



The Academy is governed by a distinguished group of eminent scientists who have been appointed Fellows of the California Academy of Sciences in recognition of their notable contributions to one or more of the natural sciences. Nominated by their colleagues and appointed by the Board of Trustees, the Fellows remain members of the Fellowship for life.

Below is a complete list of Academy Fellows.

David Ackerly
Ecology and Evolutionary Biology

Bruce M. Alberts
Molecular and Conservation Biology

Angel C. Alcalá
*Marine Biology and Conservation,
Herpetology*

Michele L. Aldrich
History of Science

Zeresenay Alemseged
Anthropology and Paleoanthropology

Frank Almeda
Botany

Walter Alvarez
Geology

Steven C. Anderson
*Systematic, Biogeographic and
Ecological Studies in Herpetology*

Christopher Andrews
*Aquarium Management and
Parasitology*

Fred Andrews
Entomology

Paul H. Arnaud
Entomology

E. N. Arnold
Herpetology

Jeanne Arnold
Anthropology

Alissa J. Arp
Marine Biology

Francisco J. Ayala
Genetics

Bruce G. Baldwin
Botany

George E. Ball
Entomology

Richard T. Barber
Marine Biology

Anthony D. Barnosky
Paleontology

Reginald H. Barrett
*Applied Biology, Agricultural and
Environmental Science*

John Barron
Micropaleontology

Bruce Bartholomew
Botany

Gibor B. Basri
Astronomy and Astrophysics

Aaron M. Bauer
Herpetology

Steven V. Beckwith
Astronomy

Shannon N. Bennett
Microbiology

William J. Bennetta
Science and Public Policy

Robert G. Bergman
Chemistry

Brent Berlin
Anthropology

Giacomo Bernardi
Ichthyology

Vladimir A. Beshkov
Herpetology

Philip E. Bickler
*Comparative Physiology,
Neuroscience and Anesthesiology*

James L. Bischoff
Marine Geology

Jeffrey M. Black
*Conservation and Ecology of Water
Fowl*

David C. Blackburn
Herpetology

Elizabeth H. Blackburn
Molecular Biology

James A. Blake
Invertebrate Zoology

Barbara A. Block
*Evolutionary, Cellular and Molecular
Physiology*

Carol L. Boggs
Evolutionary Ecology

Stephen Bollens
Biological Oceanography



Academy Fellows

Sarane T. Bowen
Genetics

Rauri C.K. Bowie
Ornithology

Justin Brashares
Ecology and Wildlife Conservation

John I. Brauman
Chemistry

Thomas S. Briggs
Entomology

Winslow R. Briggs
Botany

Michael E. Brown
Astronomy

Robert D. Brown, Jr.
Geology

Thomas D. Bruns
Mycology

Richard C. Brusca
Marine Biology and Conservation

Robert W. Buddemeier
Environmental Studies

Stephen H. Bullock
Plant Ecology

Margaret G. Burke
Behavioral Ecology and Education

Nathalie A. Cabrol
Astrobiology

Gregor M. Cailliet
Ichthyology

Roy L. Caldwell
Invertebrate Zoology

Douglas G. Capone
*Biological Oceanography, Marine
Microbiology*

Ring Cardé
Entomology

James R. Carey
Entomology

Sherwin Carlquist
Botany

Sandra J. Carlson
Paleontology

James T. Carlton
Marine Biodiversity and Conservation

Edward J. Carpenter
*Biological Oceanography and Marine
Microbiology*

James M. Carpenter
Entomology

Kent E. Carpenter
Marine Biology and Ichthyology

Mark H. Carr
Marine Ecology

John Caskey
Geology, Neotectonics

Alan Channing
Herpetology

Nona Chiariello
Global Ecology

Robert L. Christiansen
Geology

Christopher F. Chyba
Astrobiology

Frank Cipriano
Ecology and Evolutionary Biology

David A. Clague
Volcanology

William A. Clemens
Paleontology

Lloyd S. Cluff
Geology

Kenneth Coale
Oceanography

William P. Cochlan
Biological Oceanography

Anne C. Cohen
Invertebrate Systematics

Daniel M. Cohen
Ichthyology

Sarah Cohen
Marine Genetics

James P. Collman
Chemistry

Robert K. Colwell
Zoology

Lynn Cominsky
Cosmology

Margaret W. Conkey
Anthropology

Bruce Conklin
*Bioinformatics, Genomics and
Molecular Pharmacology*



Academy Fellows

Edward F. Connor
Ecology

T. J. Conomos
Marine Geology

Claudia Corti
Herpetology

Lawrence Cory
Zoology

Daniel P. Costa
Vertebrate Ecology

Daniel E. Crocker
Ecology and Physiology

Donald Croll
*Ecology of Marine Predators, Island
Ecology and Conservation*

Dale P. Cruikshank
Planetary Astronomy

Gretchen C. Daily
Conservation Biology

Howell V. Daly
Entomology

Marymegan Daly
*Animal Systematics and Ecology,
Cnidaria*

Thomas F. Daniel
Botany

Bruno David
*Paleontology, Marine Biology,
Evolution*

Todd E. Dawson
Physiological Plant Ecology

Donald J. DePaolo
Geosciences

Ruth DeFries
Landscape Ecology

Joseph DeRisi
*Molecular Biology, Genomics,
Parasitology, Virology,
Computational Biology*

David Des Marais
Geology and Astrobiology

Dennis E. Desjardin
Mycology

Susan P. Desmond-Hellmann
Oncology and Biotechnology

Marian C. Diamond
Anatomy

Janis Dickinson
*Behavioral Ecology, Conservation
Biology*

Rodolfo Dirzo
Ecology and Conservation Biology

Daniel Doak
Evolutionary Ecology

Robert V. Dowell
Entomology

John T. Doyen
Entomology

James A. Doyle
Botany

William T. Doyle
Botany

Frank Drake
Astronomy

Robert C. Drewes
Herpetology

Richard Dugdale
Oceanography

John P. Dumbacher
Ornithology

Thomas O. Duncan
Botany

Thomas Dunne
Geomorphology and Hydrology

William H. Durham
Human Biology

David M. Eakin
Physics

Sylvia A. Earle
Botany

Anne H. Ehrlich
Conservation Biology

Paul R. Ehrlich
Conservation Biology

Emil R. Eisenhardt
Conservation

Paul Ekman
Comparative Psychology

Charles Elachi
*Earth, Ocean and Atmosphere
Science from Space*

Peter M. Elias
Medicine



Academy Fellows

Thomas S. Elias
Botany

David Epel
*Cell Biology and Developmental
Biology*

Don C. Erman
Fisheries Ecology

Terry L. Erwin
Entomology

William N. Eschmeyer
Ichthyology

James A. Estes
Marine Ecology

Sandra Faber
Astronomy

Gregory C. Farrington
Chemistry

Daphne G. Fautin
Invertebrate Zoology

Lewis J. Feldman
Botany

Marcus W. Feldman
Mathematical Biology

Carl J. Ferraris
Ichthyology

Peggy L. Fiedler
Botany

Christopher B. Field
Global Ecology

Alexei Filippenko
Astronomy

Paul V. Fine
Ecology and Evolutionary Biology

Brian Fisher
Entomology

Jonathan A. Foley
Global Sustainability

Susan L. Forsburg
*Molecular Biology, Cancer Biology
and DNA*

Michael S. Foster
Marine Biology

Laurel R. Fox
Ecology

Andrew Fraknoi
Astronomy

Laurence G. Frank
Mammalogy

Peter W. Fritsch
Botany

Robert J. Full
Zoology

Inez Fung
Atmosphere-Biosphere Interactions

Jon S. Galehouse
Geology

Newell T. Garfield
Physical Oceanography

Carlos Garza
*Molecular Ecology, Conservation
Genetics*

Jacques A. Gauthier
Herpetology

Jonathan B. Geller
*Marine Ecology and Marine
Molecular Ecology*

Wayne M. Getz
Entomology

Michael T. Ghiselin
Invertebrate Zoology

Gregory S. Gilbert
Microbial Ecology

Rosemary G. Gillespie
Entomology

Gonzalo Giribet
Entomology

Alexander N. Glazer
Molecular and Conservation Biology

Stephen E. Glickman
Psychology

Lynda J. Goff
Phycology

David M. Golden
Chemistry

Charles R. Goldman
Zoology

Michael A. Goldman
*Medical Genetics and Chromosomal
Evolution*

Edgardo D. Gomez
Marine Biology, Conservation

Deborah M. Gordon
Ecology

George C. Gorman
Evolutionary Biology



Academy Fellows

Terrence M. Gosliner
Malacology

Michael H. Graham
Marine Ecology

Harry W. Greene
Herpetology

H. Gary Greene
Marine Geology

David W. Greenfield
Ichthyology

Gary B. Griggs
Geology and Oceanology

Charles E. Griswold
Entomology

Richard K. Grosberg
Evolution and Invertebrate Biology

Karen Grove
Ecology

Claes Gustafsson
Molecular Biology and Biotechnology

Elizabeth Hadly
*Mammalogy, Vertebrate Evolution,
Climate Change*

John E. Hafernik
Entomology

Benjamin Halpern
Marine Ecology

David Halpern
Physical Oceanography

Alexander Harcourt
Primateology

Susan P. Harrison
Conservation Biology

Christopher Harrold
Marine Biology, Conservation

John Harte
Environmental Studies

James T. Harvey
Marine Biology

Christine A. Hastorf
Anthropology

David Haussler
Computer Science

Tyrone B. Hayes
Herpetology

Michael S. Hedrick
*Environmental Physiology and
Herpetology*

Carl E. Heiles
Astronomy

Colin O. Hermans
Invertebrate Zoology

Donald Heyneman
*Invertebrate Zoology, Tropical
Medicine, Epidemiology and
Parasitology*

Carole S. Hickman
Paleontology

Tessa M. Hill
Earth Sciences

Stanley Hillman
*Environmental Physiology of
Amphibians and Herpetology*

Frederick G. Hochberg, Jr.
Invertebrate Zoology

Tori M. Hoehler
Astrobiology and Biochemistry

John P. Holdren
Energy and Natural Resources

Karen Holl
Restoration Ecology

Gustavo Hormiga
Entomology

Kim M. Howell
Herpetology

Sarah B. Hrdy
Anthropology

James C. Ingle
Paleontology

B. L. Ingram
Geology

Michael E. Irwin
Entomology

Lynne A. Isbell
Evolutionary Anthropology

Tomio Iwamoto
Ichthyology

Nina G. Jablonski
Anthropology

Rodney M. Jackson
Conservation Biology

Matthew J. James
Paleontology and History of Science



Academy Fellows

David L. Jameson
Zoology

William A. Jensen
Botany

Donald C. Johanson
Anthropology

Michael N. Josselyn
Ecology and Phycology

David H. Kavanaugh
Entomology

James C. Kelley
Oceanography

Donald Kennedy
Biological Sciences

William H. Kimbel
Anthropology

Wim Kimmerer
Estuarine Ecology

Patrick V. Kirch
Anthropology

David H. Kistner
Entomology

Richard G. Klein
Paleoanthropology

Paul L. L. Koch
Paleobiology and Geobiology

Patrick Kociolek
Diatom Studies

Mimi A. Koehl
Invertebrate Zoology

Walter D. Koenig
Avian Ecology

Claire Kremen
*Conservation Biology and
Entomology*

Leonard V. Kuhi
Astronomy

Eileen A. Lacey
Behavioral Ecology and Mammalogy

Watson M. Laetsch
Botany

Michael D. Lagios
Ichthyology

Robert S. Lane
Entomology

Leo F. Laporte
Geology

Ralph J. Larson
Ichthyology

John D. Lattin
Entomology

James V. Lawry, Jr.
Anatomy

Burney J. Le Boeuf
Biology

Richard E. Leakey
Anthropology

Walter S. Leal
Chemical Ecology and Entomology

Gretchen LeBuhn
Evolutionary Ecology

Welton Lee
Invertebrate Zoology

Robert Leidy
*Wetland Specialist, Aquatic Ecology,
Fish Biology*

Margaret S. Leinen
Oceanography, Climate Engineering

Janet L. Leonard
Neurobiology and Behavior

William A. Lester
Physical Chemistry

Alan E. Leviton
Herpetology

Matthew R. Lewin
Emergency Medicine

Lowell N. Lewis
Botany

Paul Licht
Herpetology

William Z. Lidicker, Jr.
Mammalogy

Kent G. Lightfoot
Archaeology and Anthropology

David R. Lindberg
Malacology

Jere H. Lipps
Paleontology

Werner J. Loher
Entomology

Sharon R. Long
Plant and Microbial Symbiosis



Academy Fellows

Jerold Lowenstein
Medicine

Margaret D. Lowman
Ecology

Jane Lubchenco
Marine Biology

Bruce E. Lyon
Behavioral Ecology

James M. Lyons
Plant Physiology

James P. Mackey
Herpetology

David Maddison
*Entomology, Informatics, Computer
Programming and Software
Development*

Rocco Mancinelli
Astrobiology

York T. Mandra
Paleontology

Marc S. Mangel
Behavior and Ecology

Geoffrey Marcy
Astrophysics

Charles R. Marshall
Paleontology

Pamela A. Matson
Environmental Studies

Daniel McCleese
Space Science

John E. McCosker
Aquatic Biology

Alistair W. McCrone
Geology

Jimmy A. McGuire
*Herpetology, Vertebrate Biology and
Evolutionary Biology*

Henry M. McHenry
Biological Anthropology

Monica Medina
*Evolutionary Genomics and Systems
Biology*

Gopinathan Menon
Biochemistry

Elisabeth Micheli
Eco-Hydrology

Fiorenza Micheli
Marine Ecology and Conservation

Kathy Ann Miller
Marine Algal Systematics

Katharine Milton
Anthropology

Brent D. Mishler
Botany

Richard L. Moe
Phycology

John P. Monteverdi
Meteorology

Richard J. Mooi
Invertebrate Zoology

Harold A. Mooney
Environmental Science

Eldridge Moores
Geology

Michael J. Moratto
Anthropology

Steve Morgan
*Behavioral Ecology, Biological
Oceanography*

Craig C. Moritz
*Evolutionary and Conservation
Genetics*

David D. Morrison
Planetary Astronomy

Carol W. Mosher
Chemistry

Peter B. Moyle
Ichthyology

Richard A. Muller
Astrophysics

Michael A. Murphy
Paleontology and Geology

Michael W. Nachman
*Mammalogy and Evolutionary
Genetics*

Donald J. Nevins
Botany

Andrew T. Newberry
Invertebrate Biology

Frederic H. Nichols
Invertebrate Zoology

Karina Nielsen
Marine Ecology

Thomas M. Niesen
Invertebrate Biology



Academy Fellows

Daniel H. Norris
Botany

Peter Norvig
*Artificial Intelligence and Computer
Science*

Amos M. Nur
Geology

Patrick M. O'Grady
Evolutionary Biology

Richard E. Packard
Physics

Kevin Padian
Paleontology

Robert E. Page, Jr.
Entomology

Stephen R. Palumbi
*Molecular Evolution and
Conservation Biology*

Theodore Papenfuss
Herpetology

Lynne R. Parenti
Ichthyology

Ingrid Parker
Ecology

Sue Taylor Parker
Anthropology

Thomas Parker
Botany

Dennis R. Parnell
Botany

Robert Patterson
Botany

James L. Patton
Mammalogy

John S. Pearse
Invertebrate Zoology

Vicki B. Pearse
Invertebrate Zoology

Yvonne Pendleton
Astrophysics

David Perlman
Journalism

Saul Perlmutter
Astrophysics

Raymond Pestrong
Geology

Lewis Petrinovich
Ornithology

Theodore W. Pietsch
Ichthyology

Carl B. Pilcher
*Astrobiology, Astronomy, Planetary
Science*

Edwin P. Pister
Conservation Biology

Karl S. Pister
Civil Engineering, Education

Norman I. Platnick
Entomology

Grant Pogson
*Molecular Population Genetics and
Ecological Genetics*

George O. Poinar, Jr.
Entomology

Katherine Pollard
Evolution and Computational Biology

Carolyn Porco
Planetary Science

Donald C. Potts
Invertebrate Zoology

Jerry A. Powell
Entomology

Thomas M. Powell
*Oceanography, Limnology and
Aquatic Biology*

Mary E. Power
Ecology of Riverine Systems

Joel R. Primack
Astronomy and Physics

Wojciech J. Pulawski
Entomology

Alexander H. Purcell
Entomology

Peter R. Raimondi
Marine Ecology

Katherine Ralls
*Conservation Biology and
Mammalogy*

Janet A. Randall
Mammalogy

Galen B. Rathbun
Mammalogy

Peter H. Raven
Botany

David C. F. Rentz
Entomology



Academy Fellows

Vincent H. Resh
Aquatic Biology

Don R. Reynolds
Botany

Wynetka A. Reynolds
Biochemistry

Mark Richards
Geophysics

Peter J. Richerson
Cultural Evolution

Rollin C. Richmond
Evolutionary Genetics

John W. Rick
Archaeology and Paleoecology

Neil J. Risch
*Human Evolutionary Genetics and
Epidemiology*

Bruce H. Robison
Deep-Sea Biology

Luiz A. Rocha
Ichthyology

Peter U. Rodda
Geology

George K. Roderick
*Population Genetics and Evolutionary
Biology*

Peter Rodman
Anthropology

Barbara Rogoff
Developmental Psychology

Peter Roopnarine
Invertebrate Paleontology

Terry L. Root
*Climate Change Sensitivity of
Vertebrates*

Barry Roth
Malacology and Paleontology

Lynn J. Rothschild
*Astrobiology and Evolutionary
Protistology*

Joan E. Roughgarden
Herpetology

Eric J. Routman
Herpetology

Rodolfo Ruibal
Herpetology

Bruce Runnegar
Geology and Paleontology

Robert Sapolsky
Neuroendocrinology

Jose Sarukhan
Botany

Russell L. Schweickart
Astrobiology

Judith G. Scotchmoor
Science Education and Outreach

Eugenie C. Scott
Anthropology

Ravinder N. M. Sehgal
*Avian Parasitology, Ecology of
Infectious Disease*

Erwin Seibel
Oceanography

H. Bradley Shaffer
Herpetology

Arthur M. Shapiro
Zoology

Howard S. Shellhammer
Mammalogy

James R. Shevock
Botany

Seth Shostak
Astronomy

Neil H. Shubin
Evolutionary Biology

Petra Sierwald
Entomology

Mary W. Silver
Biological Oceanography

W. Brian Simison
Genomics

Ellen L. Simms
Botany

Barry R. Sinervo
Ecology

Leonard S. Sklar
Geology

Doris H. Sloan
Geology

Alan R. Smith
Botany

Edmund H. Smith
Invertebrate Zoology



Academy Fellows

Edward L. Smith
Entomology

Thomas B. Smith
Ecology

George Somero
Evolutionary Biochemistry

Victoria L. Sork
Evolutionary Biology

Michael E. Soule
*Evolutionary and Conservation
Biology*

Wayne P. Sousa
Marine Ecology

Chelsea Specht
Plant Genetics and Genomics

Howard J. Spero
Paleoceanography

Gregory S. Spicer
Invertebrate Zoology

Maureen L. Stanton
Population Biology

Calvin H. Stevens
Geology

Jonathon H. Stillman
*Invertebrate Physiology and
Molecular Biology*

Scott W. Stine
Geography

Sharon Y. Strauss
Evolutionary Ecology

John L. Strother
Botany

Raymond Sullivan
Geology

James R. Sweeney
Botany

Frank Talamantes
Endocrinology

Frank H. Talbot
Marine Biology

Carol Tang
Paleontology

Kimberly Tanner
Science Education

Jill C. Tarter
Astronomy

Catherine A. Tauber
*Insect Ecology, Behavior and
Physiology*

Leighton R. Taylor
Ichthyology

John W. Taylor
Mycology

Richard R. Tenaza
Mammalogy

Robbin W. Thorp
Entomology

Ignacio Tinoco
Chemistry

Regina Tomlinson
Invertebrate Zoology

O. Brian Toon
Atmospheric Science

Jonathan D. Trent
*Astrobiology, Marine Biology and
Microbiology*

Brian E. Tucker
Seismology, Seismic Safety, Geology

Ronald D. Vale
Cell Biology, Public Science Education

James W. Valentine
Paleontology

Blaire Van Valkenburgh
Vertebrate Paleontology

Geerat J. Vermeij
Evolutionary Biology

Peter M. Vitousek
Ecology
Vance T. Vredenburg
Herpetology

Peter C. Wainwright
Evolution and Ecology

David B. Wake
Herpetology

Marvalee H. Wake
Zoology

Diana Wall
Soil Biology

Robert C. Walter
Geology

Peter D. Ward
Geology

Philip S. Ward
Ant Systematics



Academy Fellows

Marius S. Wasbauer
Entomology

Dorothy Washburn
Anthropology

Kenneth E. Watt
Zoology

Ward B. Watt
Evolutionary Biology

Robert Wayne
Molecular Systematics

Christian M. Wemmer
Conservation Biology

Cherie L. Wetzel
Botany

Lisa E. White
Geology and Paleontology

Timothy D. White
Anthropology

Frances Wilkerson
Biological Oceanography

Mark Wilkinson
Herpetology

Kipling W. Will
Entomology

Gary C. Williams
Invertebrate Zoology

R. Sanders Williams
Medicine, Cell Biology and Genetics

Stanley C. Williams
Entomology

Susan L. Williams
Marine Ecology

Terrie Williams
Comparative Physiology

James C. Zachos
*Paleoclimatology, Marine
Stratigraphy and Palaeoceanography*

Frank G. Zalom
Entomology

Richard N. Zare
Chemistry

Erika S. Zavaleta
*Community and Ecosystem Ecology,
Conservation Biology*

Ermi Zhao
Herpetology

Adrienne L. Zihlman
Anthropology

Irving Zucker
Biology