visiting Associate, 2008–.

**Daniel McCleese, D.Phil.**, *Visiting Associate in Planetary Science*  
B.S., Antioch College, 1972; D.Phil., University of Oxford, 1976. Chief Scientist, Jet Propulsion Laboratory, 1994–. Caltech, 2002–08.

**Robert James McElice, Ph.D.**, *Allen E. Puckett Professor and Professor of Electrical Engineering, Emeritus*  
B.S., Caltech, 1964; Ph.D., 1967. Professor, 1982–2007; Puckett Professor, 1997–2007; Puckett Professor and Professor, Emeritus, 2007–. Executive Officer for Electrical Engineering, 1990–99.

**Thomas Conley McGill, Ph.D.**, *Professor of Applied Physics, Emeritus*  
B.S., Lamar State College of Technology, 1964; M.S., Caltech, 1965; Ph.D., 1969. Assistant Professor, 1971–74; Associate Professor, 1974–77; Professor, 1977–85; 1999–2008; Fletcher Jones Professor, 1985–99; Professor Emeritus, 2008–.

**Garrett Brian McGuinness, Ph.D.**, *Visiting Associate in Chemistry*  
B.E., National University of Ireland, 1991; Ph.D., 1996. Lecturer, Dublin City University, 2000–. Caltech, 2008–09.

**Stephen Craig McGuire, Ph.D.**, *Visiting Associate in Physics*  
B.S., Southern University and A&M College, 1970; M.S., University of Rochester, 1974; Ph.D., Cornell University, 1979. Professor and Chair, Southern University and A&M College, 1999–. Caltech, 2000–09.

**Beverly J. McKeon, Ph.D.**, *Assistant Professor of Aeronautics*  
B.A., University of Cambridge, 1995; M.Eng., 1996; M.A. (Mechanical and Aerospace Engineering), M.A., (Engineering), Princeton University, 1999; Ph.D., 2003. Caltech, 2006–.

**Robert D. McKeown, Ph.D.**, *Professor of Physics*  
B.S., State University of New York (Stony Brook), 1974; Ph.D., Princeton University, 1979. Assistant Professor, Caltech, 1980–86; Associate Professor, 1986–92; Professor, 1992–.

**Basil Vincent McKoy, Ph.D.**, *Professor of Theoretical Chemistry*  
B.S., Nova Scotia Technical University, 1960; Ph.D., Yale University, 1964. Noyes Research Instructor in Chemistry, Caltech, 1964–66; Assistant Professor of Theoretical Chemistry, 1967–69; Associate Professor, 1969–75; Professor, 1975–.

**Scott McLennan, Ph.D.**, *Visiting Professor of Geochemistry*  
B.Sc., University of Western Ontario, 1975; M.Sc., 1977; Ph.D., Australian National University, 1981. Professor, State University of New York (Stony Brook), 1994–. Caltech, 2008.

**Carver Andress Mead, Ph.D., D.Sc.h.c., D.h.c.**, *Gordon and Betty Moore Professor of Engineering and Applied Science, Emeritus*  
B.S., Caltech, 1956; M.S., 1957; Ph.D., 1960; D.Sc.h.c., University of Lund (Sweden); D.h.c., University of Southern California. Instructor in Electrical Engineering, Caltech, 1958–59; Assistant Professor, 1959–62; Associate Professor, 1962–67; Professor, 1967–77; Professor of Computer Science and Electrical Engineering, 1977–80; Moore Professor of Computer Science, 1980–92; Moore Professor of Engineering and Applied Science, 1992–99; Moore Professor Emeritus, 1999–.

**Barry B. Megdal, Ph.D.**, *Lecturer in Electrical Engineering*  
B.S., Caltech, 1977; M.S., 1978; Ph.D., 1983. Lecturer, 1992–2008.

**Simona Mei, Ph.D.**, *Visiting Associate in Astronomy*  
Ph.D., University of Strasbourg, 1999. Associate Professor, University of Paris, 2006–. Caltech, 2006–08.

**Daniel I. Meiron, Sc.D.**, *Fletcher Jones Professor of Applied and Computational Mathematics and Computer Science*  
S.B., Massachusetts Institute of Technology, 1976; Sc.D., 1981. Research Fellow in Applied Mathematics, Caltech, 1981–83; Visiting Associate, 1984–85; Assistant Professor, 1985–89; Associate Professor, 1989–94; Professor, 1994–2000; Professor of Applied and Computational Mathematics, 2000; Professor of Applied and Computational Mathematics and Computer Science, 2001–06; Jones Professor, 2006–. Executive Officer for Applied Mathematics, 1994–98; Associate

Provost for Information and Information Technology, 2000–04.

**Jane E. Mendel, Ph.D.**, *Senior Research Associate in Biology; Lecturer in Biology*  
B.A., B.S., University of Mississippi, 1975; Ph.D., University of Tennessee, 1987. Research Fellow, Caltech, 1988–91; Senior Research Fellow, 1991–97; Lecturer, 1996–2007; 2008; Senior Research Associate, 1997–.

**Peter Metcalf, Ph.D.**, *Visiting Associate in Biology*  
B.Sc., University of Canterbury, 1976; Ph.D., University of Auckland, 1982. Associate Professor, 1998–. Caltech, 2008.

**Daniel K. Meulemans, Ph.D.**, *Senior Research Fellow in Biology*  
B.S., University of Hawaii, 1996; Ph.D., Caltech, 2003. Senior Research Fellow, 2005–08.

**Richard A. Mewaldt, Ph.D.**, *Senior Research Associate in Physics*  
B.A., Lawrence University, 1965; M.A., Washington University (St. Louis), 1967; Ph.D., 1971. Research Fellow, Caltech, 1971–75; Senior Research Fellow, 1975–81; Lecturer, 1987; Senior Research Associate, 1981–.

**Elliot M. Meyerowitz, Ph.D.**, *George W. Beadle Professor of Biology; Chair, Division of Biology*  
A.B., Columbia University, 1973; M.Phil., Yale University, 1975; Ph.D., 1977. Assistant Professor, Caltech, 1980–85; Associate Professor, 1985–89; Professor, 1989–2002; Beadle Professor, 2002–. Executive Officer for Biology, 1995–2000. Chair, 2000–.

**Georges Meylan, Ph.D.**, *Visiting Associate in Astronomy*  
Ph.D., University of Geneva, 1985. Director, École Polytechnique Fédérale de Lausanne, 2004–. Caltech, 2001–08.

**R. David Middlebrook, Ph.D.**, *Professor of Electrical Engineering, Emeritus*  
B.A., University of Cambridge, 1952; M.S., Stanford University, 1953; Ph.D., 1955; M.A., University of Cambridge, 1956. Assistant Professor, Caltech, 1955–58; Associate Professor, 1958–65; Professor, 1965–97; Professor Emeritus, 1998–. Executive Officer for Electrical Engineering, 1987–90.

**Andrei Yuryevich Mikhailov, Ph.D.**, *Sherman Fairchild Senior Research Fellow in Physics; Lecturer in Physics*  
Ph.D., Princeton University, 2000. Sherman Fairchild Senior Research Fellow, Caltech, 2003–09; Lecturer, 2007.

**Carol Ann Miller, M.D.**, *Visiting Associate in Biology*  
A.B., Mount Holyoke College, 1961; M.D., Jefferson Medical College, 1965. Professor, University of Southern California School of Medicine, 1990–; Chief, Cajal Laboratory of Neuropathology, University of Southern California Medical Center, 1982–. Caltech, 1982–2003; 2005–09.

**Thomas F. Miller, III, Ph.D.**, *Assistant Professor of Chemistry*  
B.S., Texas A&M University, 2000; Ph.D., University of Oxford, 2005. Caltech, 2008–.

**Milica Milosavljevic, Ph.D.**, *Visiting Associate in Economics*  
B.S., Elon University, 2002; M.B.A., 2004; Ph.D., Florida Atlantic University, 2007. Lecturer, University of Miami, 2007–. Caltech, 2008.

**Feng-Ying Ming, Ph.D.**, *Lecturer in Chinese*  
B.A., Tamkang University (Taiwan), 1978; M.A., California State University, 1984; M.A., University of California (Los Angeles), 1991; Ph.D., 1999. Caltech, 2000–08.

**Valery P. Mitrofanov, Visiting Associate in Physics  
M.Sc., Moscow State University, 1971; Kandidat, 1975. Assistant Professor, 1981–. Caltech, 1995–2008.**

**Naoki Mitsumoto, Ph.D.**, *Visiting Associate in Mechanical Engineering*  
B.S., Mie University (Japan), 1991; M.S., Nagoya University, 1993; Ph.D., 1996. Research Scientist, Denso Corporation Research Laboratories, 2000–. Caltech, 2005–08.

**Eric Mjolsness, Ph.D.**, *Visiting Associate in Biology*  
A.B., Washington University, 1980; Ph.D., Caltech, 1986. Associate Professor, University of California (Irvine), 2002–. Faculty Associate, 2000–02; Visiting Associate, 2002–08.

**Leonard Mlodinow, Ph.D.**, *Lecturer in Computation and Neural Systems*  
B.A., M.A., Brandeis University, 1976; Ph.D., University of California, 1981. Bantrell Research Fellow, Caltech, 1980–82; Lecturer in Statistics and Computation and Neural Systems, 2006–07; Lecturer in Computation and Neural Systems, 2008.

**Bruce Moision, Ph.D.**, *Lecturer in Electrical Engineering*  
B.S., Harvey Mudd College, 1991; Ph.D., University of California (San Diego), 2000. Caltech, 2008.

**Alain Molinari, Ph.D.**, *Visiting Associate in Aeronautics*  
B.S., Strasbourg University, 1970; M.S., 1972; Ph.D., University of Metz (France), 1979. Professor, 1987–. Millikan Visiting Professor, Caltech, 1996; 2002–03; 2005; Visiting Associate, 2004–05; 2007; 2008–11.

**Elena Montovan, Ph.D.**, *Assistant Professor of Mathematics*  
M.A., Harvard University, 1998; Ph.D., 2002. Caltech, 2005–.

**Hyungsik Moon, Ph.D.**, *Lecturer in Economics*  
B.A., Seoul National University, 1989; M.A., 1991; M.Phil., Yale University, 1996; Ph.D., 1998. Caltech, 2007.

**Farshad Morad, Ph.D.**, *Visiting Associate in Biology*  
M.S., Tehran University of Medical Sciences, 2000; Ph.D., Caltech, 2006. Postdoctoral Scholar, New York University, 2006–. Visiting Associate, Caltech, 2007–08.

**James John Morgan, Ph.D., D.Sc.h.c.**, *Marvin L. Goldberger Professor of Environmental Engineering Science, Emeritus*  
B.C.E., Manhattan College, 1954; M.S.E., University of Michigan, 1956; M.A., Harvard University, 1962; Ph.D., 1964; D.Sc.h.c., Manhattan College. Associate Professor of Environmental Health Engineering, Caltech, 1965–69; Professor, 1969–87; Goldberger Professor of Environmental Engineering Science, 1987–2000; Goldberger Professor Emeritus, 2000–. Academic Officer for Environmental Engineering Science, 1971–72; Dean of Students, 1972–75; Executive Officer for Environmental Engineering Science, 1974–80, 1993–96; Acting Dean of Graduate Studies, 1981–84; Vice President for Student Affairs, 1980–89.

**Olexei I. Motrunich, Ph.D.**, *Assistant Professor of Theoretical Physics*  
B.S., University of Missouri (Columbia), 1996; Ph.D., Princeton University, 2001. Caltech, 2006–.

**Duane Owen Muhleman, Ph.D.**, *Professor of Planetary Science, Emeritus*  
B.S., University of Toledo, 1953; Ph.D., Harvard University, 1963. Associate Professor, Caltech, 1967–71; Professor, 1971–97; Professor Emeritus, 1997–.

**Edwin Stanton Munger, Ph.D.**, *Professor of Geography, Emeritus*  
M.S., University of Chicago, 1948; Ph.D., 1951. Visiting Lecturer, American Universities Field Staff, Caltech, 1954; 1957; 1960; Professor, 1961–88; Professor Emeritus, 1988–.

**Bruce Churchill Murray, Ph.D.**, *Professor of Planetary Science and Geology, Emeritus*  
S.B., Massachusetts Institute of Technology, 1953; S.M., 1954; Ph.D., 1955. Research Fellow in Space Science, Caltech, 1960–63; Associate Professor of Planetary Science, 1963–68; Professor, 1968–92; Professor of Planetary Science and Geology, 1992–2001; Professor Emeritus, 2001–. Director, Jet Propulsion Laboratory, 1976–82.

**Richard Martin Murray, Ph.D.**, *Thomas E. and Doris Everhart Professor of Control and Dynamical Systems; Director, Information Science and Technology*  
B.S., Caltech, 1985; M.S., University of California, 1988; Ph.D., 1990. Assistant Professor of Mechanical Engineering, Caltech, 1991–97; Associate Professor, 1997–2000; Professor, 2000–05; Professor of Control and Dynamical Systems, 2005–06; Everhart Professor, 2006–. Chair, Division of Engineering and Applied Science, 2000–05; Director, 2006–.

**Sujit Nair, Ph.D.**, *Lecturer in Control and Dynamical Systems*  
B.S., Indian Institute of Technology, 2000; M.S., Princeton University, 2002; Ph.D., 2006. Caltech, 2007.

**Ehud Nakar, Ph.D.**, *Sherman Fairchild Senior Research Fellow in Astrophysics*  
B.Sc., Hebrew University of Jerusalem, 1998; M.Sc., 2000; Ph.D., 2004. Caltech, 2004–10.

**Thomas A. Neenan, M.F.A.**, *Lecturer in Music*  
B.F.A., California State University (Northridge), 1977; M.F.A., University of California (Los Angeles), 1982. Caltech, 1991–98; 1998–2010.

**Gerry Neugebauer, Ph.D.**, *Robert Andrews Millikan Professor of Physics, Emeritus*  
A.B., Cornell University, 1954; Ph.D., Caltech, 1960. Assistant Professor, 1962–65; Associate Professor, 1965–70; Professor, 1970–96; Howard Hughes Professor, 1985–96; Millikan Professor, 1996–98; Millikan Professor Emeritus, 1998–. Acting Director, Palomar Observatory, 1980–81; Director, 1981–94; Chairman, Division of Physics, Mathematics and Astronomy, 1988–93.

**Harvey B. Newman, Sc.D.**, *Professor of Physics*  
B.S., Massachusetts Institute of Technology, 1968; Sc.D., 1973. Associate Professor, Caltech, 1982–90; Professor, 1990–.

**Hien Trong Nguyen, Ph.D.**, *Visiting Associate; Lecturer in Physics*  
Ph.D., Princeton University, 1993. Visiting Associate, Caltech, 2007–09; Lecturer, 2007; 2008.

**Marc-Aurele Nicolet, Ph.D.**, *Professor of Electrical Engineering and Applied Physics, Emeritus*  
Ph.D., University of Basel, 1958. Assistant Professor of Electrical Engineering, Caltech, 1959–65; Associate Professor, 1965–73; Professor, 1973–88; Professor of Electrical Engineering and Applied Physics, 1988–98; Professor Emeritus, 1998–.

**Romi Nijhawan, Ph.D.**, *Visiting Associate in Biology*  
B.A., Punjab University (India), 1980; M.A., Rutgers University, 1982; M.S., 1987; Ph.D., 1990. Associate Professor, University of Sussex, 2003–. Senior Research Fellow, Caltech, 1998–2000; Visiting Associate, 2000–02; 2006–08.

**James Paul Oberhauser, Ph.D.**, *Visiting Associate in Chemical Engineering*  
B.S., University of California (Davis), 1992; M.S., Stanford University, 1993; Ph.D., University of California (Santa Barbara), 2001. Research Scientist Advisor, Abbott Vascular, 2007–. Caltech, 2007–08.

**John P. O'Doherty, D.Phil.**, *Associate Professor of Psychology*  
B.A., University of Dublin (Trinity College), 1996; D.Phil., University of Oxford, 2000. Assistant Professor, Caltech, 2004–07; Associate Professor, 2007–.

**Hiroshi Oguri, Ph.D.**, *Fred Kavli Professor of Theoretical Physics*  
B.A., Kyoto University (Japan), 1984; M.A., 1986; Ph.D., University of Tokyo, 1989. Visiting Associate, Caltech, 1999–2000; Professor, 2000–07; Kavli Professor, 2007–.

**Mitchio Okumura, Ph.D.**, *Professor of Chemical Physics; Executive Officer for Chemistry*  
B.S., Yale University, 1979; M.S., 1979; C.P.G.S., University of Cambridge, 1980; Ph.D., University of California, 1986. Assistant Professor, Caltech, 1988–94; Associate Professor, 1994–2003; Professor, 2003–. Executive Officer, 2006–.

**George A. Olah, Ph.D.**, *Nobel Laureate, Visiting Associate in Chemistry*  
Ph.D., Technical University of Budapest, 1949. Distinguished Professor and Loker Chair, University of Southern California, 1980–. Caltech, 2007–09.

**Gregory O'Malley, Ph.D.**, *Caltech-Huntington Mellon Postdoctoral Instructor in History*  
B.A., Boston University, 1999; M.A., Johns Hopkins University, 2003; Ph.D., 2007. Caltech, 2007–.

**Onno Heinrich Tilmann Oncken, Ph.D.**, *Moore Distinguished Scholar in Geology*  
B.S., Cologne University, 1980; Ph.D., 1982. Director, GFZ, Potsdam University, 2003–. Caltech, 2007–08.

**Christiane H. Orcel, Ph.D.**, *Lecturer in French*  
M.A., Princeton University, 1987; Ph.D., 1992. Instructor, Caltech, 1990–93; Lecturer, 1993–.

**Peter C. Ordeshook, Ph.D.**, *Professor of Political Science*  
B.S., Massachusetts Institute of Technology, 1964; Ph.D., University of Rochester, 1969. Professor, Caltech, 1987–. Executive Officer for the Social Sciences, 1992–95.

**Victoria Orphan, Ph.D.**, *Assistant Professor of Geobiology*  
B.A., University of California (Santa Barbara), 1994; Ph.D., 2001. Caltech, 2004–.

**Michael Ortiz, Ph.D.**, *Dotty and Dick Hayman Professor of Aeronautics and Mechanical Engineering*  
B.S., Polytechnic University of Madrid, 1977; M.S., University of California, 1978; Ph.D., 1982. Sherman Fairchild Distinguished Scholar, Caltech, 1994–95; Professor of Aeronautics and Applied Mechanics, 1995–2000; Professor of Aeronautics and Mechanical Engineering, 2000–04; Hayman Professor, 2004–.

**Makoto Ouchi, Ph.D.**, *Visiting Associate in Chemical Engineering*  
B.S., Kyoto University, 1996; Ph.D., 2001. Assistant Professor, 2004–. Caltech, 2007–09.

**Jeffrey Ovall, Ph.D.**, *Lecturer in Applied and Computational Mathematics*  
B.S., Western Washington University, 1996; M.S., 1998; Ph.D., University of California (San Diego), 2004. Caltech, 2008.

**Ray David Owen, Ph.D., Sc.D.h.c.**, *Professor of Biology, Emeritus*  
B.S., Carroll College, 1937; Ph.M., University of Wisconsin, 1938; Ph.D., 1941; Sc.D.h.c., Carroll College; University of the Pacific. Gosney Fellow, Caltech, 1946–47; Associate Professor, 1947–53; Professor, 1953–83; Professor Emeritus, 1983–. Chairman, Division of Biology, 1961–68; Vice President for Student Affairs and Dean of Students, 1975–80.

**Houman Owahdi, Ph.D.**, *Assistant Professor of Applied and Computational Mathematics and Control and Dynamical Systems*  
B.S., École Polytechnique (France), 1994; M.S., École Nationale des Ponts et Chaussées, 1997; Ph.D., École Polytechnique Fédérale de Lausanne (Switzerland), 2001. Caltech, 2004–.

**Oskar J. Painter, Ph.D.**, *Associate Professor of Applied Physics*  
B.S., University of British Columbia, 1994; M.S., Caltech, 1995; Ph.D., 2001. Visiting Associate, 2001–02; Assistant Professor, 2002–08; Associate Professor, 2008–.



**Thomas R. Palfrey, III, Ph.D.,** *Flintridge Foundation Professor of Economics and Political Science*  
B.A., University of Michigan, 1975; M.A., 1976; Ph.D., Caltech, 1981. Professor, 1986–2002; Flintridge Foundation Professor, 2003–05; 2006–. Executive Officer for the Social Sciences, 2001–02.

**Dimitri A. Papanastassiou, Ph.D.,** *Faculty Associate in Geochemistry*  
B.S., Caltech, 1965; Ph.D., 1970. Research Fellow in Physics, 1970–72; Senior Research Fellow in Planetary Science, 1972–76; Research Associate in Geochemistry, 1976–81; Senior Research Associate, 1981–99; Faculty Associate, 1999–.

**Robert Pappalardo, Ph.D.,** *Visiting Associate in Planetary Science*  
B.A., Cornell University, 1986; Ph.D., Arizona State University, 1994. Principal Scientist and Director's Fellow, Jet Propulsion Laboratory, 2006–. Caltech, 2007–09.

**Carl Stevens Parker, Ph.D.,** *Professor of Biochemistry*  
B.A., University of Rochester, 1973; Ph.D., Washington University (St. Louis), 1977. Assistant Professor of Chemical Biology, Caltech, 1981–87; Associate Professor, 1987–92; Professor, 1992–99; Professor of Biochemistry, 1999–. Executive Officer for Biochemistry and Molecular Biophysics, 2000–04.

**Pablo A. Parrilo, Ph.D.,** *Visiting Associate Professor of Applied and Computational Mathematics*  
B.S., University of Buenos Aires, 1994; Ph.D., Caltech, 2000. Associate Professor, Massachusetts Institute of Technology, 2004–. Lecturer in Control and Dynamical Systems, 2000–01; Visiting Associate Professor, 2007–08.

**Gholamabbas Parsafar, Ph.D.,** *Visiting Associate in Chemistry*  
B.S., Pars College (Iran), 1975; Ph.D., University of Oregon, 1980. Professor, Sharif University of Technology, 2001–. Caltech, 2008–09.

**Jay M. Pasachoff, Ph.D.,** *Visiting Associate in Planetary Science*  
A.B., Harvard University, 1965; A.M., 1965; Ph.D., 1969. Chair, Astronomy Department, Hopkins Observatory, Williams College, 1984–. Caltech, 2008–09.

**Paul H. Patterson, Ph.D.,** *Anne P. and Benjamin F. Biaggini Professor of Biological Sciences*  
B.A., Grinnell College, 1965; Ph.D., Johns Hopkins University, 1970. Professor, Caltech, 1983–2005; Biaggini Professor,

2005–. Executive Officer for Neurobiology, 1989–2000.

**Michael T. Pauken, Ph.D.,** *Lecturer in Mechanical Engineering*  
B.S., Vanderbilt University, 1983; M.S., Washington University, 1990; Ph.D., Georgia Institute of Technology, 1994. Caltech, 2001; 2008.

**Lynn K. Paul, Ph.D.,** *Senior Research Fellow in Psychology*  
B.A., Wheaton College, 1992; M.A., Fuller Graduate School of Psychology, 1994; M.A., Fuller Theological Seminary, 1996; Ph.D., Fuller Graduate School of Psychology, 1998. Visiting Associate, Caltech, 2004–07; Senior Research Fellow, 2007–09.

**Timothy John Pearson, Ph.D.,** *Senior Research Associate in Radio Astronomy*  
B.A., University of Cambridge, 1972; M.A., 1976; Ph.D., 1977. Research Fellow, Caltech, 1977–80; Senior Research Associate, 1988–.

**Charles William Peck, Ph.D.,** *Professor of Physics, Emeritus*  
B.S., New Mexico College of Agricultural and Mechanical Arts, 1956; Ph.D., Caltech, 1964. Research Fellow, 1964–65; Assistant Professor, 1965–69; Associate Professor, 1969–77; Professor, 1977–2004; Professor Emeritus, 2004–. Executive Officer for Physics, 1983–86; Chair, Division of Physics, Mathematics and Astronomy, 1993–98.

**Volnei A. Pedroni, Ph.D.,** *Visiting Professor of Electrical Engineering*  
B.S., Federal University of Rio Grande do Sul, 1975; M.S., Caltech, 1990; Ph.D., 1995. Professor, Federal University of Technology, 1976–. Visiting Professor, Caltech, 2008.

**Sergio Pellegrino, Ph.D.,** *Professor of Aeronautics and Civil Engineering*  
Laurea, University of Naples, 1982; Ph.D., University of Cambridge, 1986. Caltech, 2007–.

**Bryan E. Penprase, Ph.D.,** *Visiting Associate in Astronomy*  
M.S., Stanford University, 1985; Ph.D., University of Chicago, 1992. Associate Professor, Pomona College, 2000–. Caltech, 2007–09.

**Pietro Perona, D.Eng., Ph.D.,** *Allen E. Puckett Professor of Electrical Engineering; Executive Officer for Computation and Neural Systems*  
D.Eng., University of Padua (Italy), 1985; Ph.D., University of California, 1990. Assistant Professor, Caltech, 1991–96; Professor, 1996–2008; Puckett Professor, 2008–. Director, Center for Neuromorphic

Systems Engineering, 1999–2004. Executive Officer, 2006–.

**Jonas C. Peters, Ph.D.,** *Professor of Chemistry*  
B.S., University of Chicago, 1993; Ph.D., Massachusetts Institute of Technology, 1998. Assistant Professor, Caltech, 1999–2004; Associate Professor, 2004–06; Professor, 2006–.

**Danny Petrasek, M.D., Ph.D.,** *Visiting Associate in Applied and Computational Mathematics and Bioengineering; Lecturer in Bioengineering*  
B.S., University of California (Los Angeles), 1980; M.D., Chicago Medical School, 1985; Ph.D., Caltech, 2002. Senior Research Fellow, 2002–08; Lecturer, 2005–08; Visiting Associate, 2008–09.

**Robert Phillips, Ph.D.,** *Professor of Applied Physics and Mechanical Engineering*  
B.S., University of Minnesota, 1986; Ph.D., Washington University, 1989. Clark Millikan Visiting Assistant Professor, Caltech, 1997; Professor, 2000–.

**Thomas G. Phillips, D.Phil.,** *Altair Professor of Physics; Director, Caltech Submillimeter Observatory*  
B.A., University of Oxford, 1961; M.A., 1964; D.Phil., 1964. Visiting Associate in Radio Astronomy, Caltech, 1978–79; Professor of Physics, 1979–2004; Altair Professor, 2004–. Staff Member, Owens Valley Radio Observatory, 1978–85; Associate Director, Owens Valley Radio Observatory, 1981–85; Director, Caltech Submillimeter Observatory, 1986–.

**E. Sterl Phinney III, Ph.D.,** *Professor of Theoretical Astrophysics*  
B.S., Caltech, 1980; Ph.D., University of Cambridge, 1983. Assistant Professor, Caltech, 1985–91; Associate Professor, 1991–95; Professor, 1995–.

**Kenneth A. Pickar, Ph.D.,** *Visiting Professor of Mechanical Engineering*  
B.S., City University of New York, 1961; Ph.D., University of Pennsylvania, 1966. Senior Vice President, Retired, Allied Signal Aerospace, 1993–. Visiting Professor of Engineering, Caltech, 1998; Visiting Professor of Mechanical Engineering, 1998–99; 2003–06; J. Stanley Johnson Visiting Professor, 1999–2003.

**James R. Pierce, M.D.,** *Lecturer in Biology*  
B.S., Caltech, 1998; M.D., Jefferson Medical College, 2002. Lecturer, Caltech, 2002–03; 2005–08.

**Niles A. Pierce, D.Phil.,** *Associate Professor of Applied and Computational Mathematics and Bioengineering; Executive Officer for Bioengineering*  
B.S.E., Princeton University, 1993; D.Phil., University of Oxford, 1997. Assistant Professor of Applied Mathematics, Caltech, 2000; Assistant Professor of Applied and Computational Mathematics, 2000–04; Assistant Professor of Applied and Computational Mathematics and Bioengineering, 2004–06; Associate Professor, 2006–. Executive Officer, 2007–.

**Elena Pierpaoli, Ph.D.,** *Visiting Associate in Astrophysics*  
Ph.D., International School for Advanced Studies (Italy), 1998. Assistant Professor, University of Southern California, 2006–. Senior Research Fellow, Caltech, 2004–06; Visiting Associate, 2006–08.

**George Wood Pigman, Ph.D.,** *Professor of English*  
A.B., Harvard College, 1973; M.Phil., Yale University, 1975; Ph.D. (Comparative Literature), 1977; Ph.D. (Psychoanalysis), Southern California Psychoanalytic Institute, 1989. Assistant Professor of English, Caltech, 1977–80; Assistant Professor of Literature, 1980–83; Associate Professor, 1983–93; Professor, 1993–2004; Professor of English, 2004–. Executive Officer for the Humanities, 2003–08.

**Jerome Pine, Ph.D.,** *Professor of Physics*  
A.B., Princeton University, 1949; M.S., Cornell University, 1952; Ph.D., 1959. Associate Professor, Caltech, 1963–67; Professor, 1967–.

**Donald Pinkston, III, B.S.,** *Lecturer in Computer Science*  
B.S., Caltech, 1998. Lecturer, 2005–08.

**Charles Raymond Plott, Ph.D., D.Lit.h.c., D.h.c.,** *Edward S. Harkness Professor of Economics and Political Science*  
B.S., Oklahoma State University, 1961; M.S., 1964; Ph.D., University of Virginia, 1965; D.Lit.h.c., Purdue University; D.h.c., Université Pierre Mendès. Professor of Economics, Caltech, 1971–87; Harkness Professor, 1987–.

**Hugh David Politzer, Ph.D., Nobel Laureate,** *Richard Chace Tolman Professor of Theoretical Physics*  
B.S., University of Michigan, 1969; Ph.D., Harvard University, 1974. Visiting Associate, Caltech, 1975–76; Associate Professor, 1976–79; Professor, 1979–2004; Tolman Professor, 2004–. Executive Officer for Physics, 1986–88.

**James E. Polk, Ph.D.**, *Visiting Associate in Aeronautics; Lecturer in Aeronautics*  
B.S., Georgia Institute of Technology, 1984; M.S., Princeton University, 1986; Ph.D., 1996. Lecturer, Caltech, 1999–2002; 2005–08; Visiting Associate, 2007–08.

**Adrian Ponce, Ph.D.**, *Visiting Associate in Chemistry*  
B.S., Michigan State University, 1993; Ph.D., Caltech, 1999. Research Scientist, Jet Propulsion Laboratory, 2001–. Visiting Associate, Caltech, 2000–09.

**Frank Clifford Porter, Ph.D.**, *Professor of Physics*  
B.S., Caltech, 1972; Ph.D., University of California, 1977. Research Fellow, Caltech, 1977–78; Weizmann Research Fellow, 1978–80; Senior Research Fellow, 1980–82; Assistant Professor, 1982–88; Associate Professor, 1988–94; Professor, 1994–.

**John P. Preskill, Ph.D.**, *John D. MacArthur Professor of Theoretical Physics*  
A.B., Princeton University, 1975; A.M., Harvard University, 1976; Ph.D., 1980. Associate Professor, Caltech, 1983–90; Professor, 1990–2002; MacArthur Professor, 2002–.

**Thomas Allen Prince, Ph.D.**, *Professor of Physics; Senior Research Scientist, Jet Propulsion Laboratory; Director, W. M. Keck Institute for Space Studies*  
B.S., Villanova University, 1970; M.S., University of Chicago, 1972; Ph.D., 1978. Research Fellow, Caltech, 1979–80; Robert A. Millikan Research Fellow, 1980–82; Senior Research Fellow, 1982–83; Assistant Professor, 1983–86; Associate Professor, 1986–92; Professor, 1992–. Associate Director, Center for Advanced Computer Research, 1995–2001; Director, 2005–; Director, Keck Institute, 2008–. Chief Scientist, Jet Propulsion Laboratory, 2001–06; Senior Research Scientist, 2006–.

**Demetri Psaltis, Ph.D.**, *Thomas G. Myers Professor of Electrical Engineering*  
B.Sc., Carnegie Mellon University, 1974; M.Sc., 1975; Ph.D., 1977. Assistant Professor, Caltech, 1980–85; Associate Professor, 1985–90; Professor, 1990–97; Myers Professor, 1997–. Executive Officer for Computation and Neural Systems, 1992–96; Director, Center for Neuromorphic Systems Engineering, 1996–99.

**Eleftheria Psyllaki, Ph.D.**, *Visiting Associate in Environmental Science and Engineering*  
Lic., Université de Montpellier II—Sciences et Techniques du Languedoc, 1993; M.S., 1994; Ph.D., University of Bristol, 1997. Assistant Professor, Technical University of Crete, 2004–. Caltech, 2007.

**Carmie Puckett Robinson, M.D.**, *Visiting Associate in Biology*  
B.S., Michigan State University, 1970; M.D., 1975. Professor, University of Southern California, 2000–. Senior Research Fellow, Caltech, 1986–92; Visiting Associate, 2006–09.

**Dale Ian Pullin, Ph.D.**, *Theodore von Kármán Professor of Aeronautics*  
B.Sc., University of Melbourne, 1966; B.E., University of Sydney, 1968; Ph.D., University of London (Imperial College), 1974. Visiting Associate, Caltech, 1990; Professor, 1991–2006; von Kármán Professor, 2006–.

**Marco B. Quadrelli, Ph.D.**, *Lecturer in Aeronautics*  
B.S., University of Padua, 1987; M.S., Georgia Institute of Technology, 1992; Ph.D., 1996. Caltech, 2007–08.

**Steven R. Quartz, Ph.D.**, *Associate Professor of Philosophy*  
B.A., University of Western Ontario (Huron College), 1986; M.A., 1988; Ph.D., University of California (San Diego), 1993. Instructor, Caltech, 1998–99; Assistant Professor, 1999–2002; Associate Professor, 2002–.

**Kevin J. Quirk, Ph.D.**, *Lecturer in Electrical Engineering*  
B.S., University of California (San Diego), 1993; M.S., 1997; Ph.D., 2000. Caltech, 2006–08.

**Rodrigo Cesar Quian Quiroga, Ph.D.**, *Visiting Associate in Biology*  
M.S., University of Buenos Aires, 1993; Ph.D., University of Lubeck, 1998. Lecturer, University of Leicester, 2004–. Caltech, 2004–09.

**Andreas Quirrenbach, Ph.D.**, *Visiting Associate in Astronomy*  
Ph.D., University of Bonn, 1990. Professor, University of Heidelberg, 2002–. Caltech, 2006–09.

**Yuval Rabani, Ph.D.**, *Visiting Associate in Computer Science*  
B.S., Tel Aviv University, 1987; M.S., 1989; Ph.D., 1993. Associate Professor, Technion—Israel Institute of Technology, 2000–. Caltech, 2006–08.

**Matthew Rabin, Ph.D.**, *Moore Distinguished Scholar*  
B.A., University of Wisconsin (Madison), 1984; Ph.D., Massachusetts Institute of Technology, 1989. Edward G. and Nancy S. Jordan Professor of Economics, University of California, 2003–. Caltech, 2008.

**Fredric Raichlen, Sc.D.**, *Professor of Civil and Mechanical Engineering, Emeritus*  
B.E., Johns Hopkins University, 1953; S.M., Massachusetts Institute of Technology, 1955; Sc.D., 1962. Assistant Professor of Civil Engineering, Caltech, 1962–67; Associate Professor, 1967–72; Professor, 1972–97; Professor of Civil and Mechanical Engineering, 1997–2001; Professor Emeritus, 2001–.

**Eric M. Rains, Ph.D.**, *Professor of Mathematics*  
B.A., Case Western Reserve University, 1991; B.S., 1991; M.S., 1991; Ph.D., Harvard University, 1995. Visiting Associate and Lecturer, Caltech, 2002; Professor, 2007–.

**Dinakar Ramakrishnan, Ph.D.**, *Taussky-Todd-Loneragan Professor of Mathematics*  
B.E., University of Madras, 1970; M.S., Brooklyn Polytech, 1973; M.A., Columbia University, 1977; Ph.D., 1980. Professor, Caltech, 1988–2007; Taussky-Todd-Loneragan Professor, 2007–.

**Edmond Rambod, Ph.D.**, *Visiting Associate in Aeronautics*  
B.S., Israel Institute of Technology, 1985; M.S., 1987; Ph.D., 1999. President, BioQuantetics, Inc., 2000–. Caltech, 2007–08.

**Michael Ramsey-Musolf, Ph.D.**, *Senior Research Associate in Physics*  
Ph.D., Princeton University, 1989. Visiting Associate, Caltech, 2001; Senior Research Associate, 2001–; Lecturer, 2005–06.

**Lisa Randall, Ph.D.**, *Moore Distinguished Scholar*  
B.A., Harvard University, 1983; Ph.D., 1987. Professor, 2001–. Caltech, 2008.

**Antonio Rangel, Ph.D.**, *Associate Professor of Economics*  
B.S., Caltech, 1993; M.S., Harvard University, 1996; Ph.D., 1997. Instructor, Caltech, 1997–98; Visiting Associate, 2005–06; Associate Professor, 2006–.

**Vilupanur A. Ravi, Ph.D.**, *Visiting Associate Professor of Bioengineering and Materials Science*  
B.S., University of Madras, 1980; B.E., Indian Institute of Science, 1983; M.S., Ohio State University, 1986; Ph.D., 1988. Associate Professor, California State Polytechnic University, 1996–; Adjunct Professor, Drexel University, 1996–. Visiting Associate in Aeronautics, Caltech, 2001–04; Visiting Associate Professor, 2004–08.

**Guruswami Ravichandran, Ph.D.**, *John E. Goode, Jr., Professor of Aeronautics and Mechanical Engineering*  
B.E., University of Madras (Regional Engineering College), 1981; Sc.M. (Solid Mechanics and Structures), Brown University, 1983; Sc.M. (Applied Mathematics), 1984; Ph.D., 1986. Assistant Professor of Aeronautics, Caltech, 1990–95; Associate Professor, 1995–99; Professor, 1999–2000; Professor of Aeronautics and Mechanical Engineering, 2000–05; Goode Professor, 2005–.

**Anthony C. S. Readhead, Ph.D.**, *Barbara and Stanley R. Rawen, Jr., Professor of Astronomy; Director, Chajnantor Observatory; Senior Research Scientist, Jet Propulsion Laboratory; Director, Owens Valley Radio Observatory*  
B.Sc., University of Witwatersrand (South Africa), 1968; Ph.D., University of Cambridge, 1972. Research Fellow, Caltech, 1974–75; Senior Research Fellow, 1976–79; Research Associate, 1979–81; Professor of Radio Astronomy, 1981–90; Professor of Astronomy, 1990–2000; Rawen Professor, 2000–. Director, Owens Valley Radio Observatory, 1981–86; 2007–. Executive Officer for Astronomy, 1990–92; Director, 2006–; Senior Research Scientist, 2006–.

**Carol Readhead, Ph.D.**, *Lecturer in Engineering*  
B.Sc., University of Witwatersrand (South Africa), 1969; Ph.D., University of Cambridge, 1976. Research Fellow in Biology, Caltech, 1977–79; Senior Research Fellow, 1980–83; Senior Research Associate, 1998–2002; Lecturer in Engineering, 2006–08.

**Douglas C. Rees, Ph.D.**, *Roscoe Gilkey Dickinson Professor of Chemistry; Investigator, Howard Hughes Medical Institute; Executive Officer for Biochemistry and Molecular Biophysics*  
B.S., Yale University, 1974; Ph.D., Harvard University, 1980. Professor, Caltech, 1989–2004; Dickinson Professor, 2004–. Investigator, 1997–2002; 2005–; Full Investigator, 2002–05. Executive Officer for Chemistry, 2002–06; Executive Officer, 2007–.

**Gil Refael, Ph.D.**, *Associate Professor of Theoretical Physics*  
B.S., Tel Aviv University, 1997; M.S., 1998; Ph.D., Harvard University, 2003. Assistant Professor, Caltech, 2005–08; Associate Professor, 2008–.

**Jennifer F. Reinganum, Ph.D.,** *Visiting Associate in Economics*  
B.A., Economics, Oberlin College, 1976; B.A., Mathematics, 1976; M.S., Northwestern University, 1978; Ph.D., 1979. Ingram Professor, Vanderbilt University, 1995–. Assistant Professor, Caltech, 1979–1982; Associate Professor, 1982–84; Professor, 1986–87; Visiting Associate, 2008.

**Sarah E. Reisman, Ph.D.,** *Assistant Professor of Chemistry*  
B.A., Connecticut College, 2001; Ph.D., Yale University, 2006. Caltech, 2008–.

**David H. Reitze, Ph.D.,** *Visiting Associate in LIGO*  
B.A., Northwestern University, 1983; Ph.D., University of Texas (Austin), 1993. Professor, University of Florida, 1998–. Visiting Associate, Caltech, 1996–97; 2000; 2003; 2007–08.

**Paul Renteln, Ph.D.,** *Visiting Associate in Mathematics*  
A.B., University of California, 1981; Ph.D., Harvard University, 1988. Assistant Professor, California State University (San Bernardino), 1991–. Caltech, 1998–2008.

**Jean-Paul Revel, Ph.D.,** *Albert Billings Ruddock Professor of Biology, Emeritus*  
B.Sc., University of Strasbourg, 1949; Ph.D., Harvard University, 1957. Professor of Biology, Caltech, 1971–78; Ruddock Professor, 1978–2006; Ruddock Professor Emeritus, 2006–. Dean of Students, 1996–2005.

**Jason Rhodes, Ph.D.,** *Visiting Associate in Astronomy*  
B.S., Harvey Mudd College, 1994; Ph.D., Princeton University, 1999. Staff Scientist, Jet Propulsion Laboratory, 2004–. Caltech, 2004–08.

**Frank Rice, M.S.,** *Lecturer in Physics*  
M.S., Caltech, 1996. Lecturer, 2001–08.

**John Hall Richards, Ph.D.,** *Professor of Organic Chemistry and Biochemistry*  
B.A., University of California, 1951; B.Sc., University of Oxford, 1953; Ph.D., University of California, 1955. Assistant Professor of Organic Chemistry, Caltech, 1957–61; Associate Professor, 1961–70; Professor, 1970–99; Professor of Organic Chemistry and Biochemistry, 1999–.

**Mark I. Richardson, Ph.D.,** *Assistant Professor of Planetary Science*  
B.Sc., University of London (Imperial College), 1992; M.S. (Geophysics and Space Science), University of California (Los Angeles), 1995; M.S. (Atmospheric Science), 1996; Ph.D., 1999. Caltech, 2001–.

**Jose Luis Riechmann, Ph.D.,** *Visiting Associate in Biology*  
B.S., Madrid Autonomous University, 1987; Ph.D., 1991. Research Fellow, Caltech, 1993–96; Senior Research Fellow, 1996–98; Senior Research Associate, 2004–08; Visiting Associate, 2008–09.

**John Keith Riles, Ph.D.,** *Visiting Associate in LIGO*  
B.A., University of California, 1982; Ph.D., Stanford University, 1989. Associate Professor, University of Michigan, 1992–. Visiting Associate in Physics, Caltech, 1998–99; Visiting Associate in LIGO, 2005–09.

**Elon S. Rimon, Ph.D.,** *Visiting Associate in Mechanical Engineering*  
B.S., Technion—Israel Institute of Technology, 1985; M.S., Yale University, 1987; Ph.D., 1991. Senior Lecturer, Technion—Israel Institute of Technology, 1994–. Research Fellow, Caltech, 1992–94; Visiting Associate, 1994–97; 1999–2004; 2008.

**Robert C. Ritchie, Ph.D.,** *Visiting Associate in History*  
A.B., Occidental College, 1960; Ph.D., University of California (Los Angeles), 1970. W. M. Keck Foundation Director of Research, Huntington Library and Art Gallery, 1992–. Visiting Associate, Caltech, 1993–2008; Lecturer, 1995; 1997; 1999; 2001; 2005.

**Daniel Rittel, Ph.D.,** *Visiting Associate in Aeronautics*  
B.S., Ben-Gurion University of the Negev, 1979; M.S., Hebrew University (Jerusalem), 1983; Ph.D., 1988. Associate Professor, Technion—Israel Institute of Technology, 2000–. Visiting Professor, Caltech, 2000; Visiting Associate, 2001–06; 2007–09; Clark B. Millikan Visiting Professor, 2006–07.

**John D. Roberts, Ph.D., Dr.rer.Nat.h.c., Sc.D.h.c., D.Sc.h.c.,** *Institute Professor of Chemistry, Emeritus*  
B.A., University of California (Los Angeles), 1941; Ph.D., 1944; Dr.rer.Nat.h.c., University of Munich; Sc.D.h.c., Temple University; D.Sc.h.c., University of Wales; University of Notre Dame; Scripps Research Institute. Research Associate, Caltech, 1952–53; Professor, 1953–72; Institute Professor, 1972–88; Institute Professor Emeritus, 1988–; Lecturer, 1988–92. Chairman, Division of Chemistry and Chemical Engineering, 1963–68; Acting Chairman, 1972–73; Provost and Vice President, Dean of the Faculty, 1980–83.

**Alonso P. Rodriguez, Ph.D.,** *Visiting Associate in Engineering and Applied Science*  
B.S., University of Arizona, 1979; M.S., 1977; Ph.D., University of Southern

California, 1981. Adjunct Professor, 1985–. Caltech, 2004–09.

**Rodney Rojas,** *Lecturer in Mechanical Engineering*  
Caltech, 2004–07.

**Ares J. Rosakis, Ph.D.,** *Theodore von Kármán Professor of Aeronautics and Mechanical Engineering; Director, Graduate Aeronautical Laboratories*  
B.Sc., University of Oxford, 1978; Sc.M., Brown University, 1980; Ph.D., 1982. Assistant Professor of Aeronautics and Applied Physics, Caltech, 1982–88; Associate Professor, 1988–93; Professor of Aeronautics and Applied Mechanics, 1993–2000; Professor of Aeronautics and Mechanical Engineering, 2000–04; von Kármán Professor, 2004–. Director, 2004–.

**Paul A. Rosen, Ph.D.,** *Visiting Associate in Geophysics*  
B.S., University of Pennsylvania, 1981; M.S., 1982; Ph.D., Stanford University, 1989. Technical Group Supervisor, Jet Propulsion Laboratory, 1992–. Visiting Associate, Caltech, 1998–2008; Lecturer, 2000–03; 2005.

**Robert Allan Rosenstone, Ph.D.,** *Professor of History*  
B.A., University of California (Los Angeles), 1957; Ph.D., 1965. Visiting Assistant Professor, Caltech, 1966–68; Assistant Professor, 1968–69; Associate Professor, 1969–75; Professor, 1975–. Executive Officer for the Humanities, 1983–86.

**Jean-Laurent Rosenthal, Ph.D.,** *Rea A. and Lela G. Axline Professor of Business Economics; Executive Officer for the Social Sciences*  
B.A., Reed College, 1984; Ph.D., Caltech, 1988. Professor of Economics, 2006–08; Axline Professor, 2008–. Executive Officer, 2007–.

**Anatol Roshko, Ph.D.,** *Theodore von Kármán Professor of Aeronautics, Emeritus*  
B.Sc., University of Alberta, 1945; M.S., Caltech, 1947; Ph.D., 1952. Research Fellow, 1952–54; Senior Research Fellow, 1954–55; Assistant Professor, 1955–58; Associate Professor, 1958–62; Professor, 1962–85; von Kármán Professor, 1985–94; von Kármán Professor Emeritus, 1994–. Acting Director, Graduate Aeronautical Laboratories, 1985–87.

**Brian D. Ross, D.Phil.,** *Visiting Associate in Chemistry*  
B.Sc., University College London, 1958; M.B.B.S., 1961; D.Phil., University of Oxford (Trinity College), 1966. Director, Clinical Spectroscopy Laboratory, Huntington Medical Research Institutes, 1986–. Caltech, 1988–2008.

**George Robert Rossman, Ph.D.,** *Eleanor and John R. McMillan Professor of Mineralogy*  
B.S., Wisconsin State University, 1966; Ph.D., Caltech, 1971. Instructor, 1971; Assistant Professor, 1971–77; Associate Professor, 1977–83; Professor, 1983–2008; McMillan Professor, 2008–. Divisional Academic Officer for Geological and Planetary Sciences, 1999–2008.

**Paul W. K. Rothmund, Ph.D.,** *Senior Research Associate in Bioengineering, Computer Science, and Computation and Neural Systems*  
B.S., Caltech, 1994; Ph.D., University of Southern California, 2001. Visiting Associate, Caltech, 2001; Beckman Senior Research Fellow, 2001–04; Senior Research Fellow in Computation and Neural Systems and Computer Science, 2004–08; Senior Research Associate, 2008–.

**Ellen Rothenberg, Ph.D.,** *Albert Billings Ruddock Professor of Biology*  
A.B., Harvard University, 1972; Ph.D., Massachusetts Institute of Technology, 1977. Assistant Professor, Caltech, 1982–88; Associate Professor, 1988–94; Professor, 1994–2007; Ruddock Professor, 2007–.

**Michael L. Roukes, Ph.D.,** *Professor of Physics, Applied Physics, and Bioengineering; Codirector, Kavli Nanoscience Institute*  
B.A., University of California (Santa Cruz), 1978; Ph.D., Cornell University, 1985. Associate Professor of Physics, Caltech, 1992–96; Professor, 1996–2002; Professor of Physics, Applied Physics, and Bioengineering, 2002–. Director, 2004–06; Codirector, 2008–.

**David B. Rutledge, Ph.D.,** *Kiyo and Eiko Tomiyasu Professor of Electrical Engineering; Chair, Division of Engineering and Applied Science*  
B.A., Williams College, 1973; M.A., University of Cambridge, 1975; Ph.D., University of California, 1980. Assistant Professor, Caltech, 1980–84; Associate Professor, 1984–89; Professor, 1989–2001; Tomiyasu Professor, 2001–. Executive Officer for Electrical Engineering, 1999–2002; Chair, 2005–.

**Rolf Heinrich Sabersky, Ph.D.,** *Professor of Mechanical Engineering, Emeritus*  
B.S., Caltech, 1942; M.S., 1943; Ph.D., 1949. Assistant Professor, 1949–55; Associate Professor, 1955–61; Professor, 1961–88; Professor Emeritus, 1988–.

**Inge-Juliana Sackmann, Ph.D.,** *Faculty Associate in Physics*  
B.A., University of Toronto, 1963; M.A., 1965; Ph.D., 1968. Research Fellow, Caltech, 1971–74; Visiting Associate, 1974–76; Senior Research Fellow, 1976–81; Faculty Associate, 1981–.

**Daryoosh Saeedkia, Ph.D.**, *Visiting Associate in Electrical Engineering*  
B.S., Sharif University of Technology, 1995; M.S., 2001; Ph.D., University of Waterloo, 2005. Research Assistant Professor, 2007–. Caltech, 2008.

**Melissa Saenz, Ph.D.**, *Lecturer in Computation and Neural Systems*  
B.S., Caltech, 1998; Ph.D., University of California (San Diego), 2002. Lecturer, Caltech, 2008.

**Tomoo Saito, Ph.D.**, *Visiting Associate in Civil Engineering*  
B.S., University of Tokyo, 1991; M.S., 1993; Ph.D., 2000. Deputy Senior Researcher, 2003–. Caltech, 2007–08.

**Kathleen M. Sakamoto, M.D.**, *Visiting Associate in Biology*  
B.A., Williams College, 1979; M.D., University of Cincinnati (College of Medicine), 1986. Professor, University of California (Los Angeles), 1998–. Caltech, 1999–2000; 2004–09.

**Alok J. Saldanha, Ph.D.**, *Visiting Associate in Biology*  
B.S., Massachusetts Institute of Technology, 1999; Ph.D., Stanford, 2003. Software Engineer, Ellington Management Group, 2007–. Caltech, 2007–08.

**Jason Brian Saleeby, Ph.D.**, *Professor of Geology*  
B.S., California State University (Northridge), 1972; Ph.D., University of California (Santa Barbara), 1975. Associate Professor, Caltech, 1978–88; Professor, 1988–.

**Tina Salmassi, Ph.D.**, *Visiting Associate in Environmental Science and Engineering*  
B.S., University of California (Los Angeles), 1996; M.S., Caltech, 1998; Ph.D., 2001. Assistant Professor, California State University, 2002–. Visiting Associate, Caltech, 2006–08.

**Stanley P. Sander, Ph.D.**, *Visiting Associate in Planetary Science*  
B.A., Pomona College, 1974; M.S., Caltech, 1975; Ph.D., 1980. Senior Research Scientist, Jet Propulsion Laboratory, 1996–. Visiting Associate in Planetary Science and Environmental Engineering Science, Caltech, 1998–2005; Lecturer in Geology and Planetary Sciences and Environmental Engineering Science, 1998–2004; Visiting Associate in Planetary Science and Environmental Engineering and Science, 2005; Visiting Associate in Planetary Science, 2006–08.

**Virginio Sannibale, Ph.D.**, *Lecturer in Physics*  
Ph.D., University of Savoy (France), 1998. Caltech, 2001–08.

**Anncila I. Sargent, Ph.D.**, *Benjamin M. Rosen Professor of Astronomy; Vice President for Student Affairs*  
B.Sc., University of Edinburgh, 1963; M.S., Caltech, 1967; Ph.D., 1977. Research Fellow in Astronomy, 1977–79; Member of the Professional Staff, 1979–88; Senior Research Fellow, 1988–90; Senior Research Associate, 1990–98; Professor, 1998–2004; Rosen Professor, 2004–. Associate Director, Owens Valley Radio Observatory, 1992–96; Executive Director, 1996–98; Director, 1998–2007; Director, Interferometry Science Center, 2000–03; Director, Michelson Science Center, 2003; Vice President, 2007–.

**Wallace L. W. Sargent, Ph.D.**, *Ira S. Bowen Professor of Astronomy*  
B.Sc., University of Manchester, 1956; M.Sc., 1957; Ph.D., 1959. Research Fellow, Caltech, 1959–62; Assistant Professor, 1966–68; Associate Professor, 1968–71; Professor, 1971–81; Bowen Professor, 1981–. Executive Officer for Astronomy, 1975–81; 1996–97; Staff Member, Owens Valley Radio Observatory, 1978–88; Director, Palomar Observatory, 1997–2000.

**Re'em Sari, Ph.D.**, *Associate Professor of Astrophysics and Planetary Science*  
B.Sc. (Physics), Ben-Gurion University of the Negev, 1991; B.Sc. (Mathematics), 1992; M.Sc., Hebrew University of Jerusalem, 1994; Ph.D., 1998. Fairchild Senior Research Fellow in Astrophysics, Caltech, 1998–2003; Lecturer in Physics, 2001; Lecturer in Planetary Science, 2001; Associate Professor, 2003–.

**Tilman Sauer, Ph.D.**, *Senior Research Associate in History; Lecturer in History*  
Dipl., Free University (Berlin), 1990; Ph.D., 1994. Visiting Associate, Caltech, 2001–03; Senior Research Fellow, 2003–05; Senior Research Associate, 2005–10; Lecturer, 2006; 2008.

**Jan Saxl, Ph.D.**, *Visiting Associate in Mathematics*  
B.S., University of Bristol, 1970; M.A., University of Oxford, 1975; Ph.D., University of Cambridge, 1977. Professor, 2003–. Caltech, 2000–01; 2003; 2008.

**William P. Schaefer, Ph.D.**, *Senior Research Associate in Chemistry, Emeritus*  
B.S., Stanford University, 1952; M.S., University of California (Los Angeles), 1954; Ph.D., 1960. Instructor, Caltech, 1960–62; Assistant Professor, 1962–66; Senior Research Fellow, 1968–77; Research Associate, 1977–81; Senior Research Associate, 1981–94; Senior Research Associate Emeritus, 1994–. Assistant Director of Admissions, 1968–73; Registrar, 1971–77; Director of Financial Aid, 1973–77.

**Janet D. Scheel, Ph.D.**, *Visiting Associate in Physics*  
Ph.D., Caltech, 2006. Assistant Professor, California Lutheran University, 2006–. Visiting Associate, Caltech, 2006–08.

**Mark Scheel, Ph.D.**, *Senior Research Fellow in Physics*  
Ph.D., Cornell University, 1996. Senior Research Fellow, Caltech, 2005–; Lecturer, 2005–06.

**Axel Scherer, Ph.D.**, *Bernard A. Neches Professor of Electrical Engineering, Applied Physics, and Physics; Codirector, Kavli Nanoscience Institute*  
B.S., New Mexico Institute of Mining and Technology, 1981; M.S., 1982; Ph.D., 1985. Associate Professor of Electrical Engineering, Caltech, 1993–95; Professor, 1995; Professor of Electrical Engineering and Applied Physics, 1995–96; Professor of Electrical Engineering, Applied Physics, and Physics, 1996–2000; Neches Professor, 2000–. Director, 2006–08; Codirector, 2008–.

**Maarten Schmidt, Ph.D., Sc.D.**, *Francis L. Moseley Professor of Astronomy, Emeritus*  
Ph.D., University of Leiden, 1956; Sc.D., Yale University, 1966. Associate Professor, Caltech, 1959–64; Professor, 1964–81; Institute Professor, 1981–87; Moseley Professor, 1987–96; Professor of Astronomy Emeritus, 1996–. Executive Officer for Astronomy, 1972–75; Chairman, Division of Physics, Mathematics and Astronomy, 1976–78; Director, Hale Observatories, 1978–80.

**Scott Schnee, Ph.D.**, *Lecturer in Astronomy*  
B.S., Columbia University, 2000; M.A., Harvard University, 2002; Ph.D., 2006. Caltech, 2008.

**Tapio Schneider, Ph.D.**, *Associate Professor of Environmental Science and Engineering*  
Vordipl., Freiburg University, 1993; Ph.D., Princeton University, 2001. Assistant Professor, Caltech, 2002–08; Associate Professor, 2008–.

**Robert Schofield, Ph.D.**, *Visiting Associate in Physics*  
Ph.D., University of Oregon, 1990. Senior Research Associate, 1999–. Caltech, 2000–08.

**Kathrin Schrick, Ph.D.**, *Visiting Associate in Biology*  
B.A., B.S., Purdue University, 1986; Ph.D., University of Washington, 1994. Adjunct Professor, Claremont Graduate University, 2005–; Research Assistant Professor, Keck Graduate Institute, 2004–. Caltech, 2006–08.

**Peter Schröder, Ph.D.**, *Professor of Computer Science and Applied and Computational Mathematics*  
B.S., Technical University of Berlin, 1987; M.S., Massachusetts Institute of Technology, 1990; M.A., Princeton University, 1992; Ph.D., 1994. Assistant Professor of Computer Science, Caltech, 1995–98; Associate Professor, 1998–2000; Associate Professor of Computer Science and Applied and Computational Mathematics, 2000–01; Professor, 2001–.

**Jan Schroers, Ph.D.**, *Visiting Associate in Materials Science*  
M.S., University of Cologne, 1994; Ph.D., Rheinisch-Westfälische Technische Hochschule (Aachen), 1997. Associate Professor, Yale University, 2006–. Caltech, 2003–08.

**Leonard J. Schulman, Ph.D.**, *Professor of Computer Science*  
B.S., Massachusetts Institute of Technology, 1988; Ph.D., 1992. Associate Professor, Caltech, 2000–05; Professor, 2005–.

**Wolfram Schultz, M.D., Ph.D.**, *Visiting Associate in Neuroscience*  
B.A., Universities of Hamburg and Heidelberg, 1971; M.D., University of Heidelberg, 1972; Ph.D., University of Fribourg, 1981. Professor, University of Cambridge, 2001–. Visiting Associate, Caltech, 2004–05; 2007; 2008; Moore Distinguished Scholar, 2005–06.

**Erin M. Schuman, Ph.D.**, *Professor of Biology; Investigator, Howard Hughes Medical Institute*  
B.A., University of Southern California, 1985; M.A., Princeton University, 1987; Ph.D., 1990. Assistant Professor, Caltech, 1993–99; Associate Professor, 1999–2004; Professor, 2004–. Assistant Investigator, 1997–2002; Associate Investigator, 2002–05; Investigator, 2005–. Executive Officer for Neurobiology, 2000–06.

**John H. Schwarz, Ph.D.**, *Harold Brown Professor of Theoretical Physics*  
A.B., Harvard College, 1962; Ph.D., University of California, 1966. Research Associate, Caltech, 1972–81; Senior Research Associate, 1981–85; Professor of Theoretical Physics, 1985–89; Brown Professor, 1989–.

**Nicholas Zabriskie Scoville, Ph.D.**, *Francis L. Moseley Professor of Astronomy*  
B.A., Columbia University, 1967; Ph.D., 1972. Professor, Caltech, 1984–96; Moseley Professor, 1996–. Director, Owens Valley Radio Observatory, 1986–96. Executive Officer for Astronomy, 2000–04.

**Thayer Scudder, Ph.D.**, *Professor of Anthropology, Emeritus*  
A.B., Harvard College, 1952; Ph.D., Harvard University, 1960. Assistant Professor, Caltech, 1964–66; Associate Professor, 1966–69; Professor, 1969–2000; Professor Emeritus, 2000–.

**Michael D. Seiffert, Ph.D.**, *Visiting Associate in Physics*  
B.S., Stanford University, 1986; Ph.D., University of California (Santa Barbara), 1994. Group Supervisor and Lead Scientist for Cosmology, Jet Propulsion Laboratory, 2004–. Caltech, 2005–08.

**John Hersh Seinfeld, Ph.D., D.Sc.h.c.**, *Louis E. Nohl Professor and Professor of Chemical Engineering*  
B.S., University of Rochester, 1964; Ph.D., Princeton University, 1967; D.Sc.h.c., University of Patras (Greece); Carnegie Mellon University. Assistant Professor, Caltech, 1967–70; Associate Professor, 1970–74; Professor, 1974–; Nohl Professor, 1979–. Executive Officer for Chemical Engineering, 1974–90; Chair, Division of Engineering and Applied Science, 1990–2000.

**Eugene Serabyn, Ph.D.**, *Visiting Associate in Physics*  
B.S., Massachusetts Institute of Technology, 1978; M.S., University of California, 1980; Ph.D., 1984. Senior Research Scientist, Jet Propulsion Laboratory, 2001–. Research Fellow, Caltech, 1986–89; Senior Research Fellow, 1989–95; Senior Research Associate, 1995–98; Visiting Associate, 1998–2008.

**Peter C. Sercel, Ph.D.**, *Lecturer in Applied Physics*  
B.S., University of Arizona, 1987; M.S., Caltech, 1988; Ph.D., 1992. Lecturer, 2007–08.

**Alex L. Sessions, Ph.D.**, *Assistant Professor of Geobiology*  
B.A., Williams College, 1991; M.Sc., Dartmouth College, 1996; Ph.D., Indiana University (Bloomington), 2001. Caltech, 2003–.

**Mona Shahgholi, Ph.D.**, *Lecturer in Chemistry*  
B.S., Oklahoma State University, 1979; M.S., University of Colorado, 1989; Ph.D., University of Tennessee, 1993. Caltech, 2008.

**Shu-ou Shan, Ph.D.**, *Assistant Professor of Chemistry*  
B.S., University of Maryland, 1994; Ph.D., Stanford University, 2000. Caltech, 2005–.

**Andrew A. Shapiro, Ph.D.**, *Visiting Associate in Mechanical Engineering*  
B.S., University of California, 1981; M.S., University of California (Los Angeles),

1989; Ph.D., University of California (Irvine), 1998. Principal Engineer, Jet Propulsion Laboratory, 2002–. Caltech, 2008–09.

**Bruce E. Shapiro, Ph.D.**, *Visiting Associate in Biology*  
M.S., Johns Hopkins University, 1988; M.S., University of California (Los Angeles), 1995; Ph.D., 2000. Senior Member of Technical Staff, Jet Propulsion Laboratory, 2000–. Caltech, 2005–08.

**Sandra B. Sharp, Ph.D.**, *Visiting Associate in Biology*  
B.A., University of California, 1967; Ph.D., University of California School of Medicine, 1981. Professor, California State University, 1986–. Caltech, 2003–08.

**Joseph E. Shepherd, Ph.D.**, *C. L. “Kelly” Johnson Professor of Aeronautics and Professor of Mechanical Engineering*  
B.S., University of South Florida, 1976; Ph.D., Caltech, 1981. Associate Professor of Aeronautics, 1993–99; Professor, 1999–2005; Professor of Aeronautics and Mechanical Engineering, 2006–08; Johnson Professor and Professor of Mechanical Engineering, 2008–.

**Robert P. Sherman, Ph.D.**, *Professor of Economics and Statistics*  
B.A., Marquette University, 1978; M.A., University of Louisville, 1985; M.Phil., Yale University, 1987; Ph.D., 1991. Assistant Professor, Caltech, 1996–99; Associate Professor, 1999–2005; Professor, 2005–.

**William H. Sherman, Ph.D.**, *Eleanor Searle Visiting Professor of History*  
B.A., Columbia University, 1988; M.Phil., Cambridge University, 1989; Ph.D., 1992. Professor, University of York, 2005–. Caltech, 2008.

**Drora Shevy, Ph.D.**, *Visiting Associate in Physics*  
M.D., Sackler School of Graduate Biomedical Sciences, 1985; Ph.D., 1985. Director, Orbits Lightwave, Inc., 2001–. Caltech, 2007–09.

**Shinsuke Shimojo, Ph.D.**, *Professor of Biology*  
B.A., University of Tokyo, 1978; M.A., 1980; Ph.D., Massachusetts Institute of Technology, 1985. Associate Professor, Caltech, 1997–98; Professor, 1998–.

**Ken-Ichi Shimomura, Ph.D.**, *Visiting Associate in Economics*  
B.A., Keio University (Japan), 1986; M.S., 1988; M.A., University of Rochester, 1992; Ph.D., 1994. Associate Professor, Kobe University, 2004–. Caltech, 1998; 2000; 2007–09.

**Hong Kee Shin, Ph.D.**, *Visiting Associate in Materials Science*  
B.S., Seoul National University, 1986; M.S., Korea Advanced Institute of Science and Technology, 1989; Ph.D., 1993. Professor, Daejin University, 2005–. Caltech, 2008.

**David H. Shoemaker, Ph.D.**, *Visiting Associate in LIGO*  
M.S., Massachusetts Institute of Technology, 1980; Ph.D., University of Paris (Sud), 1987. Principal Research Scientist, Massachusetts Institute of Technology, 1991–. Caltech, 2005–08.

**Kirill Shtengel, Ph.D.**, *Visiting Associate in Physics*  
B.S., St. Petersburg Technical University, 1988; M.S., University of California (Los Angeles), 1994; Ph.D., 1999. Assistant Professor, University of California (Riverside), 2005–. Caltech, 2005–08.

**Athanasios G. Siapas, Ph.D.**, *Assistant Professor of Computation and Neural Systems; Bren Scholar*  
B.S., Massachusetts Institute of Technology, 1990; M.S., 1992; Ph.D., 1996. Assistant Professor, Caltech, 2002–; Bren Scholar, 2003–.

**Peter H. Siegel, Ph.D.**, *Faculty Associate in Electrical Engineering*  
B.A., Colgate University, 1975; M.S., Columbia University, 1983; M.Phil., 1983; Ph.D., 1983. Caltech, 2002; 2007–10.

**David O. Siegmund, Ph.D.**, *Visiting Associate in Mathematics*  
B.A., Southern Methodist University, 1963; Ph.D., Columbia University, 1966. Professor, Stanford University, 1976–. Caltech, 2005–08.

**Kerry Edward Sieh, Ph.D.**, *Professor of Geology*  
A.B., University of California (Riverside), 1972; Ph.D., Stanford University, 1977. Assistant Professor, Caltech, 1977–82; Associate Professor, 1982–86; Professor, 1986–2002; 2008–; Robert P. Sharp Professor of Geology, 2003–08. Divisional Academic Officer, 1989–94.

**Leon Theodore Silver, Ph.D.**, *W. M. Keck Foundation Professor for Resource Geology, Emeritus*  
B.S., University of Colorado, 1945; M.S., University of New Mexico, 1948; Ph.D., Caltech, 1955. Assistant Professor of Geology, 1955–62; Associate Professor, 1962–65; Professor, 1965–83; Keck Professor, 1983–96; Keck Professor Emeritus, 1996–.

**Barry Martin Simon, Ph.D., D.Sc.h.c.**, *International Business Machines Professor of Mathematics and Theoretical Physics*  
A.B., Harvard College, 1966; Ph.D., Princeton University, 1970. D.Sc.h.c., Technion–Israel Institute of Technology. Sherman Fairchild Distinguished Scholar, Caltech, 1980–81; Professor, 1981–84; International Business Machines Professor, 1984–. Executive Officer for Mathematics, 1997–2003.

**Melvin I. Simon, Ph.D.**, *Anne P. and Benjamin F. Biaggini Professor of Biological Sciences, Emeritus*  
B.S., City College of New York, 1959; Ph.D., Brandeis University, 1963. Professor, Caltech, 1982–86; Biaggini Professor, 1986–2005; Biaggini Professor Emeritus, 2005–. Chair, Division of Biology, 1995–2000.

**Mark Simons, Ph.D.**, *Professor of Geophysics*  
B.S., University of California (Los Angeles), 1989; Ph.D., Massachusetts Institute of Technology, 1995. Assistant Professor, Caltech, 1997–2003; Associate Professor, 2003–07; Professor, 2007–.

**Annette Jacqueline Smith, Ph.D.**, *Professor of Literature, Emeritus*  
B.A., University of Paris (Sorbonne), 1947; M.A., 1950; Ph.D., 1970. Visiting Assistant Professor of French, Caltech, 1970–71; Lecturer, 1971–81; Associate Professor, 1982–85; Professor, 1985–92; Professor of Literature Emeritus, 1993–.

**Graham Peter Smith, Ph.D.**, *Visiting Associate in Astronomy*  
Ph.D., University of Durham (United Kingdom), 2002. Caltech, 2005–08.

**Christina D. Smolke, Ph.D.**, *Assistant Professor of Chemical Engineering*  
B.S., University of Southern California, 1997; Ph.D., University of California, 2001. Caltech, 2003–.

**Erik Snowberg, Ph.D.**, *Assistant Professor of Economics and Political Science*  
S.B., Massachusetts Institute of Technology, 1999; Ph.D., Stanford University, 2008. Caltech, 2008–.

**G. Jeffrey Snyder, Ph.D.**, *Faculty Associate in Materials Science; Lecturer in Materials Science*  
B.A., Cornell University, 1991; Ph.D., Stanford University, 1997. Visiting Associate, Caltech, 2000–06; Lecturer, 2003; 2007–08; Faculty Associate, 2006–09.

**Baruch Thomas Soifer, Ph.D.**, *Professor of Physics; Director, Spitzer Science Center*  
B.S., Caltech, 1968; Ph.D., Cornell University, 1972. Senior Research Fellow, Caltech, 1978–81; Senior Research Associate, 1981–89; Professor, 1989–; Director, Space Infrared Telescope Facility (SIRTF) Science Center, 1997–2004; Director, Spitzer Science Center, 2004–.

**Michael L. Spezio, Ph.D.**, *Lecturer in Psychology*  
B.S., Case Western Reserve University, 1988; Ph.D., Cornell University, 1994; M.Div., Pittsburgh Theological Seminary, 1996; Ph.D., University of Oregon, 2002. Caltech, 2006–08.

**Maria Spiropulu, Ph.D.**, *Associate Professor of Physics*  
B.Sc., Aristotle University of Thessaloniki, 1993; M.A., Harvard University, 1995; Ph.D., 2000. Caltech, 2008–.

**Matthew L. Spitzer, J.D., Ph.D.**, *Professor of Law and Social Science*  
B.A., University of California (Los Angeles), 1973; J.D., University of Southern California, 1977; Ph.D., Caltech, 1979. Visiting Professor, Caltech, 1988; 1990; 1991–92; Professor of Law and Social Sciences, 1992–2001; 2006–; Visiting Associate, 2001–06.

**Richard J. Squibbs, Ph.D.**, *Caltech-Huntington Mellon Postdoctoral Instructor in English*  
B.A., Southern Connecticut State University, 1997; M.A., University of Massachusetts (Amherst), 2000; Ph.D., Rutgers University, 2007. Mellon Postdoctoral Instructor in History, Caltech, 2000; Mellon Postdoctoral Instructor in English, 2007–09.

**Shannon S. Stahl, Ph.D.**, *Moore Distinguished Scholar*  
B.S., University of Illinois (Urbana-Champaign), 1992; Ph.D., Caltech, 1997. Associate Professor, University of Wisconsin (Madison), 2005–. Caltech, 2008.

**Angelike Stathopoulos, Ph.D.**, *Assistant Professor of Biology*  
B.A., University of California, 1992; Ph.D., Stanford University, 1998. Caltech, 2005–.

**Charles C. Steidel, Ph.D.**, *Lee A. DuBridge Professor of Astronomy*  
A.B., Princeton University, 1984; Ph.D., Caltech, 1990. Assistant Professor, 1995–97; Associate Professor, 1997–98; Professor, 1998–2004; DuBridge Professor, 2004–. Executive Officer for Astronomy, 2004–07.

**Eric D. A. Stemp, Ph.D.**, *Visiting Associate in Chemistry*  
B.S., University of Denver, 1987; M.S., Northwestern University, 1988; Ph.D., 1993. Assistant Professor, Mount St. Mary's College, 1996–. Research Fellow, Caltech, 1993–96; Visiting Associate, 1996–2009.

**Thomas L. Sterling, Ph.D.**, *Faculty Associate in the Center for Advanced Computing Research*  
B.S., Old Dominion University, 1974; M.S., Massachusetts Institute of Technology, 1983; Ph.D., 1984. Visiting Associate, Caltech, 1996–99; Faculty Associate, 1999–2008; 2008–09.

**Paul Warren Sternberg, Ph.D.**, *Thomas Hunt Morgan Professor of Biology; Investigator, Howard Hughes Medical Institute*  
B.A., Hampshire College, 1978; Ph.D., Massachusetts Institute of Technology, 1984. Assistant Professor, Caltech, 1987–92; Associate Professor, 1992–96; Professor, 1996–2004; Morgan Professor, 2004–. Associate Investigator, 1992–97; Investigator, 1997–.

**David J. Stevenson, Ph.D.**, *George Van Osdol Professor of Planetary Science*  
B.S., Victoria University (New Zealand), 1971; M.S., 1972; Ph.D., Cornell University, 1976. Associate Professor, Caltech, 1980–84; Professor, 1984–95; Van Osdol Professor, 1995–. Chair, Division of Geological and Planetary Sciences, 1989–94.

**Joann M. Stock, Ph.D.**, *Professor of Geology and Geophysics*  
B.S., Massachusetts Institute of Technology, 1981; M.S., 1981; Ph.D., 1988. Visiting Assistant Professor, Caltech, 1990; Associate Professor, 1992–98; Professor, 1998–.

**Edward Manin Stolper, Ph.D.**, *Provost; William E. Leonhard Professor of Geology*  
A.B., Harvard College, 1974; M.Phil., University of Edinburgh, 1976; Ph.D., Harvard University, 1979. Assistant Professor, Caltech, 1979–82; Associate Professor, 1982–83; Professor, 1983–90; Leonhard Professor, 1990–. Acting Executive Officer for Geochemistry, 1989; Executive Officer, 1989–94; Chair, Division of Geological and Planetary Sciences, 1994–2004; Acting Provost, 2004; Provost, 2007–.

**Brian M. Stoltz, Ph.D.**, *Ethel Wilson Bowles and Robert Bowles Professor of Chemistry*  
B.S., B.A., Indiana University of Pennsylvania, 1993; M.A., Yale University, 1996; Ph.D., 1997. Assistant Professor, Caltech, 2000–06; Associate Professor, 2006–07; Professor, 2007; Bowles Professor, 2007–.

**Edward Carroll Stone, Jr., Ph.D., D.Sc.h.c.**, *David Morrisroe Professor of Physics; Vice Provost for Special Projects*  
S.M., University of Chicago, 1959; Ph.D., 1964; D.Sc.h.c., Harvard University; Washington University; University of Chicago; University of Southern California. Research Fellow, Caltech, 1964–66; Senior Research Fellow, 1967; Assistant Professor, 1967–71; Associate Professor, 1971–76; Professor, 1976–94; Morrisroe Professor, 1994–. Chairman, Division of Physics, Mathematics and Astronomy, 1983–88; Vice President for Astronomical Facilities, 1988–90; Vice President and Director of the Jet Propulsion Laboratory, 1991–2001; Vice Provost, 2004–.

**Ellen Glowacki Strauss, Ph.D.**, *Senior Research Associate in Biology, Emeritus*  
B.A., Swarthmore College, 1960; Ph.D., Caltech, 1966. Research Fellow, 1969–73; Senior Research Fellow, 1973–84; Senior Research Associate, 1984–2007; Senior Research Associate Emeritus, 2007–.

**James Henry Strauss, Ph.D.**, *Ethel Wilson Bowles and Robert Bowles Professor of Biology, Emeritus*  
B.S., Saint Mary's University, 1960; Ph.D., Caltech, 1967. Assistant Professor, 1969–75; Associate Professor, 1975–83; Professor, 1983–93; Bowles Professor, 1993–2007; Bowles Professor Emeritus, 2007–. Executive Officer for Molecular and Cellular Biology, 1980–89.

**Thomas T. Su, Ph.D.**, *Visiting Associate in Biology*  
B.S., University of California (Los Angeles), 1996; Ph.D., 2002; M.D., Memorial Sloan Kettering Cancer Center, 2004. Resident, University of California (Los Angeles) Medical Center, 2005–. Caltech, 2006–08.

**Deborah L. Sulsky, Ph.D.**, *Visiting Associate in Aeronautics*  
B.S., State University of New York, 1977; M.S., New York University, 1979; Ph.D., Courant Institute of Mathematical Sciences, 1982. Professor, University of New Mexico, 1998–. Caltech, 2000–01; 2008.

**Roger Summons, Ph.D.**, *Moore Distinguished Scholar*  
Ph.D., University of New South Wales, 1971. Professor, Massachusetts Institute of Technology, 2001–. Caltech, 2008.

**Hwankyung Sung, Ph.D.**, *Visiting Associate in Astronomy*  
Ph.D., Seoul National University, 1995. Associate Professor, Sejong University, 2005–. Caltech, 2008–09.

**Noel M. Swerdlow, Ph.D.**, *Visiting Associate in History*  
B.S., University of California (Los Angeles), 1964; M.A., Yale University, 1967; Ph.D., 1968. Professor, University of Chicago, 1982–. Caltech, 2008–09.

**Lisa E. Szechter, Ph.D.**, *Visiting Associate in Physics*  
A.B., Oberlin College, 1997; M.S., Pennsylvania State University, 1999; Ph.D., 2003. Assistant Professor, Tulane University, 2005–. Caltech, 2005–08.

**Yu-Chong Tai, Ph.D.**, *Professor of Electrical Engineering and Mechanical Engineering; Executive Officer for Electrical Engineering*  
B.S., National Taiwan University, 1981; M.S., University of California, 1986; Ph.D., 1989. Assistant Professor of Electrical Engineering, Caltech, 1989–95; Associate Professor, 1995–2000; Professor, 2000–05; Professor of Electrical Engineering and Mechanical Engineering, 2005–. Executive Officer, 2005–.

**Hidehiko Takahashi, Ph.D.**, *Visiting Associate in Biology*  
Ph.D., Tokyo Medical and Dental University, 2005. Chief Investigator, National Institute of Radiological Sciences, 2006–. Caltech, 2008–09.

**Masumi Taki, Ph.D.**, *Visiting Associate in Biology*  
Ph.D., Gunma University, 1998. Assistant Professor, Okayama University, 2003–. Caltech, 2007–08.

**Hugh Pettingill Taylor, Jr., Ph.D.**, *Robert P. Sharp Professor of Geology, Emeritus*  
B.S., Caltech, 1954; A.M., Harvard University, 1955; Ph.D., Caltech, 1959. Assistant Professor, 1959–61; Research Fellow, 1961; Assistant Professor, 1962–64; Associate Professor, 1964–69; Professor, 1969–81; Sharp Professor, 1981–2002; Sharp Professor Emeritus, 2002–. Executive Officer for Geology, 1987–94.

**Vassilios Theofilis, Ph.D.**, *Visiting Associate in Mechanical Engineering*  
B.S., University of Patras, 1984; M.S., University of Manchester, 1988; Ph.D., 1991. Tenured Research Professor, Technical University of Madrid, 2006–. Caltech, 2008.

**Frederick Burtis Thompson, Ph.D.**, *Professor of Applied Philosophy and Computer Science, Emeritus*  
A.B., University of California (Los Angeles), 1946; M.A., 1947; Ph.D., University of California, 1952. Professor of Applied Science and Philosophy, Caltech, 1965–77; Professor of Applied Philosophy and Computer Science, 1977–93; Professor Emeritus, 1993–.

**Kip Stephen Thorne, Ph.D., D.Sc.h.c., D.h.c., L.H.D.h.c.,** *Richard P. Feynman Professor of Theoretical Physics*  
B.S., Caltech, 1962; Ph.D., Princeton University, 1965; D.Sc.h.c., Illinois College; Utah State University; D.h.c., Moscow University; University of Glasgow; L.H.D.h.c., Claremont Graduate University. Research Fellow in Physics, Caltech, 1966–67; Associate Professor of Theoretical Physics, 1967–70; Professor, 1970–91; William R. Kenan Professor, 1981–91; Feynman Professor, 1991–.

**Massimo Tinto, Ph.D.,** *Visiting Associate in Physics*  
Ph.D., University College (Wales), 1987. Senior Scientist, Jet Propulsion Laboratory, 1991–. Research Fellow, Caltech, 1987–89; Visiting Associate, 2001–09.

**David A. Tirrell, Ph.D., D.h.c.,** *Ross McCollum–William H. Corcoran Professor and Professor of Chemistry and Chemical Engineering; Chair, Division of Chemistry and Chemical Engineering*  
B.S., Massachusetts Institute of Technology, 1974; M.S., University of Massachusetts, 1976; Ph.D., 1978; D.h.c., Eindhoven Technical University. McCollum–Corcoran Professor and Professor, Caltech, 1998–. Chair, 1999–.

**Thomas Anthony Tombrello, Ph.D., Ph.D.h.c.,** *William R. Kenan, Jr., Professor and Professor of Physics; Technology Assessment Officer*  
B.A., Rice University, 1958; M.A., 1960; Ph.D., 1961; Ph.D.h.c., Uppsala University. Research Fellow, Caltech, 1961–62; 1964–65; Assistant Professor, 1965–67; Associate Professor, 1967–71; Professor, 1971–; Kenan Professor, 1997–. Technology Assessment Officer, 1996–. Chair, Division of Physics, Mathematics and Astronomy, 1998–2008.

**Ritsuko Hirai Toner, Ph.D.,** *Lecturer in Japanese*  
B.A., Kyoto University of Foreign Studies (Japan), 1974; M.A., University of Southern California, 1979; Ph.D., 1987. Caltech, 1992–2008.

**Geoffrey C. Toon, D.Phil.,** *Visiting Associate in Planetary Science*  
B.A., University of Oxford, 1978; M.A., 1981; D.Phil., 1984. Research Scientist, Jet Propulsion Laboratory, 1986–. Caltech, 2001–09.

**Tony Travouillon, Ph.D.,** *Visiting Associate in Astronomy*  
Ph.D., University of New South Wales, 2004. Site Testing Scientist, Thirty-Meter Telescope, 2005–. Caltech, 2006–09.

**Tommaso Treu, Ph.D.,** *Visiting Associate in Astronomy*  
Ph.D., Scuola Normale Superiore (Italy), 2000. Assistant Professor, University of California (Santa Barbara), 2005–. Caltech, 2007.

**Marie Treyer, Ph.D.,** *Visiting Associate in Physics*  
Ph.D., University of Paris, 1994. Research Associate, Laboratoire d'Astrophysique de Marseille, 1999–. Caltech, 2003–08.

**Sandra Troian, Ph.D.,** *Professor of Applied Physics, Aeronautics, and Mechanical Engineering*  
B.A., Harvard University, 1980; M.S., Cornell University, 1984; Ph.D., 1987. Moore Distinguished Scholar, Caltech, 2004–05; Professor, 2006–.

**Jeroen Tromp, Ph.D.,** *Professor of Geophysics*  
B.Sc., Utrecht University (Netherlands), 1988; M.S., Princeton University, 1990; Ph.D., 1992. Visiting Professor, Caltech, 1998–99; Professor, 2000–02; 2008–; McMillan Professor, 2003–08. Director, Seismological Laboratory, 2003–08.

**Joel A. Tropp, Ph.D.,** *Assistant Professor of Applied and Computational Mathematics*  
B.A., B.S., University of Texas (Austin), 1999; M.S., 2001; Ph.D., 2004. Caltech, 2007–.

**Oliver D. Tschauner, Ph.D.,** *Visiting Associate in Geophysics*  
Ph.D., University of Cologne, 1997. Assistant Research Professor, University of Nevada (Las Vegas), 2002–. Caltech, 2006–09.

**Nicholas William Tschoegl, Ph.D.,** *Professor of Chemical Engineering, Emeritus*  
B.Sc., New South Wales University of Technology, 1954; Ph.D., University of New South Wales, 1958. Associate Professor of Materials Science, Caltech, 1965–67; Professor of Chemical Engineering, 1967–85; Professor Emeritus, 1985–.

**Ka-Kit Tung, Ph.D.,** *Visiting Associate in Environmental Science and Engineering*  
B.S., Caltech, 1972; M.S., 1972; Ph.D., Harvard University, 1979. Professor, University of Washington, 1989–. Visiting Associate, Caltech, 2008.

**Catalin C. Turc, Ph.D.,** *Visiting Associate in Applied and Computational Mathematics*  
B.S., Alexandru Ioan Cuza University, 1997; M.S., 1999; Ph.D., 2005. Assistant Professor, University of North Carolina, 2007–. Caltech, 2008.

**Carol Chace Tydel, D.V.M.,** *Visiting Associate in Biology; Lecturer in Biology*  
B.S., University of California (Davis), 1980; D.V.M., 1982. Adjunct Professor, Pasadena City College, 2007–. Visiting Associate, Caltech, 2007–08; Lecturer, 2008.

**Michiko Ueda, Ph.D.,** *Assistant Professor of Political Science*  
B.A., International Christian University (Japan), 1996; M.A., University of Tokyo, 1999; M.A., Stanford University, 2001; Ph.D., Massachusetts Institute of Technology, 2006. Caltech, 2006–.

**Christopher M. Umans, Ph.D.,** *Associate Professor of Computer Science*  
B.A., Williams College, 1996; Ph.D., University of California, 2000. Assistant Professor, Caltech, 2002–08; Associate Professor, 2008–.

**Edwin T. Upchurch, Ph.D.,** *Visiting Associate in the Center for Advanced Computing Research*  
B.S., University of Texas (Austin), 1964; M.S., University of Wisconsin (Madison), 1969; Ph.D., University of Texas (Austin), 1982. Staff Scientist, Jet Propulsion Laboratory, 2000–. Caltech, 2002–09.

**Rolando Uribe, M.S.,** *Coach*  
B.S., California State University (San Bernardino), 1995; M.S., 2002. Caltech, 2001–09.

**Kerry J. Vahala, Ph.D.,** *Ted and Ginger Jenkins Professor of Information Science and Technology and Professor of Applied Physics*  
B.S., Caltech, 1980; M.S., 1981; Ph.D., 1985. Research Fellow in Applied Physics, 1985; Assistant Professor, 1986–90; Associate Professor, 1990–96; Professor, 1996–; Jenkins Professor, 2002–.

**Nagarajan Vaidichi, Ph.D.,** *Visiting Associate in Chemistry*  
M.S., Indian Institute of Technology, 1981; Ph.D., 1986. Professor, Beckman Research Institute, City of Hope, 2005–. Research Fellow, Caltech, 1991–94; Visiting Associate, 2006–08.

**P. P. Vaidyanathan, Ph.D.,** *Professor of Electrical Engineering*  
B.Sc., University of Calcutta, 1974; B.Tech., 1977; M.Tech., 1979; Ph.D., University of California (Santa Barbara), 1982. Assistant Professor, Caltech, 1983–88; Associate Professor, 1988–93; Professor, 1993–. Executive Officer for Electrical Engineering, 2002–05.

**Michele Vallisneri, Ph.D.,** *Visiting Associate in Physics*  
Laurea, University of Parma (Italy), 1997; M.S., 2000; Ph.D., Caltech, 2002. Research Scientist, Jet Propulsion Laboratory, 2005–. Lecturer, Caltech, 2003–05; Visiting Associate, 2005–08.

**Joseph C. Vanderwaart, Ph.D.,** *Instructor in Computer Science*  
B.S., Williams College, 1999; Ph.D., Carnegie Mellon University, 2006. Caltech, 2006–08.

**John P. Van Deusen, B.S.,** *Lecturer in Mechanical Engineering*  
A.A., El Camino College, 1978; B.S., California State University (Long Beach), 2003. Caltech, 2004–07.

**Axel van de Walle, Ph.D.,** *Assistant Professor of Materials Science*  
B.Eng., Ecole Polytechnique de Montreal, 1994; M.Math., University of Waterloo, 1995; Ph.D., Massachusetts Institute of Technology, 2000. Caltech, 2006–.

**Jeroen van Dongen, Ph.D.,** *Visiting Associate in History*  
B.Sc., University of Amsterdam, 1994; M.Sc., 1998; Ph.D., 2002. Veni Research Fellow, University of Utrecht, 2005–. Caltech, 2007–10.

**Steven J. van Enk, Ph.D.,** *Visiting Associate in Physics*  
M.S., University of Utrecht, 1988; Ph.D., University of Leiden, 1992. Associate Professor, University of Oregon, 2006–. Caltech, 2005–08.

**Michael C. Vanier, Ph.D.,** *Lecturer in Computer Science*  
B.S., McGill University, 1986; M.S., 1993; Ph.D., Caltech, 2001. Lecturer, 2004–08.

**Jakob J. Van Zyl, Ph.D.,** *Faculty Associate; Lecturer in Electrical Engineering and Planetary Science*  
B.Eng., University of Stellenbosch (South Africa), 1979; M.S., Caltech, 1983; Ph.D., 1986. Research Fellow in Electrical Engineering, 1986; Lecturer in Electrical Engineering and Planetary Science, 2001–07; 2008; Faculty Associate, 2007–09.

**Alexander J. Varshavsky, Ph.D.,** *Howard and Gwen Laurie Smits Professor of Cell Biology*  
B.S., Moscow State University, 1970; Ph.D., Institute of Molecular Biology, 1973. Caltech, 1992–.

**Peter John Veitch, Ph.D.,** *Visiting Associate in Physics*  
Ph.D., University of Western Australia, 1987. Associate Professor, University of Adelaide, 2006–. Caltech, 2007–08.

**Jan Veizer, Ph.D.,** *Visiting Associate in Geochemistry*  
Ph.D., Slovak Academy of Sciences, 1968; Ph.D., Australian National University, 1971. Distinguished University Professor, University of Ottawa, 2004–. Caltech, 2007–08.

**Luis Fernando Velazquez Campoy, Ph.D.**, *Visiting Associate in Mathematics* Ph.D., University of Zaragoza, 1993. Professor, 1997–. Caltech, 2008.

**Sergey P. Viattchanine, Ph.D.**, *Visiting Associate in Physics* Ph.D., Moscow State University, 1979. Leading Research Fellow, 2000–. Caltech, 2008.

**Michael Vivic, Ph.D.**, *Lecturer in Chemical Engineering* B.S., University of Akron, 1992; Ph.D., Caltech, 1999. Lecturer, 2003–08.

**Daniel Vielzeuf, Ph.D.**, *Visiting Associate in Geochemistry* B.S., Université Blaise Pascal (Clermont-Ferrand), 1977; Ph.D., 1984. Professor, CRM-CNRS, Campus de Luminy, 2005–. Visiting Professor, Caltech, 2004–05; Visiting Associate, 2008.

**Scott C. Virgil, Lecturer in Chemistry** Caltech, 2008.

**Gerald E. Voecks, Ph.D.**, *Visiting Associate in Chemistry* B.S., Wayne State University, 1962; M.S., University of South Dakota, 1967; Ph.D., Montana State University, 1972. Retired, General Motors Fuel Cell Activity Center, 2004–. Caltech, 2005–08.

**Petr Vogel, Ph.D.**, *Senior Research Associate in Physics, Emeritus* Ph.D., Joint Institute of Nuclear Research (USSR), 1966. Senior Research Fellow, Caltech, 1970–75; Research Associate, 1975–81; Senior Research Associate, 1981–2004; Lecturer, 1983–90; 1992; 1995–96; 1999–2000; 2006. Senior Research Associate Emeritus, 2004–.

**Rochus E. Vogt, Ph.D.**, *R. Stanton Avery Distinguished Service Professor and Professor of Physics, Emeritus* S.M., University of Chicago, 1957; Ph.D., 1961. Assistant Professor, Caltech, 1962–65; Associate Professor, 1965–70; Professor, 1970–2002; R. Stanton Avery Distinguished Service Professor, 1982–2002; Avery Professor and Professor of Physics, Emeritus, 2002–. Chief Scientist, Jet Propulsion Laboratory, 1977–78; Chairman, Division of Physics, Mathematics and Astronomy, 1978–83; Acting Director, Owens Valley Radio Observatory, 1980–81; Vice President and Provost, 1983–87; Director, Laser Interferometer Gravitational-Wave Observatory Project, 1987–94.

**Heinrich von Staden, Ph.D.**, *Visiting Associate in History* B.A., Yale University, 1961; Ph.D., University of Tübingen, 1968. Professor, Institute for Advanced Study, 1998–. Caltech, 2009.

**Thad Vreeland, Jr., Ph.D.**, *Professor of Materials Science, Emeritus* B.S., Caltech, 1949; M.S., 1950; Ph.D., 1952. Research Fellow in Engineering, 1952–54; Assistant Professor of Mechanical Engineering, 1954–58; Associate Professor, 1958–63; Associate Professor of Materials Science, 1963–68; Professor, 1968–91; Professor Emeritus, 1991–.

**Daniel Wagenaar, Ph.D.**, *Broad Senior Research Fellow in Brain Circuitry* M.Sc., University of Amsterdam, 1977; M.Sc., King's College London, 1998; Ph.D., 2006. Caltech, 2008–.

**David Bertram Wales, Ph.D.**, *Professor of Mathematics, Emeritus* B.S., University of British Columbia, 1961; M.A., 1962; Ph.D., Harvard University, 1967. Bateman Research Fellow, Caltech, 1967–68; Assistant Professor, 1968–71; Associate Professor, 1971–77; Professor, 1977–2008; Professor Emeritus, 2008–. Associate Dean of Students, 1976–80; Dean of Students, 1980–84; Executive Officer for Mathematics, 1985–91; Master of Student Houses, 1991–97.

**Duane E. Waliser, Ph.D.**, *Visiting Associate in Planetary Science* B.S., Oregon State University, 1985; M.S., University of California (San Diego), 1987; Ph.D., 1992. Research Scientist, Jet Propulsion Laboratory, 2004–. Caltech, 2004–08.

**Eric Wambach, Ph.D.**, *Olga Taussky and John Todd Instructor in Mathematics* Vordipl., University of Cologne, 1998; M.Phil., Columbia University, 2003; Ph.D., 2005. Caltech, 2005–08.

**Jiajun Wang, Ph.D.**, *Olga Taussky and John Todd Instructor in Mathematics* M.S., Peking University, 2001; Ph.D., University of California, 2007. Caltech, 2007–10.

**Xiangyun Wang, Ph.D.**, *Lecturer in Chinese* M.A., Central Institute for Nationalities (China), 1985; Ph.D., Harvard University, 1995. Caltech, 2001–08.

**Zhen-Gang Wang, Ph.D.**, *Professor of Chemical Engineering* B.Sc., Beijing University, 1982; Ph.D., University of Chicago, 1987. Assistant Professor, Caltech, 1991–97; Associate Professor, 1997–2002; Professor, 2002–.

**Theodore A. Waniuk, Ph.D.**, *Visiting Associate in Materials Science* B.S., Harvey Mudd College, 1996; M.S., Caltech, 1998; Ph.D., 2004. Senior Scientist, Liquidmetal Technology, 2002–. Caltech, 2008–09.

**Gerald J. Wasserburg, Ph.D., D.h.c., Sc.D.h.c., D.Sc.h.c., Crafoord Laureate**, *John D. MacArthur Professor of Geology and Geophysics, Emeritus* S.B., University of Chicago, 1951; S.M., 1952; Ph.D., 1954; D.h.c., Rennes I University; University of Brussels; University of Turin; University of Paris; Sc.D.h.c., Arizona State University; D.Sc.h.c., University of Chicago. Assistant Professor of Geology, Caltech, 1955–59; Associate Professor, 1959–62; Professor of Geology and Geophysics, 1963–82; MacArthur Professor, 1982–2001; MacArthur Professor Emeritus, 2001–. Chairman, Division of Geological and Planetary Sciences, 1987–89; Executive Officer for Geochemistry, 1987–89.

**Michael Watkins, Ph.D.**, *Lecturer in Aeronautics* M.S., University of Texas (Austin), 1985; Ph.D., 1989. Caltech, 2005–08.

**Frank H. Webb, Ph.D.**, *Visiting Associate in Geology* B.A., University of California (Santa Barbara), 1984; M.S., Caltech, 1989; Ph.D., 1990. Group Supervisor, Satellite Geodesy and Geodynamics Systems Group, Jet Propulsion Laboratory, 2000–. Visiting Associate, Caltech, 2005–09.

**Sander Weinreb, Ph.D.**, *Faculty Associate in Electrical Engineering* B.S., Massachusetts Institute of Technology, 1958; Ph.D., 1963. Caltech, 1999–.

**Alan Jay Weinstein, Ph.D.**, *Professor of Physics* A.B., Harvard University, 1978; Ph.D., 1983. Assistant Professor, Caltech, 1988–95; Associate Professor, 1995–99; Professor, 2000–.

**Cindy Weinstein, Ph.D.**, *Professor of English; Executive Officer for the Humanities* B.A., Brandeis University, 1982; Ph.D., University of California, 1989. Assistant Professor of Literature, Caltech, 1989–95; Associate Professor, 1995–2004; Associate Professor of English, 2004–05; Professor, 2005–. Executive Officer, 2008–.

**Daniel Paul Weitekamp, Ph.D.**, *Professor of Chemical Physics* B.A., Harvard College, 1974; Ph.D., University of California, 1982. Assistant Professor of Chemistry, Caltech, 1985–91; Associate Professor of Chemical Physics, 1991–2006; Professor, 2006–.

**Paul O. Wennberg, Ph.D.**, *R. Stanton Avery Professor of Atmospheric Chemistry and Environmental Science and Engineering; Director, Ronald and Maxine Linde Center for Global Environmental Science* B.A., Oberlin College, 1985; Ph.D., Harvard University, 1994. Associate Professor of Atmospheric Chemistry and Environmental Engineering Science, Caltech, 1998–2001; Professor, 2001–03; Professor of Atmospheric Chemistry and Environmental Science and Engineering, 2003–04; Avery Professor, 2004–. Director, 2008–.

**Brian P. Wernicke, Ph.D.**, *Chandler Family Professor of Geology* B.S., University of Southern California, 1978; Ph.D., Massachusetts Institute of Technology, 1982. Visiting Professor, Caltech, 1990; Professor of Geology, 1992–2001; Chandler Professor, 2001–.

**Ward Whaling, Ph.D.**, *Professor of Physics, Emeritus* B.S., Rice University, 1944; M.A., 1947; Ph.D., 1949. Research Fellow, Caltech, 1949–52; Assistant Professor, 1952–58; Associate Professor, 1958–62; Professor, 1962–93; Professor Emeritus, 1993–.

**Gerald Beresford Whitham, Ph.D.**, *Charles Lee Powell Professor of Applied Mathematics, Emeritus* B.Sc., University of Manchester, 1948; M.Sc., 1949; Ph.D., 1953. Visiting Professor of Applied Mechanics, Caltech, 1961–62; Professor of Aeronautics and Mathematics, 1962–67; Professor of Applied Mathematics, 1967–83; Powell Professor, 1983–98; Powell Professor Emeritus, 1998–. Executive Officer for Applied Mathematics, 1971–80.

**Allyson J. Whittaker, Ph.D.**, *Senior Research Fellow in Biology* B.S., University of Massachusetts, 1993; Ph.D., Massachusetts Institute of Technology, 2000. Caltech, 2006–08.

**Adam Wierman, Ph.D.**, *Assistant Professor of Computer Science* B.S., Carnegie Mellon University, 2001; M.S., 2004; Ph.D., 2007. Caltech, 2007–.

**Simon J. Wilkie, Ph.D.**, *Faculty Associate in Economics* B.Comm., University of New South Wales, 1982; M.A., University of Rochester, 1988; Ph.D., 1990. Instructor, Caltech, 1994–95; Assistant Professor, 1995–2002; Senior Research Associate, 2002–05; Faculty Associate, 2005–08.



**Richard M. Wilson, Ph.D.**, *Professor of Mathematics*  
B.S., Indiana University, 1966; M.S., Ohio State University, 1968; Ph.D., 1969.  
Sherman Fairchild Distinguished Scholar, Caltech, 1976; Professor, 1980–.

**Erik Winfree, Ph.D.**, *Associate Professor of Computer Science, Computation and Neural Systems, and Bioengineering*  
B.S., University of Chicago, 1991; Ph.D., Caltech, 1998. Assistant Professor, 1999–2006; Associate Professor of Computer Science and Computation and Neural Systems, 2006–07; Associate Professor of Computer Science, Computation and Neural Systems, and Bioengineering, 2007–.

**Jay R. Winkler, Ph.D.**, *Faculty Associate in Chemistry*  
B.S., Stanford University, 1978; Ph.D., Caltech, 1993. Lecturer, 2002; 2004–05; Faculty Associate, 2008–11.

**Mark Brian Wise, Ph.D.**, *John A. McCone Professor of High Energy Physics*  
B.Sc., University of Toronto, 1976; M.Sc., 1977; Ph.D., Stanford University, 1980. Assistant Professor of Theoretical Physics, Caltech, 1982–84; Associate Professor, 1984–85; Professor, 1985–92; McCone Professor, 1992–.

**Barbara J. Wold, Ph.D.**, *Bren Professor of Molecular Biology; Director, Beckman Institute*  
B.S., Arizona State University (Tempe), 1973; Ph.D., Caltech, 1978. Research Fellow, 1978; Assistant Professor, 1981–88; Associate Professor, 1988–96; Professor, 1996–2002; Bren Professor, 2003–. Director, 2001–.

**Juliann Kay Wolfgram, Ph.D.**, *Lecturer in Art History*  
B.A., Scripps College, 1979; M.A., University of Kansas, 1986; M.Phil., 1986; Ph.D., 1986. Caltech, 1992–2008.

**Nicolaj Wolfson, M.D.**, *Visiting Associate in Materials Science*  
M.D., Tel Aviv Medical School, 1984. Visiting Assistant Professor, University of Southern California, 2006–. Caltech, 2007–09.

**Joyce Y. Wong, Ph.D.**, *Visiting Associate in Electrical Engineering*  
B.S., Caltech, 1995; M.S., 1996; Ph.D., 2000. Senior Research Scientist, Schlumberger, 2000–. Visiting Associate, Caltech, 2004–09.

**Vanessa Woods, Ph.D.**, *Lecturer in Psychology*  
B.S., University of California (Santa Barbara), 2000; M.A., 2002; Ph.D., 2006. Caltech, 2008.

**James Francis Woodward, Ph.D.**, *J. O. and Juliette Koepfli Professor of the Humanities*  
B.A., Carleton College, 1968; Ph.D., University of Texas (Austin), 1977. Mellon Postdoctoral Instructor, Caltech, 1983–86; Assistant Professor, 1986–88; Associate Professor, 1988–92; Professor, 1992–2001; Koepfli Professor, 2001–. Executive Officer for the Humanities, 1992–95; 2000–03.

**Kenneth W. Wright, M.D.**, *Visiting Associate in Chemical Engineering*  
B.A., California Lutheran College, 1972; M.D., Boston University, 1977. Director, Pediatric Ophthalmology Research and Education Division, Cedars-Sinai Medical Center, 1999–. Caltech, 2004–09.

**Theodore Yao-Tsu Wu, Ph.D.**, *Professor of Engineering Science, Emeritus*  
B.S., Chiao-Tung University (China), 1946; M.S., Iowa State University, 1948; Ph.D., Caltech, 1952. Research Fellow, 1952–55; Assistant Professor of Applied Mechanics, 1955–57; Associate Professor, 1957–61; Professor, 1961–66; Professor of Engineering Science, 1966–96; Professor Emeritus, 1996–.

**Peter John Wyllie, Ph.D., D.Sc.h.c.**, *Professor of Geology, Emeritus*  
B.Sc. (Geology and Physics), Saint Andrews University (Scotland), 1952; B.Sc. (Geology), 1955; Ph.D., 1958; D.Sc.h.c., Saint Andrews University, Professor, Caltech, 1983–99; Professor Emeritus, 1999–. Chairman, Division of Geological and Planetary Sciences, 1983–87; Divisional Academic Officer, 1994–99.

**Lihua Xie, Ph.D.**, *Visiting Associate in Control and Dynamical Systems*  
B.S., Najing University of Science and Technology (China), 1983; M.S., 1986; Ph.D., University of Newcastle (Australia), 1992. Professor, Nanyang Technological University, 2004–. Caltech, 2008–.

**Changhuei Yang, Ph.D.**, *Assistant Professor of Electrical Engineering and Bioengineering*  
B.S. (Electrical Engineering), B.S. (Physics), Massachusetts Institute of Technology, 1997; M.Eng., 1997; B.S. (Mathematics), 2002; Ph.D., 2002. Assistant Professor of Electrical Engineering, Caltech, 2003–04; Assistant Professor of Electrical Engineering and Bioengineering, 2004–.

**Amnon Yariv, Ph.D.**, *Martin and Eileen Summerfield Professor of Applied Physics and Professor of Electrical Engineering*  
B.S., University of California, 1954; M.S., 1956; Ph.D., 1958. Associate Professor of Electrical Engineering, Caltech, 1964–66; Professor, 1966–74; Professor of Electrical Engineering and Applied Physics, 1974–79; Thomas G. Myers Professor of Electrical Engineering and Professor of Applied

Physics, 1979–96; Summerfield Professor and Professor of Electrical Engineering, 1996–.

**Leeat Yariv, Ph.D.**, *Associate Professor of Economics*  
B.Sc., Tel Aviv University, 1992; M.Sc., 1995; M.A., Harvard University, 2001; Ph.D., 2001. Visiting Assistant Professor, Caltech, 2004–05; Associate Professor, 2005–.

**Rachid Yazami, Ph.D.**, *Visiting Associate in Chemistry*  
Eng., National Polytechnic Institute of Grenoble, 1978; Ph.D., 1985. Research Director, National Center for Scientific Research, 1998–. Visiting Associate in Materials Science, Caltech, 2000–06; Visiting Associate in Chemistry, 2006–08.

**Jun Je, Ph.D.**, *Moore Distinguished Scholar*  
B.S., Jiao Tong University, 1989; M.S., University of New Mexico, 1991; Ph.D., University of Colorado, 1997. Associate Professor, 2004–. Caltech, 2008.

**Nai-Chang Yeh, Ph.D.**, *Professor of Physics*  
B.S., National Taiwan University, 1983; Ph.D., Massachusetts Institute of Technology, 1988. Assistant Professor, Caltech, 1989–95; Associate Professor, 1995–97; Professor, 1997–.

**Yun Yen, Ph.D.**, *Visiting Associate in Chemical Engineering*  
M.D., Taipei Medical College, 1982; Ph.D., Thomas Jefferson University, 1987. Associate Cancer Center Director, City of Hope, 2005–. Caltech, 2007–08.

**Tau-Mu Yi, Ph.D.**, *Visiting Associate in Control and Dynamical Systems*  
A.B., B.S., Harvard College, 1986; Ph.D., Massachusetts Institute of Technology, 1995. Assistant Professor, University of California (Irvine), 2003–. Visiting Associate in Biology, Caltech, 1995–98; Visiting Associate in Control and Dynamical Systems, 2004–08.

**Hae Yong Yoo, Ph.D.**, *Senior Research Fellow in Biology*  
B.S., Seoul National University, 1990; M.S., 1992; Ph.D., 1998. Caltech, 2005–08.

**Sanichiro Yoshida, Ph.D.**, *Visiting Associate in Physics*  
Ph.D., Keio University (Japan), 1986. Engineer, University of Florida, 1997–. Caltech, 2000–09.

**Steven J. Youra, Ph.D.**, *Faculty Associate in the Humanities*  
A.B., University of Michigan, 1971; M.A., University of Rochester, 1973; Ph.D., Cornell University, 1983. Faculty Associate, Caltech, 2001–. Director, Hixon Writing Center, 2001–.

**Mary An-yuan Yui, Ph.D.**, *Senior Research Fellow in Biology*  
B.S., University of California (Santa Barbara), 1977; M.S., Oregon State University, 1982; Ph.D., Florida University, 1995. Lecturer, Caltech, 2005; Senior Research Fellow, 2005–09.

**Yuk Ling Yung, Ph.D.**, *Professor of Planetary Science*  
B.S., University of California, 1969; Ph.D., Harvard University, 1974. Visiting Associate, Caltech, 1976; Assistant Professor, 1977–82; Associate Professor, 1982–86; Professor, 1986–.

**Ahmed H. Zewail, Ph.D., D.Sc.h.c., D.h.c., D.Univ.h.c., D.Phil.h.c., D.H.L., LL.D.h.c., M.D.h.c., Nobel Laureate, Linus Pauling Professor of Chemistry and Professor of Physics**  
B.Sc., Alexandria University, 1967; Ph.D., University of Pennsylvania, 1974; D.Sc.h.c., American University in Cairo; Katholieke Universiteit, Leuven; University of Pennsylvania; Université de Lausanne; Alexandria University; University of New Brunswick; Jadavpur University; Heriot-Watt University; Bogaziçi University; École Normale Supérieure; University of Oxford; University of Dublin; University of Cambridge; D.h.c., University of Rome; Université de Liège; D.Univ.h.c., Swinburne University; Peking University; Tohoku University; University of Buenos Aires; Babes-Bolyai University; D.Phil.h.c., Lund University; D.H.L., American University of Beirut; LL.D.h.c., Concordia University; M.D.h.c., Pusan National University. Assistant Professor of Chemical Physics, Caltech, 1976–78; Associate Professor, 1978–82; Professor, 1982–89; Pauling Professor, 1990–2007; Pauling Professor of Chemistry, 2007–; Professor of Physics, 1995–.

**Jiji Zhang, Ph.D.**, *Assistant Professor of Philosophy*  
B.A., Peking University, 2000; M.S., Carnegie Mellon University, 2002; Ph.D., 2006. Caltech, 2006–.

**Wendong Zhang, Ph.D.**, *Visiting Associate in Electrical Engineering*  
B.S., North University of China, 1982; M.S., 1986; Ph.D., Beijing Institute of Technology, 1995. President and Professor, North University of China, 2000–. Caltech, 2008.

**Deming Zhao, Ph.D.**, *Visiting Associate in Environmental Science and Engineering*  
B.S., Zhejiang University, 1998; M.S., 2001; Ph.D., 2003. Associate Professor, 2007–. Caltech, 2008–09.

**Hans Peter Zima, Ph.D.**, *Visiting Associate in the Center for Advanced Computing Research*  
Ph.D., University of Vienna, 1964.  
Principal Scientist, Jet Propulsion  
Laboratory, 2001–. Caltech, 1999–2008.

**Maxym Zinchenko, Ph.D.**, *Harry Bateman  
Reseach Instructor in Mathematics*  
M.S., Kharkov National University  
(Ukraine), 1997; Ph.D., University of  
Missouri (Columbia), 2006. Caltech,  
2006–09.

**Kai Zinn, Ph.D.**, *Professor of Biology*  
B.A., University of California (San Diego),  
1977; Ph.D., Harvard University, 1983.  
Assistant Professor, Caltech, 1989–95;  
Associate Professor, 1995–99; Professor,  
1999–.

**Harold Zirin, Ph.D.**, *Professor of  
Astrophysics, Emeritus*  
A.B., Harvard College, 1950; A.M., Harvard  
University, 1951; Ph.D., 1953. Visiting  
Associate, Caltech, 1963; Professor,  
1964–98; Professor Emeritus, 1998–. Chief  
Astronomer, Big Bear Solar Observatory,  
1970–80; Director, Big Bear Solar  
Observatory, 1980–97.

**Jonas Zmuidzinas, Ph.D.**, *Professor of  
Physics; Senior Research Scientist, Jet  
Propulsion Laboratory; Director, Microdevices  
Laboratory, Jet Propulsion Laboratory*  
B.S., Caltech, 1981; Ph.D., University of  
California, 1987. Assistant Professor,  
Caltech, 1989–95; Associate Professor,  
1995–2000; Professor, 2000–. Senior  
Research Scientist, 2005–; Director, 2007–.

**Peter A. Zoller, Ph.D.**, *Moore Distinguished  
Scholar*  
Ph.D., University of Innsbruck, 1977.  
Caltech, 2008.

**Natalia Zotov, Ph.D.**, *Visiting Associate in  
Physics*  
Ph.D., University of Otago (New Zealand),  
1974. Associate Professor, Louisiana Tech  
University, 1990–. Caltech, 2001–08.

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