

# *Excellence*

Center for Excellence in Education

*Celebrating 35 Years of Excellence*

USA  
BIOlympiad



Teacher  
Enrichment  
Program

*The Broad Institute  
Cambridge, Massachusetts  
October 12-14, 2018*

# Excellence

## Center for Excellence in Education

The Center for Excellence in Education (CEE) was founded in 1983 by the late Admiral H.G. Rickover, Father of the Nuclear Navy and of civilian uses of nuclear power, and Joann P. DiGennaro, CEE's President. They recognized that nurturing careers of excellence and leadership in science and technology in high school and university scholars was an essential investment in the United States' national and global future.

The Center's programs help keep the United States competitive and further international collaboration among leaders of the world. CEE challenges students and assists them on a long-term basis to become the creators, inventors, scientists and leaders of the 21<sup>st</sup> century.

Funding for CEE began with \$250 that Admiral Rickover received for a university lecture. Today, thanks to generous donors and supporters, the Center sponsors three programs that are free of cost for all participants chosen to attend.

The Research Science Institute (RSI) was launched in 1984 and now welcomes 80 of the world's most accomplished high school students for a summer science and engineering program that is collaboratively sponsored with MIT.



The USA Biology Olympiad (USABO), launched in 2002, is recognized as the premier competition for high school biology students.



It brings 20 finalists to a residential training program from which Team USA is selected for the International Biology Olympiad. The USABO is collaboratively sponsored with University of California San Diego at the UCSD campus.

The Teacher Enrichment Program, launched in 2011 with the goal of ensuring a future talented and diverse U.S. workforce in STEM, provides opportunities for rural and urban middle and high school teachers to connect with leading experts in industry and academia. TEP programming is currently available to teachers in California, Florida, Maryland, Pennsylvania, Texas and Virginia, and will be inaugurated in West Virginia in spring 2019.



CEE has partnered with more than 55 countries in collaborative agreements negotiated by Ms. DiGennaro, CEE's President. CEE was the first U.S. organization to receive high school students from the People's Republic of China, India and the Balkan and Baltic nations. The Center organized the first initiative in Saudi Arabia for women to attend university STEM studies with men. RSI has initiated programs in Bulgaria, China, India, Israel, Saudi Arabia and Singapore.

# Excellence

Center for Excellence in Education

October 12, 2018

Welcome to the Center for Excellence in Education's 35<sup>th</sup> anniversary celebration! This is a special weekend. Whether you are an alumnus of one of CEE's programs or a generous supporter or donor who has contributed so that CEE can offer wonderful programming free to participants, thank you for joining us!



The Center is incredibly proud of the accomplishments of alumni.

- The Research Science Institute (RSI), inaugurated in 1984, receives more than 1,500 applications each year from high school students who are hopeful to attend our six-week, on-campus program in collaboration with Massachusetts Institute of Technology. There are nearly 3,000 RSI alumni who continue to make headlines both in academia and in their professions.
- The United States Biology Olympiad began 15 years ago with Team USA competing in the International Biology Olympiad (IBO). Since 2003, each of Team USA's four members has medaled at IBO. USABO is collaboratively sponsored by the University of California San Diego. More than 10,000 U.S. students annually compete for the coveted 20 places in the prestigious USABO finals.
- Our newest initiative is the Teacher Enrichment Program (TEP) which was formed in 2012 and already has impacted nearly 2,500 teachers in nine states and Washington, D.C. TEP programs provide career development opportunities for rural and urban middle and high school teachers to ensure a future and talented diverse U.S. workforce in science, technology, engineering and mathematics (STEM).

Welcome to an amazing weekend!

Sincerely,

A handwritten signature in black ink, reading "Joann P. DiGennaro".

Joann P. DiGennaro  
President  
*Center for Excellence in Education*

Excellence

Center for Excellence in Education

# *Excellence*

---

Center for Excellence in Education

October 12, 2018

The Center for Excellence in Education for the past 35 years has been at the forefront in developing the next generation of U.S. scientific leaders.

As Chairman of the Center's Board of Trustees, it gives me great pleasure to congratulate Joann DiGennaro and the CEE staff on reaching this milestone celebration! The Center's programming for U.S. high school students is incredibly successful and just keeps getting better and better.



I am impressed with the Research Science Institute, the USA Biology Olympiad and the Teacher Enrichment Program. These programs make an impact far and wide and encourage both students and teachers to delve into STEM topics and ensure the future innovation of the United States.

I am honored to be a part of the Center for Excellence in Education. I strongly support its mission to nurture young scholars to career of excellence and leadership in STEM, as well as encouraging collaboration between and among world leaders.

Here's looking forward to continued success for many years to come!

Sincerely,

A handwritten signature in black ink, appearing to read 'Mel Chaskin', with a stylized, cursive script.

Mel Chaskin  
Chairman of the Board of Trustees  
*Center for Excellence in Education*



# Center for Excellence in Education

## Board of Trustees

### Honorary Members

The Honorable Jimmy Carter *39th President of the United States*  
The Honorable Lindsey Graham *United States Senator, South Carolina*  
The Honorable Barbara Comstock *United States Congresswoman, Virginia*  
The Honorable Scott Peters *United States Congressman, California*

#### Chairman

Mel Chaskin  
*President & CEO, Vanguard Research, Inc.*

#### President

Joann P. DiGennaro, Esquire  
*President, Center for Excellence in Education*

Frederick Y. Chen, M.D., Ph.D.  
*Chief, Division of Cardiac Surgery, Tufts Medical Center*

Robert E. Curry, Ph.D.  
*CEO, PerceptiMed, Inc.*

Betty J. Dranow  
*President, The Dranow Family Foundation*

Dana Miller Ervin  
*Staff, U.S. House of Representatives*

Cara Esposito  
*Executive Director, Leonetti/O'Connell Family Foundation*

Nicholas S. Gouletas  
*Chairman, America Invest*

Amy Gowder  
*Vice President & General Manager, Lockheed Martin Training and Logistics Solutions (TLS)*

Ross Grossman, Ph. D.  
*Retired Senior Vice President, Human Resources, Regeneron Pharmaceuticals*

Her Excellency Bahia El Hariri  
*Member of Parliament, Lebanon, President, Hariri Foundation*

Douglas E. Himberger, Ph.D.  
*President, D E Himberger Consulting LLC*

Ronald E. Hohauser  
*Chief Financial Officer, Legendary*

Lt. General David H. Huntoon Jr., USA (Ret)  
*Member, The Spectrum Group*

Noreen A. Hynes, M.D., M.P.H.  
*Director, Geographic Medicine Center Division of Infectious Diseases, Johns Hopkins University*

Dean Kamen  
*President, DEKA Research & Development*

Mark Kantrowitz  
*Publisher and VP of Research, Savingforcollege.com*

Sean Kanuck  
*Founder & CEO, EXEDEC International LLC*

Wolfgang Ketterle, Ph.D.  
*John D. MacArthur Professor of Physics, Research Lab for Electronics, MIT-Harvard Center for Ultracold Atoms & Department of Physics/MIT*

Raymond C. Kubacki  
*Chairman & CEO, Psychomedics Corporation*

Tom Leighton  
*Co-Founder & CEO, Akamai Technologies, Inc.*

Wendell Maddox  
*President & CEO, ION Corporation*

J. Michael McQuade, Ph.D.  
*Vice President for Research Carnegie Mellon University*

Admiral W. A. Owens, USN (Ret.)  
*Chairman and Co-Founder, Red Bison Advisory Group*

Arvind Parthasarathi  
*Advisor/Consultant*

Roger Pelligrini  
*Managing Director, Securitization Finance, RBC Capital Markets*

The Honorable Thomas R. Pickering  
*Vice Chairman, Hills & Company, International Consultants*

Cynthia Pickett-Stevenson  
*Attorney-at-law, Pickett Law Group, PLLC*

The Honorable Clarine Nardi Riddle  
*Counsel, Kasowitz, Benson, Torres LLP*

Rasheed Sabar  
*Co-Founder and Co-CEO, Correlation One*

Siddharth Shenai  
*Independent Investment Professional*

Kathy Sherman  
*Executive Director, State Government Affairs, Amgen*

Ronald W. Simms  
*Chairman, Board of Directors, Petroleum Service Company*

Michael Sipser, Ph.D.  
*Dean, School of Science, MIT*

Feng Zhang, Ph.D.  
*Core Member, Broad Institute of MIT and Harvard*



# Admiral H.G. Rickover

## Founder, Center for Excellence in Education

Admiral H.G. Rickover, “Father of the Nuclear Navy” and developer of civilian nuclear power, founded the Center for Excellence in Education with Joann P. DiGennaro in 1983.

Admiral Rickover served his country for 63 years in the U.S. Navy, the longest-serving member in U.S. history. He received four stars for his service as a Naval Officer. The quality of the U.S. nuclear navy is a testament to the unique contributions Admiral Rickover made to peace and the security of the nation. He is one of only four people to be awarded two Congressional Gold Medals.



Admiral Rickover was quoted as saying, “Education is our first line of defense – make it strong.” He was an advocate for higher standards in science and math education and took issue with what he perceived as the U.S. education system’s inability to provide high-achieving students an opportunity to excel. After his retirement from the U.S. Navy, Admiral Rickover was committed to providing outstanding students with the ability to study science, technology, engineering and mathematics through the CEE’s Research Science Institute, created in 1984.

Born in Poland, Admiral Rickover came to the U.S. and lived in Chicago in his early years. He was appointed to the Naval Academy in 1922 and graduated with a degree in engineering. He then earned a Master of Science Degree in electrical engineering from Columbia University.

Admiral Rickover authored numerous articles and several books, including: *Education and Freedom*; *Swiss Schools and Ours: Why Theirs Are Better*; *American Education – A National Failure*; *Eminent Americans – Namesakes of the Polaris Submarine Fleet*; and *How the Battleship Maine Was Destroyed*.

*“Success teaches us nothing; only failure teaches.”*  
*“Optimism and stupidity are nearly synonymous.”*  
~ H.G. Rickover

# Rickoids of the Year

**1984**

Kevin Murdock

**1985**

Karl Rumelhart

**1986**

Tess Hildebrand

**1987**

Dallas Wrege

**1988**

Peggy Hsia

**1989**

Jed Macosko

**1990**

Raga Ramachandran  
Oliver Rando

**1991**

Susan S. Lee

**1992**

Ravi Kamath

**1993**

Erin Lynch  
Josh McDermott

**1994**

Danile Biss

**1995**

Bruce Haggerty

**1996**

Jay Sengupta

**1997**

Sapan Shah

**1998**

Jeremy England

**1999**

Zackary Stone

**2000**

Nate Craig

**2001**

Sheel Ganatra

**2002**

Steve Byrnes

**2003**

Arup Sarma

**2004**

Johann Komander  
Nick Semenkovich

**2005**

Huan Liu

**2006**

Dexian Lim

**2007**

Christina Chang  
Paul Kominers

**2008**

Varoon Bashykarla

**2009**

Anjali Balakrishnan

**2010**

Samih Kabalan

**2011**

Daniel Pollack

**2012**

Connor Duffy

**2013**

Tara Murty  
Rajet Vatsa

**2014**

Kavish Gandhi

**2015**

David Zhao

**2016**

Joshua Dong  
Kathy Liu

**2017**

Syamantak Payra

**2018**

William Ellsworth  
Matthew Tan

*"You can't go to heaven if you die dumb." - H.G. Rickover*



# 35th Anniversary Weekend Agenda

**Friday, October 12, 2018**

**3 p.m.: Kick-Off, Broad Institute Auditorium**

- *Welcome/Greeting: Eric S. Lander, Ph.D., President and Founding Director of the Broad Institute of MIT and Harvard*
- *Opening Remarks: Feng Zhang, RSI'99, Ph.D.; Investigator, McGovern Institute; James and Patricia Poitras Professor of Neuroscience at MIT; Professor, Brain and Cognitive Sciences and Biological Engineering; Core Member, Broad Institute, Developer of Optogenetics and CRISPR Technologies*
- *Remarks: Joann DiGennaro, CEE President*
- *Introduction of Submariners and Naval Reactors Group: Mr. William Becklean, Former CEE Trustee*

**4:10 p.m.: The “Admiral Rickover Way” Panel — Moderator: Admiral William A. Owens, Vice Chairman of the Joint Chiefs of Staff, U.S. Navy Retired; Chairman and Co-Founder, Red Bison Advisory Group, CEE Trustee**

- *Admiral Edmund Giambastiani, Seventh Vice Chairman of the Joint Chiefs of Staff, U.S. Navy, Retired*
- *Mr. William L. Givens, Naval Reactors (NR) Program with Admiral Rickover; Harvard University, Reischauer Institute of Japanese Studies; Former Chairman, U.S. – Japan Trade Competition*
- *Pamela L. Krah, MD, MPH, Captain, U.S. Navy, RSI'85; Preventive Medicine and Biostatistics, Occupational and Environmental Medicine Residency Program Director, Uniformed Services University of the Health Sciences*
- *Professor Neil Todreas, Naval Reactors (NR) Program with Admiral Rickover; KEPCO Professor of Nuclear Science and Engineering, Professor of Mechanical Engineering (Emeritus) at MIT*

**5:35 p.m.: CEE 35<sup>th</sup> Anniversary Alumni Welcome Reception, Sponsored by Regeneron**

- *Welcome Remarks: Gina Thomas, Director of Talent Acquisition, Regeneron*
- *Rickoids, VIPs, and Rickover Panelists*

**Saturday, October 13, 2018**

**8 a.m.: Continental Breakfast**

**8:50 a.m.: Opening Remarks — Joann DiGennaro**

**9 a.m.: Nobel Laureate Panel — Moderator: Dr. Scott Kominers, RSI'04, MBA Class of 1960 Associate Professor of Business Administration in the Entrepreneurial Management Unit at Harvard University; Faculty Affiliate of the Harvard Department of Economics; Affiliate of the Harvard Center of Mathematical Sciences and Applications; Associate of the Harvard Center for Research on Computation and Society; Research Economist at the National Bureau of Economic Research; Associate Editor of Management Science**

- *Dr. Wolfgang Ketterle, John D. MacArthur Professor of Physics at MIT; Associate Director of the Research Laboratory of Electronics at MIT; Director of MIT-Harvard Center for Ultracold Atoms; Nobel Laureate 2001, Physics*
- *Dr. Eric Maskin, Adams University Professor, Harvard University; Nobel Laureate 2007, Economics*
- *Dr. Kit Pogliano, Dean of the Division of Biological Sciences, UC San Diego*
- *Dr. Richard Royce Schrock, F G Keyes Professor of Chemistry, MIT Chemistry; Nobel Laureate 2005, Chemistry*



# 35th Anniversary Weekend Agenda

**10 a.m.: Innovation and Entrepreneurship Panel** — Moderator: Amy L. Gowder, Vice President and General Manager, Lockheed Martin; CEE Trustee

- Jud Bowman, RSI'98, Founder and CEO, Sift
- Rasheed Sabar, RSI'00, Co-Founder & Co-CEO, Correlation One
- Daniel Kim, RSI'90, Ph.D., MBA, Founder and Principal, Sweetwater Digital Asset Consulting, LLC
- Olgica Bakajin, RSI'91, Ph.D., Chief Executive Officer and Chief Technology Officer, Porifera, Inc.

**11:15 a.m.: Lunch, Sponsored by Citadel** — Presentation by Scott Rickard, Chief Data Scientist, Citadel

**12:30 p.m.: Rickover Contributions to Science, Technology and U.S. Submarine Education Panel**

— Moderator: Mr. Bill Becklean, United States Navy, Retired, Naval Reactors, 1959 to 1966

- Edson "Tip" Brolin, Former Deputy Assistant Secretary, U.S. Department of Energy, Naval Reactors
- Dr. Jack Cook, United States Navy, Retired; Submariner
- Dr. Mario Fiori, United States Assistant Secretary of the Army from 2001 to 2004; Submariner
- Peter Van Nort, Chairman, Enhanced Energy Group, Naval Reactors

**1:30 p.m.: "CEE Talks" — Alumni discuss Interests, Careers and Research.**

**3:30 p.m.: Global STEM Policy Panel** — Moderator: Dr. Jake Taylor, Assistant Director for Quantum Information Science, White House Office of Science and Technology Policy

- Dr. Aaron Kesselheim, RSI'97, M.D., J.D., M.P.H., Associate Professor of Medicine, Harvard Medical School, Faculty Member in the Division of Pharmacoepidemiology and Pharmacoeconomics; Department of Medicine, Brigham and Women's Hospital
- Greg Gunn, RSI'86, Founder, Lingo Ventures
- Shamit Kachru, RSI'86, Ph.D., Department Chair, Professor of Physics and Director, Stanford Institute for Theoretical Physics
- Daniel Dongyuel Lee, RSI'85, Ph.D., Professor, Cornell Tech, Professor of Electrical and Computer Engineering; Samsung Research, Executive Vice President

**6:15 p.m.: Reception, Sponsored by Two Sigma**

**7:30 p.m.: Formal Dinner**

## Sunday, October 14, 2018

**8:45 a.m.: Continental Breakfast**

**9:30 a.m.: Alumni Meeting**

**11 a.m.: CEE Luminaries Discussion** — Interview by Admiral Bobby Ray Inman, Former Chairman CEE Board of Trustees, LBJ Centennial Chair in National Policy at University of Texas at Austin Lyndon B. Johnson School of Public Affairs, U.S. Navy Retired

- Ben Silberman, RSI'98, Co-Founder and CEO, Pinterest
- Diane Tang, RSI'90, Ph.D., Fellow, Data Mining and Modeling, Google
- Lauren K. Williams, RSI'94, Ph.D., Seaver Professor at the Radcliffe Institute and Professor of Mathematics, Harvard University
- Feng Zhang, RSI'99, Ph.D., Investigator, McGovern Institute; James and Patricia Poitras Professor of Neuroscience at MIT; Professor, Brain and Cognitive Sciences and Biological Engineering; Core Member, Broad Institute, Developer of Optogenetics and CRISPR Technologies

**2 p.m.: CEE Board Meeting, Trustees Only**



# **J. Hamilton Lambert**

## **Executive Director, Claude Moore Charitable Foundation**

### **First Chairperson, Center for Excellence in Education Board of Trustees**

J. Hamilton Lambert has led a long and distinguished career of public service. He was the first chairman of the Center for Excellence in Education (then known as the Admiral Rickover Foundation) and has been honored many times on local and national levels.

The son of a horse trainer, Lambert graduated from high school in 1959 and immediately went to work in neighboring Fairfax County in suburban Washington, D.C., as an assistant map draftsman. He rose through government service and in 1980 became Fairfax's County Executive, a position he held for 10 years while becoming one of the Washington region's most influential power brokers.



The Council of Governments presented him with its Metropolitan Achievement Award for his contributions to the Washington region, while City & State magazine named him one of the top two county executives in the country. A conference center at the Fairfax County Government Center was named in his honor. Lambert also holds the distinction of being the only individual to be awarded the Washingtonian of the Year, Fairfax County Citizen of the Year and Loudoun County Citizen of the Year.

Lambert has received an honorary doctorate in humane letters from George Mason University and he twice has been awarded a commendation by a joint resolution of the Virginia assembly.

After retiring from government work in 1990, he founded J. Hamilton Lambert and Associates and also serves as the Executive Director of the Claude Moore Charitable Foundation.

*"When doing a job - any job - one must feel that he owns it,  
and act as though he will remain in that job forever."  
- H.G. Rickover*

# Center for Excellence in Education

## Trustees Through the Years

Lieutenant General James A. Abrahamson  
 Mr. Eduardo Aguirre  
 Senator George F. Allen Jr.  
 Mr. Bill Andresen  
 Dr. Atilla Askar  
 The Honorable Caroline E. Baker  
 Mr. William R. Becklean  
 Mr. Thomas D. Bell Jr.  
 Dr. James Benecke Jr.  
 Mr. John D. Bergen  
 Mr. Alfred R. Berkeley III  
**Dr. Edward H. Bersoff**  
 Mr. Gordon M. Binder  
 Mr. K. David Boyer Jr.  
 Mr. Norman Braman  
 Mr. Aviram Branitzky  
 Mr. E. Lee Bryan  
 Ms. Alix Burns  
 Congressman Eric Cantor  
**The Honorable Frank C. Carlucci**  
*President Jimmy Carter*  
 Mr. John J. Castellani  
 Mr. Red Cavaney  
 Mr. Carl T. Chaleff  
**Mr. Mel Chaskin**  
*Dr. Frederick Y. Chen*  
 Mr. Gerald J. Churchill  
 Dr. Constance E. Clayton  
 The Honorable Anne S. Collins  
*Congresswoman Barbara Comstock*  
*Dr. Robert E. Curry*  
 Congressman Tom Davis  
 Dr. Mary J. DeLong  
*Ms. Joann P. DiGennaro*  
*Ms. Betty J. Dranow*  
 Mr. Milton L. Dranow  
 Mr. Richard Edlund  
 Mr. Juan Enriquez  
*Ms. Cara Esposito*  
 Mr. David Fishman  
 Senator William H. Frist  
 Mr. Art Fritzson  
 Dr. Lorna J. Gladstone  
 Senator Barry M. Goldwater  
*Mr. Nicholas S. Gouletas*  
*Ms. Amy Gowder*  
*Senator Lindsey Graham*  
 Mr. Gerald Greenwald  
 Mr. Edward F. Greissing  
*Dr. Ross Grossman*  
 Ms. Misty S. Gruber  
 Mr. Gregory M. Gunn  
 Dr. Mordecai Hacohen  
 Mr. Elbert O. Hand

*Her Excellency Bahia El Hariri*  
 Congresswoman Jane Harman  
 Captain Frederick H. Hauck  
 Dr. Reuben Hecht  
 Reverend Theodore M. Hesburgh  
 Dr. Bonnie Guiton Hill  
*Dr. Douglas E. Himberger*  
*Mr. Ronald E. Hohaus*  
 Mrs. Glen Holden  
 Professor Charles Holloway  
 Congresssman Mike Honda  
 Congressman Frank Horton  
 Mr. Albert Hoser  
 Lt. Gen. David H. Huntoon  
*Dr. Noreen A. Hynes*  
**Admiral Bobby R. Inman**  
 Senator Henry M. Jackson  
 Harvard Jee  
**Mr. Michael H. Jordan**  
 Lord Lawrence Kadoori  
*Mr. Dean Kamen*  
*Mr. Mark Kantrowitz*  
*Mr. Sean Kanuck*  
 Mr. David Kearns  
 Mr. William M. Keck II  
*Dr. Wolfgang Ketterle*  
 Dr. George A. Keyworth II  
 The Honorable Gwendolyn S. King  
*Mr. Raymond C. Kubacki*  
**Mr. J. Hamilton Lambert**  
 Ms. Susan C. Lavrakas  
 Dr. David Lee  
 Ms. Susan Lee Ko  
 Dr. David T. Leighton  
*Dr. Tom Leighton*  
 Dr. David K.P. Li  
 Senator Joseph I. Lieberman  
 The Honorable Sol M. Linowitz  
 Mr. James A. Lovell  
 Ms. Kathryn A. MacLane  
*Mr. Wendell Maddox*  
 Ms. Nancy Mallinak  
 Mr. Frank G. Mancuso, Sr.  
 Professor Hans Mark  
 Dr. John C. Mather  
**Mr. William M. McCormick**  
 Mr. Bill McDermott  
 Ms. DorothyS. McDiarmid  
**Mr. David T. McLaughlin**  
*Dr. J. Michael McQuade*  
*Ms. Dana Miller Ervin*  
 Congressman Joseph G. Minish  
 Mr. David L. Moore  
 Dr. Eddie Neal  
 Senator Bill Nelson

Dr. Patrick Nettles  
 President Richard Nixon  
 Senator Sam Nunn  
 Dr. Anthony G. Oettinger  
 Mr. Talat M. Othman  
*Admiral William A. Owens*  
 Mr. David Packard  
*Mr. Arvind Parthasarathi*  
 Mr. James C. Paul  
*Mr. Roger Pelligrini*  
 Mr. H. Ross Perot Sr.  
*Congressman Scott Peters*  
 The Honorable Thomas R. Pickering  
 Ms. Cynthia Pickett-Stevenson  
 Mrs. Gretchen Poston  
 General Colin L. Powell  
 Mr. A.N. Pritzker  
 Dr. Estelle Ramey  
 Mr. David K. Rensin  
*The Honorable Clarine Nardi Riddle*  
 Ms. Linda Robinson  
 Mr. David M. Rubenstein  
*Mr. Rasheed Sabar*  
 Ms. Diane Sawyer  
 Dr. Raymond Scalettar  
 Dr. James Schlesinger  
 Professor Glenn T. Seaborg  
 Mr. Wayne Shelton  
*Mr. Siddharth Shenai*  
*Ms. Kathy Sherman*  
*Mr. Ronald W. Simms*  
 Professor Susan Rundell Singer  
 Mr. Surinder Singh  
*Dr. Michael Sipser*  
 Mrs. Esther T. Smith  
 Dr. Julian C. Stanley  
 Mr. Harry Stern  
 Dr. Steven Strong  
 Dr. Diane Tang  
 Congresswoman Ellen Tauscher  
 Mr. Michael Uslan  
 Mr. Alfred R. Villalobos  
 Mr. Sadami (Chris) Wada  
 Dr. Jon P. Wade  
 Mr. Harry Walker  
 Senator John W. Warner  
 Mr. Fred J. Weinert  
 Dr. Virginia V. Weldon  
 Mr. James E. Whaley  
 Mr. Earle C. Williams  
**Ms. Gayle Wilson**  
 Mr. Bradley D. Wine  
 Mr. William Winston  
*Feng Zhang*  
 Lord Solly Zuckerman

**Names in Bold served as Chairpersons of CEE.**  
*Current trustees are noted in italics.*

# **Bahia El Hariri**

## **President, Hariri Foundation for Sustainable Human Development**

### **International Medal for Excellence**

Born in 1952 in Saida, Lebanon, Bahia Hariri is a highly active personality in the Lebanese political and social life. She has conducted a long educational and professional path in different fields, from education to civil society mobilization to women's empowerment to legislative work and sustainable human development.

Mrs. Bahia Hariri is head of Hariri Foundation for Sustainable Human Development (founded in 1979), an NGO that is a member at the United Nations Economic and Social Council with Special status. The Foundation aims to activate the role of the Lebanese citizen in achieving sustainable human development and empower the underprivileged.



Keen on developing critical social issues especially in education, Mrs. Hariri is a leading example and an active entity in promoting social and human development projects. Since 1992, Mrs. Hariri has been elected a deputy in the Lebanese Parliament and served as head of its Educational Committee. From 2008 until 2009, she was also designated as the Lebanese Minister of Education and Higher Education.

She is a board member in several academic and cultural institutions (such as Lebanese American University and the Arab Thought Foundation), aiming at supporting social fairness and raising the civil community to the highest standards.

Mrs. Hariri's work also evolves around empowering Arab women. In collaboration with the Arab League and Egypt's National Council for Women, in 2000 she established "The First Arab Women's Summit." She was elected Head of Women's Committee in the Arab Inter-Parliamentary Union and vice-president of the Arab Parliament in 2005. A dedicated champion of woman's rights, Bahia Hariri has consistently promoted the status of women in Arab society, campaigning for the adoption of laws protecting women and helping their emancipation.

On the international level, Mrs. Hariri was appointed as UNESCO Goodwill Ambassador for Arab women and girls (since November 2000), member of board of trustees at the Arab Thought Foundation (since 2002), associate member of the Parliamentary Network on the World Bank (since 2004), and member of the women's advisory committee at the Islamic Development Bank (since 2006).

She has achieved several honors and awards in recognition of her work, including Lebanese Cedar Award at the level of lieutenant in recognition of her service in social and cultural fields, the "Légion d'honneur" awarded by former French President Jacques Chirac. She has been presented the Doctor of Laws honoris causa degree from Dundee University, an honorary doctorate from the American University of Sciences and Technology (AUST) and the Strategic Partnership Award from the Lebanese American University. Mrs. Hariri is a member of the CEE Board of Trustees and sponsors Lebanese students to attend RSI.



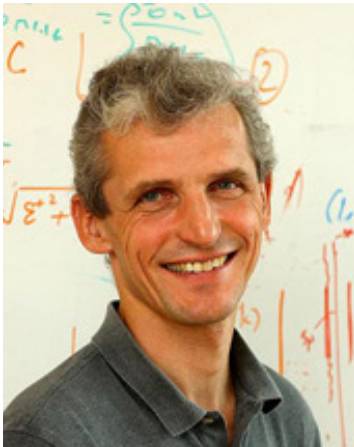
# **Wolfgang Ketterle**

## **John D. MacArthur Professor of Physics**

### **Research Laboratory for Electronics, MIT-Harvard Center for Ultracold Atoms, and Department of Physics/MIT**

### **Massachusetts Institute of Technology**

### **National Medal for Excellence**



Wolfgang Ketterle received a diploma (equivalent to a master's degree) from the Technical University of Munich (1982), and a Ph.D. in Physics from the University of Munich (1986).

After postdoctoral work at the Max-Planck Institute for Quantum Optics in Garching, Germany, the University of Heidelberg and at MIT, he joined the physics faculty at MIT (1993), where he is now the John D. MacArthur Professor of Physics. He is a member of the CEE Board of Trustees.

Dr. Ketterle does experimental research in atomic physics and laser spectroscopy and focuses currently on Bose-Einstein condensation in dilute atomic gases. He was among the first scientists to observe this phenomenon in 1995, and realized the first atom laser in 1997. His earlier research was in molecular spectroscopy and combustion diagnostics.

Dr. Ketterle's awards include a David and Lucile Packard Fellowship (1996), the Rabi Prize of the American Physical Society (1997), the Gustav-Hertz Prize of the German Physical Society (1997), the Discover Magazine Award for Technological Innovation (1998), the Fritz London Prize in Low Temperature Physics (1999), the Dannie-Heineman Prize of the Academy of Sciences, Göttingen, Germany (1999), the Benjamin Franklin Medal in Physics (2000), and the Nobel Prize in Physics, 2001, together with E.A. Cornell and C.E. Wieman.

*"The man in charge must concern himself with details. If he does not consider them important, neither will his subordinates." - H.G. Rickover*



JIMMY CARTER

October 2018

To the Center for Excellence in Education  
Leaders and Alumni

Congratulations on your 35<sup>th</sup> anniversary. I am proud to serve as an Honorary Trustee of this fine organization dedicated to advancing Admiral H.G. Rickover's vision for U.S. leadership in science, technology, engineering and math.

The Admiral never lost his strategic perspective, and he, perhaps more than any other American, has been responsible for the innovations in science, technology and engineering which have guaranteed our security and our nation's freedom.

CEE serves as a great testament to Rickover's values and has continued his legacy for thousands of students over the past 35 years.

With best wishes for continued success,

Sincerely,

KASOWITZ BENSON TORRES LLP  
1633 BROADWAY  
NEW YORK, NEW YORK 10019-6799  
212-547-1417  
FAX: 212-500-3577  
JLIEBERMAN@KASOWITZ.COM  
ADMITTED IN CONNECTICUT AND NEW YORK



THE HON. JOSEPH I. LIEBERMAN  
SENIOR COUNSEL  
UNITED STATES SENATOR, RETIRED

ATLANTA  
HOUSTON  
LOS ANGELES  
MIAMI  
NEWARK  
SAN FRANCISCO  
SILICON VALLEY  
WASHINGTON, DC

October 13, 2018

CEE 35th Anniversary Booklet

Dear Friends:

It is my pleasure to welcome you to the 35th Anniversary of the Center for Excellence in Education. Hadassah and I regret that we cannot join you this evening.

CEE has been an influential leader in developing programs for students and teachers that enrich STEM education by encouraging leadership and innovation among top STEM students, enhancing STEM teacher professional development, and expanding the pipeline of underserved urban and rural students pursuing STEM careers. The Center has been instrumental in its unwavering commitment to ensure this nation's competitive global position. To date, the Center for Excellence in Education is responsible for two of the most respected scientific enrichment programs in the U.S. The Research Science Institute and the USA Biology Olympiad have afforded young people the opportunity to participate in these world renowned programs to encourage them to be the scientific innovators of the future, free of cost to them.

As CEE celebrates and looks forward to even greater accomplishments, I take pleasure in saying that CEE is a treasure and strong resource that will continue to sustain innovation and to assure this nation's economic growth and security. I would like to thank everyone who has made this event possible, as your generosity and support is truly something that would make Admiral Rickover proud. A special thank you to Joann DiGennaro who has not only kept Admiral Rickover's vision alive, but expanded it beyond what even he could have imagined.

With every good wish for a wonderful evening.

Best regards,

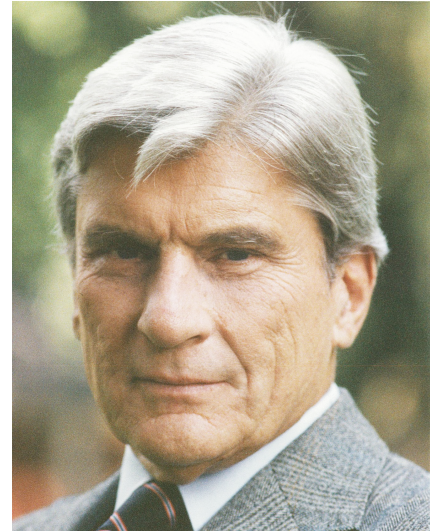
Joseph I. Lieberman  
United States Senator

THANKS!



Friends of the Center for Excellence in Education,

The late Admiral H.G. Rickover will always be remembered as the founding father of the use of nuclear energy worldwide. Today, America must continue to have a strong program, working with the men and women of the armed forces, as so many of our ships are powered by his wisdom for the rest of the world to navigate by.



I salute CEE President Joann DiGennaro for carrying forth the Admiral's vision for a life-changing nonprofit organization dedicated to the STEM education so vitally important to our country and world.

Well Done.

A handwritten signature in black ink that reads "John W. Warner".

Senator John W. Warner





**Sam Nunn**  
**1180 Peachtree Street, NE, Suite 1700**  
**Atlanta, Georgia 30309**

September 20, 2018

Congratulations to the Center for Excellence in Education on your 35<sup>th</sup> anniversary! It was my honor to serve as an Honorary Trustee of CEE, and I salute the Center's legacy of leadership in science, technology, engineering and mathematics (STEM) education.

From its founding by Admiral Rickover and Joann DiGennaro in 1983, CEE's positive impact now extends to Research Science Institute alumni from 50 states and 56 other countries. The Center's USA Biology Olympiad annually engages tens of thousands of U.S. high school biology students, and its Team USA regularly captures top international awards. In addition, the CEE's professional development program for STEM teachers benefits underserved rural and urban students across the country.

The Center for Excellence in Education has been a shining example of American leadership in global STEM education for the past 35 years.

I wish you many more years of Excellence!

Sincerely,

A handwritten signature in black ink that reads "Sam Nunn".

Sam Nunn  
U.S. Senator (1972-1996)

# Research Science Institute

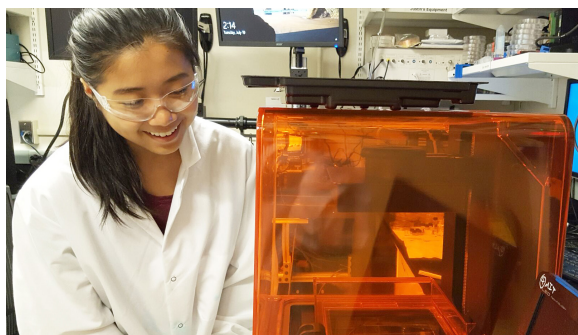
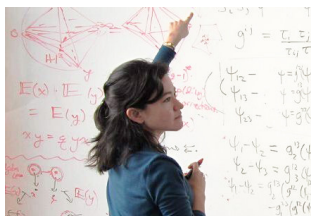
The Research Science Institute was the first U.S. summer science, technology, engineering and mathematics (STEM) program to combine on-campus course work in theory with off-campus STEM research. Students master each step of the research process from literature review to the design, execution and analysis of original experiments.

More than 1,500 high school students apply each year to be selected among the 50 to attend college-level classes taught by distinguished professors from leading universities. The RSI Student Selection Committee is comprised of educators, scientists and RSI alumni. Thirty international students also are chosen to attend by their respective nations.

The six-week program is sponsored by CEE in collaboration with Massachusetts Institute of Technology, where RSI is held. Set on campus, RSI has access to distinguished STEM mentors, as well as state-of-the-art university laboratories, hospitals and corporate research facilities.

Since its inception in 1983, RSI has hosted nearly 2,700 students, who each year travel to Cambridge with their eyes on making an impact in the world of STEM.

As with all CEE programs, RSI is free of cost to all participants.



# Research Science Institute

## Top Oral and Written Presentations

- Szymon Acedanski** – Using Algebraic Coding for Transferring Files in Peer-to-Peer Networks
- Michael Agney** – Examination of the Computational Properties of Backpropagation Neural Networks
- Khaled Al-Rabe** – Characterization of Co(II) Binding to PAMAM G4-NH<sub>2</sub> Dendrimer in Aqueous Solutions Using UV and EPR Spectroscopy
- Seth L. Altman** – Spectral Analysis of Semiconductor Diode Lasers
- Jose Maria Amich Manero** – A Novel Regulatory Mechanism of the BMP Signaling Pathway
- Walker Anderson** – NP-Completeness of the Five Cells Pencil Puzzle
- Thilini Ariyawansa** – The Development of Multifunctional Nanoparticles for Simultaneous Fluorescence Imaging and Gene Delivery
- Sam Backwell** – The Structural Effects of Lead Substitution in Bismuth Based High Temperature Superconductors
- Jodi Balfe** – A Nanosatellite Concept Study: Extrasolar Planet Transit Light Curve Analysis in Search for Earth Analogs
- Jared Bass** – Job Scheduling to Improve Running Time on a Set of Parallel Processors
- Jakub Byszewski** – The Game of Vingt-et-un
- Sanjay Basu** – Protective Effect of Non-Steroidal Anti-Inflammatory Drugs Against Alzheimer's Disease Onset and Progression
- Asheesh Bedi** – The Analysis of Cerebral Blood Flow Using Single Photon Emission Computed Topography (SPECT) in Presymptomatic Huntington's Disease
- Oded Ben-David** – The Effect of Distance Between Tubes and Pads in LEP/OPAL Hadron Calorimeter
- Scott Berger** – An Analysis of Charged Particle Distribution from Quark Hadronization in Electron-Proton Collisions
- Laurence Bleicher** – Double Negative Va24JaQ-Bearing T-Cells as Markers of Non-Progression in Autoimmune Diabetes
- Marc Borkan** – Surfaces with Spherical Representations
- Josh Brankesiek** – Bounds on the Size of Sound Monotone Switching Networks Accepting Permutation Sets of Directed Trees
- Leigh Marie Braswell** – Angles of the Cookie Monster Problem
- Kenneth Brewer** – The Monoreduction of Diketones and Its Application Towards the Total Synthesis of Kalmanol
- Douglas Brown** – Effectiveness of the Electro-Acoustical Simulator for Engineers (EASE) in Determining Room Acoustics
- Shyamal Buch** – An Atomistic, First-Principles Study of N-Doped Reduced Graphene Oxide
- Victoria Emily Buckland** – Design of an Economic and Passive Daylighting System
- Supinda Bunyavanich** – The Efficacy of Chitosan and Bentonite in Municipal Wastewater Treatment
- Claire Burch** – Detection and Characterization of Candidate Exoplanetary Systems Using Gravitational Lensing Events
- Kevin Burdge** – Holographically Computing the Entanglement Entropy of an Annulus in a Strongly Coupled Conformal Field Theory
- Jakub Byszewski** – The Game of Vingt-et-un
- Anni Cai** – Determining the Amino Acids Involved in Inhibition of PDE4B by Structurally-Diverse Compounds
- Sophie Cai** – Guided Search Theory: Exploring a Novel Technique for Demonstrating the Presence of Combined Serial and Parallel Processing in Visual Search
- Carolyn Calfee** – Allelopathetic Activity of *Paeonia officinalis*
- Eric Carmichael** – Converting an English Natural Language Processor
- Gabriel Carroll** – Homology of Narrow Posets
- Silvia Casacuberta** – On the Divisibility of Binomial Coefficients
- Carl Cenik** – The Effects of Natural Selection and Mutation on Inbreeding Effective Size
- Samidh Chakrabarti** – Three Dimensional Image Mapping of Irregular Solids with Active Optical Triangulation



# Research Science Institute

## Top Oral and Written Presentations

- Francesca Y. Chang** – Excitotoxicity in Afferent Fibers Innervating Hair Cells of the Lateral Line Organ of *Xenopus laevis*
- ZeNan Chang** – Genetic Polymorphisms in Meningioma Formation and Progression
- Andrew Chanham** – Characterization of Phosphotransacetylase in *Clostridium thermocellum*
- Prashant Chavarkar** – Laser Doppler Anemometry to Map the Flow Field of a Cryosteady Thrust Augmentor
- Gardenia Chavez** – Improving the Accuracy of a Semi-Implicit Finite-Difference Model for the Shallow Water Equations
- Albert Chen** – Synthesis of 3-amino-2-alkenoate
- Evan Chen** – Diagrammatic Computation of Morphisms Between Bott-Samelson Bimodules via Libedinsky's Light Leaves
- Sitan Chen** – On the Rank Number of Grid Graphs
- Phillip Cheng** – Qualitative Analysis of Rat Cortical Oligodendrocyte and Astrocyte Protein Compositions with 2-D Page
- Clara-Ann Cheng Ling** – Determining Crystal Orientation via Reflection High Energy Electron Diffraction
- Jao-ke Chin-Lee** – Deafening Silence: Active Noise Cancellation in Human-Robot Speech Interaction
- Dave Choltshi** – Developing a Protocol for Infrared Cryocrystallographic Analysis of Carbon-monoxymyoglobin
- Yong He Chong** – Replacement of the  $\alpha$ -3 Helix in  $Za_{ADAR1}$  with Amino Acids from  $Z_{aDLM1}$  and SARS and Binding of Chimera Proteins to Z-DNA
- Dawen Choy** – Quantum Theory of Neutron Reflectivity
- Radoslaw Chrapkiewicz** – Synthesizing and Measuring Superconducting Sodium Cobalt Oxide ( $NaxCoO_2$ ) Crystals
- Eric Chung** – Determining the Probability of Boxed Point in n-Dimensional Space
- Hannah Chung** – Investigation of Graphs Having Identical Path Layer Matrices
- Alex Churchill** – Self-Reflective Comma-Free Codes
- Amy Chyao** – Investigations of a  $Za$ -Like Peptide Motif in Koi Herpesvirus
- Ian Cinnamon** – Visual Search with Relative Stereoscopic Depth
- Ann Marie Cody** – The Parerit Stars of New Extrasolar Planet System Candidates
- Michael Colsher** – Schur's Problem Reciprocated
- Rita Coore** – Energy Metabolism in Man
- Michael Coulter** – Semiconducting Phase-Change Materials
- Aimee Crago** – Alfalfa Resistance to the Fungal Disease Anthracnose
- Nathaniel Craig** – Relation of Equilibrium and Dynamic Properties in Supercooled Glass-Forming Polymeric Liquids
- Clare Crawford** – Acoustic Impedance of Electrorheological Fluids
- Elod Csirmaz** – Theory of File Synchronization
- Jason Cui** – Optimized Droplet-Based Microfluidics for High-Throughput Screening of Adherent Cells
- Parmita Dalal** – Mechanisms by which Lyme Disease and Cancer Invade the Central Nervous System
- Rumen Dangovski** – *On the Lower Central Series of PI-Algebras*
- Rhiju Das** – Plasma Electron Streaming Induced by a Few Waves
- Mary Davies** – Identifying Stellar Counterparts for Short Duration Microlensing Events
- Benjamin Davis** – Exploration of Self-Avoiding Random Walks in Infinite Grids
- Matthew DeBergalis** – Design of a Reversible Processor
- Laura DeLong** – Time Course and Local Specialization of Axonal Development in Tissue Culture
- Joseph Dexter** – Immobilization and High-Throughput Screening of Zebrafish Using Novel Microfluidic Devices
- Manal Dia** – Ulam's Problem: A Different Approach
- Bistra Dilkina** – An Alternative Approach to Information Retrieval Using Multi-Word Terms
- Vesselin Dimitrov** – Zero-Sum Problems in Finite Groups



# Research Science Institute

## Top Oral and Written Presentations

- Jeffrey A. Doering** – Research on the Ranque-Hilsh Tube: Efficiency and Feasibility
- Charles F. Doran Jr.** – Identification and Differentiation of Magnetic Discontinuities Using Minimum Variance Techniques
- Ron Dror** – Stream Option Management Generalized to Three Dimensions
- Shaaakshi Dube** – Atomistic and Continuum Modeling of the Mechanical Properties of M13 Bacteriophage Microfibers
- Lia Eggleston** – Gravitational Mesolensing: Analysis of Bright, Nearby Events from OGLE
- Julia Einbond** – The Development of Children's Responses to Questions: A Comparison of English and French
- Sandi Eltringham** – Canavanine Production By Clover Root Tissue Cultures
- Jeremy England** – Stabilization and Release Effects of Pluronic Polyols in Proteiri Drug Delivery
- Scott Ettinger** – Reaching the Canopy: A Preliminary Study
- Marshal Everett** – The Effect of Moisture on Carbon Fiber Reinforced Polymer Strengthened Concrete Structures
- Yale Fan** – Adiabatic Quantum Algorithms for Boolean Satisfiability
- Lochie Ferrier** -- Development of an Optical Autonomous Satellite Identification System
- Adam Friedman** – Identification of the Transcription Start Site for the Rat Phosphatidylcholine Transfer Protein Gene
- Shiv Gaglani** – Quantitative Trait Loci Modulate the Size of the Cerebral Cortex
- Kavish Gandhi** – Minimal Saturated Subgraphs of the Hypercube
- Nandini Gandhi** – Sensitivity of Polymerase Chain Reaction in the Detection of Heteroplasmy in MELAS
- Sahaj Garg** – Perception and Interpretation of Dynamic Imagery
- Joshua Gewolb** – Amino Acid Recognition Specificity of an Acyl-Transfer Ribozyme
- Allison Gilmore** – A Relation Between the Unknotting Numbers and Almost-Alternating Numbers of Prime Knots
- Michael Ginsberg** – The Modulation of Optokinetic Nystagmus by Vestibular and Optokinetic Information
- B. Girish** – Conversion of Satellite Images from the RGB to the HIS Color Coordinate System or Effective Analysis
- Bell Glass** – A Design Concept of a Multichambered Radial Inflow: (MCRI) Bipropellant Rocket, Engine
- Benjamin Goetz** – Lorenz Braids
- Sara Goldhaber** – Tranposon Tn903 Mutagenesis of the *Escherichia coli* Mur Z Gene to Determine the Role of the Gene in Bacterial Cell Wall Biosynthesis
- Gil Goldshlager** – Characterizing Outerplanar and x-Monotone Thrackles
- Philippe Golle** – On the Rate of Growth of Metal Monolayers
- Meredith Golomb** – Ethanol Withdrawal and the Adenosine Receptor
- Marcus Gomez** – Substrate Stiffness Modulates Cardiac Side Population Stem Cell Symmetric Division and Gene Expression
- Jan Gong** – The Effect of High Glucose Levels on Morphine Signaling in *Mytilus edulis*: Nevol Implications for the Treatment of Obesity in Diabetes
- Shannon Grammel** – Ejection Behavior of Hypervelocity Stars in the Presence of Sagittarius A\* and the Milky Way Potential
- Andrew Marc Green** – A Program to Graph Thermal Decomposition Data
- Pamela Greene** – Electro-Optical Modulation of Laser Light
- Jerry Guo** – Regulation of Late-Stage Flower Development by Downstream Genes of the Homeotic Protein AGAMOUS
- Anvita Gupta** – Computational Drug Discovery for Targeting Intrinsically Disordered Proteins
- Haley Hagg** – *Aspergillus fumigatus* Produces Varying Amounts of the Antiniotic Fumagillin When Cultivated in Different Media
- Axel Hansen** – Improved Heuristics for Program Continuation in Failure Oblivious Computing
- Luke Hansen** – Optimization of a Novel Mutagenic PCR Procedure
- Brett Harrison** – On the Reducibility of Cyclotomic Polynomials over Finite Fields

# Research Science Institute

## Top Oral and Written Presentations

- Neil Hattangadi** – Artificial Life Through Adaptive Autonomous Agents  
**Caleb He** – On the Spectral Invariance of Ellipses in Convex, Planar Domains  
**Douglas E. Heimburger** – The Genetic Evolution of Mucins 1, 2, 3, and 5 from Rodents to Humans  
**Scott Hemphill** – Shallow Medical Analysis (SHAMAN): The Feasibility of Applying a Logical Structure to Folk Medicine  
**Gaelen Hess** – Predicting How Electrostatic Forces Bend Asymmetrically Neutralized DNA  
**Carole Hohwiller** – Prototype Detectors for Superconducting Super Collider Spaghetti Calorimeter  
**Wenxian Hong** – Design and Characterization of a Littrow Configuration External Cavity Diode Laser  
**Ben Horkley** – Applying to Moolloy Guided Improvement Algorithm to Automobile Component Selection  
**Roger Horton** – Airfoil Design for a High-Altitude Loiter Aircraft  
**Edward C. Hsiao** – Silicon Beam Purity of the Eaton NV-6200 Ion Implantation System  
**Susan Hu** – Measuring the Size of the X-ray Emitting Accretion Flow onto Sagittarius A\*  
**Tricia L. Huang** – Selected Host-Pathogen Interaction Studies with Postharvest Pathogens of Tomato Fruit  
**Janice Hudgings** – The Individuality of Human Footprints  
**Charley Hutchison** – Kinetics and Thermodynamics of Deeply-Supercooled Liquids  
**Hadass Inbar** – Mechanical Properties and Adhesion of the Collagen-Hydroxyapatite Interface in Bone  
**Brian Jacokes** – An Improved Quantum Algorithm for Searching an Ordered List  
**J.B. Jasiunas** – The Use of Power Analysis to Detect Trends in Spotted Owl Populations  
**Camille Jeanneney** – The Effects of Surface Tension on Kelvin-Helmholtz Instability  
**Lili Jiang** – A Theoretical Study into Electronic Properties of Polythiophene and its Functional Derivatives: A 3D Adapted Su-Schrieffer-Heeger Model  
**Andrew Jin** – A Machine Learning Framework to Identify Selected Variants in Regions of Recent Adaptation  
**Ramesh Johari** – Creation of Visually and Physically Realistic Computer Simulated Cockroach Legs  
**Chloe Joray** – Interhemispheric Integration of Shapes in Infancy  
**Konstantin Kakaes** – An Investigation of Kirillov's Problem  
**Jonah Kallenbach** – Characterizing and Identifying Protein Interactions of Intrinsically Disordered Protein  
**Sean Kanuck** – Analysis of Tobacco Plants for Kanamycin-Resistant Gene  
**Dimitar Karev** – Cyber Threat Hunting Through the Use of an Isolation Forest  
**Or Katz** – Detectability Analysis of Gravitational Waves from SN2006gy  
**Emily Kendall** – Effect of Magnetic Ions in a Barrier on Spin Tunneling  
**George Kerchev** – The Structure of the Quotient  $Ni(An)$   
**Jonas Ketterle** – Wireless Sensor Networks and Smart Materials  
**Peter Khalifah** – A Novel Chemical Method for the In Vitro Genetic Transformation of Zea Mays Pollen  
**Daniel Kim** – A Simulation of Sonar in the Arctic Ice Cap Regions  
**Lyna Kim** – Optimizing the Energy Density of Azobenzene-Functionalized Solar Thermal Fuels via Metallic Phosphate Frameworks  
**Yo-whan John Kim** – Improving Gesture Interface Using Bayesian Network Structure Learning and Non Parametric Modeling  
**Melissa Klein** – Gene Regulation in Transgenic Plants  
**Jay Koh** – Secondary Structure and Buried Surface Area in Proteins  
**Robert Kotredes** – Anti-Aliasing of Images Using Line Sampling  
**Benjamin Kraft** – Entries of Random Matrices  
**Abijith Krishnan** – A Secretary Problem with a Sliding Window for Recalling Applicants  
**David Kuo** – A Comparative Study of Genie and KES: Two Expert-System-Building Systems  
**Harry Lai** – Modeling Chaos in the Earth's Magnetofield  
**Brian Lamacchia** – Computer Simulations of Protein Folding in Two and Three Dimensions  
**Anne Langley** – Clinical and Experimental Aspects of Cancer Research & Treatment

# Research Science Institute

## Top Oral and Written Presentations

**Eric Larson** – On Nilpotent Fusion Categories

**Gregory Lauer** – Computer-Aided Analyses of Offshore Steel-Jacketed Structures

**Brian Lawrence** – On Finite Groups with  $m$  Elements of Order  $n$

**Patrick LeClair** – Ferromagnetic-Ferromagnetic Tunneling with an Antiferromagnetic Barrier in a High Magnetic Field

**Samuel Lederer** – The Effect of Chemical Additives on Ice-Spike Formation

**Anne Lee** – A New Design Guideline of Mixed B-Site Perovskites for Water Splitting

**Irwin Lee** – Acoustic Behavior of Electroviscous Fluids

**Kari Lee** – Fuzzy Logic Controllers for Structures

**Michael Lee** – An Investigation into Gallai's Generalization of Van der Waerden's Theorem on Arithmetic Progressions

**Susan Lee** – The Evaluation of a Protease from *Trichuris suis* as a Diagnostic Tool for *T. suis* Infection in Swine

**Yuri Lenskiy** – Re-Analyzing an Optimal Binary Quantum Channel Using Information Theory

**John Lesieutre** – On a Generalization of the Collatz Conjecture

**David Levary** – A Novel Approach to Protein Engineering Using Multivalent Cell Surface Interactions

**Lauren Li** – Clonal Contributions of T-Cell Infiltration in Solid Tumors

**Wei-Yen Lim** – The Effect of Zearalenone on the Cytotoxicity of Colchicine on Three Human Breast Cancer Cell Lines

**Yuhua Lim** – Claudin – 18 Function in Gastric Parietal Cell Regulates the Hippo Signaling Transduction Pathway

**Da Lin** – Evaluation of cis-cis HOONO Production by Laser Photolysis Through Modeling of Reaction Kinetics

**Henry Lin** – Cool Core Bias in Sunyaev-Zel'dovich Galaxy Cluster Surveys

**Margret Lin** – The Effectiveness of Electroporation in Transforming Tobacco Plants

**Lauren Lisann** – RNAi Against Dyslexia Genes Disrupts Neuronal Migration

**Joyce Liu** – Isolation of  $(CAC)_n$  Microsatellite Repeats in *Drosophila* DNA

**Kevin Liu** – Number Fields Generated by Torsion Points on Elliptic Curve

**Judy Chii-Wen Liu** – The Effects of Spacing of Submarine Propeller Forces/Noises

**Kathy Liu** – Development of a Metal Halide Chemical Vapor Deposition Process for Photovoltaics and Thin Film Technology

**Po-Ling Loh** – Closure Properties of  $D_{2p}$  in Finite Groups

**Leon Low** – Lymphocyte Subpopulation and the Genetic Control of Disease Susceptibility to Eimerian Parasitic Infections in B-Congenetic Chickens

**Peter Lu** – Nonequilibrium Dynamics in Cuprate Superconductors Using Transient Grating Spectroscopy

**Sophia Luo** – Modulating Pro-Inflammatory Macrophage Phenotype Through Re-Polarization b Hyaluronic Acid Nanoparticle Delivery of miRNA

**Jonathan Lu** – Organized Microphase Separation of Active Spinner Particles in Dense Colloidal Solutions

**Lester Mackey** – A Combinatorial Proof of Seymour's Conjecture for Regular Oriented Graphs with Regular Outsets  $0'_a$  and  $0''_a$

**Todar Markov** – On Extremal Degrees of Minimal Ramsey Graphs

**Lisa Marrone** – A Novel Function of Lactate Transporter MCT1 in Gastric Restitution

**Susan Mathai** – *Drosophila* Protein Egalitarian Shows Homology to Z-DNA Binding Domain of Human ADAR1

**Adam Matthews** – The Effect of Nucleosomes on V(D)J Cleavage

**Sean Mauch** – A Method for Computing Revisit Time of the Lambdasat Satellite Communications System

**Shana McCormack** – Use of Polymerase Chain Reaction in the Detection of *Mycoplasma genitalium* in Saliva

**Matt McCutchen** – Putting Javari into Practice

**Chris Mihelich** – On the Structure of a Polynomial Quotient Ring Involving Symmetric Polynomials

**Eric Miller** – Electrodeposition of YBaCuO Superconducting Films

**Yingting Mok** – Effects of Glucosamine and Mannosamine on Biosynthesis in Bovine Chondrocytes

**Joel Moore** – Computer Simulation of Growth Uniformity in Molecular Beam Epitaxy

# Research Science Institute

## Top Oral and Written Presentations

- Tejaswini More** – Functional Analysis of zAlk-8, A Novel Type I Receptor, in Zebrafish, *Danio rerio*
- Tomasz Motylewski** – Molecular Mechanics Computer Simulations on IBM PC
- Eran Mukamel** – Photocathode Lifetime Extension for Polarized Electron Injectors
- Vikram Nathan** – Effects of Fluctuating Rates and Transition State Pathways on Reaction Kinetics Using Single Molecule Analysis
- Christie S. Nelson** – Angular Transmission Function of Optical Fibers
- Kelvin Neu** – Preliminary Evidence for a Novel Synovial Fluid Antigen in Human Rheumatoid Arthritis
- Gary Ng** – The Resolution of Calcium-Binding Proteins by Electrophoresis
- Ping Fung Ng** – On the Problem of Finding the 27 Tropical Lines on a Tropical Cubic Surface
- Joseph L. Ngai** – A High Precision Laser Speckle Tracking Technique for Measuring Angular Dynamics: Fiber Optic Cross Correlation
- Kristen Nielsen** – Spatial Representation in the Normal Visual Field: A Study of Hemifield Line Bisection
- Sahar Nissim** – The Effect of DNA Conformational Changes on the Regulation of Nitrogen Utilization in *Escherichia coli*
- YI-Ching Ong** – Generation of Truncated, Full-Length and Constitutively Active DNA Constructs for zALK-8, a TGF- $\beta$  Type I Serine/Threonine Kinase Receptor in Zebrafish
- Zera Ong** – Exercise-Induced Pgc-1 $\alpha$  Expression Does Not Lower mtDNA Point Mutation Levels but Downregulates Tyrosine Hydroxylase Expression in the Striatum
- Manisha Pandita** – Correlation Between Loss of Fixation and Antisaccade Errors in Schizophrenic Individuals
- Dhaivat Pandya** – Optimal Linear Network Coding for General Connections
- Renee Park** – The Effects of Atmospheric Turbulence on Simulated Starlight in a Low-Pressure Telescope Environment
- Arvind Parthasarathi** – Carcinogenic Risk Assessment of Certain Chemicals
- Matteo Paris** – Grammatical Structure of English Noun Compounds for Implementation in an Augmented Phrase Structure Grammar
- Jake Parrott** – Kinetic Study of Various First-Order Alkylidyne-Forming Reactions
- Tarun Prasad Murali Prasad** – Active Learning and its Application in the Analysis of Scientific Data: Predicting Mie Scattering by Nanoparticles
- Kalina Petrova** – Automating the Neuron Integration in Connectome Construction
- Amol Punjabi** – Discovering Druggable Binding Sites on Intrinsically Disordered Proteins
- Dominik Rabeij** – Evaluating and Improving Human-Guided Simple Search with Heuristics
- Ram Rajendran** – Word-Stem Completion Priming for Novel Words in Global Amnesia
- Rageshree Ramachandran** – A Simple Chaotic Numerical Model of the El Niño-Southern Oscillation
- Sanjay Raman** – An Analysis of the Photon Identification Mechanism in CMS 2016 Data
- Vivek Raman** – Biotinylation Turnover Assay of the A33 Antigen
- Oliver Rando** – Sphingosine 1-Phosphate, a Compound Involved in Cell Proliferation and a Possible Second Messenger
- Antoni Rangachev** – On the Solvability of p-adic Diagonal Equations
- Rajesh Rao** – Epitaxy of High-Temperature Superconductors
- Ruchir Rastogi** – Hyaluronic Acid-Polyethylenimine Gene Therapy System for Treatment of Inflammatory Diseases
- David Ratajczak** – Adding HUI to a GUI: An Assessment of Interface Performance Improvements Using Haptic Feedback
- Matthew Rauhen** – On Strongly Multiplicative Graphs
- Naomi Reece** – Effects of Taurocholate on the Development of WIF-B Cells in Culture
- Ashley Reiter** – The Hausdorff Dimension of Pascal's Modulo a Prime to a Power
- Michael Rengarajan** – On the Induction of B-DNA to Z-DNA Conversion by Monoclonal Antibody Z22 Mouse Immunoglobulin G



# Research Science Institute

## Top Oral and Written Presentations

- Keith A. Renouard** – Comparison of Assorted Superconductors Using Microwave Absorption
- Brant W. Richards** – Corrosion Evaluation of Nickel Aluminum Bronze Pump Impeller
- Lori Rifkin** – Regulation of Expression of the First Gene in the Dolichol Pathway of Protein N-glycosylation in the Yeast *Saccharomyces cerevisiae*: The Effect of Poly (A) Tails on the Stability of ALG7 mRNA
- Scott A. Rifkin** – Hepatocyte Attachment to Microcarriers and the Development of a Flow System to Measure the Attachment Strength
- Dhruv Rohatgi** – When Two-Holed Torus Graphs Are Hamiltonian
- C. Brian Roland** – Characterization and Development of an Apoptosis Assay and its Application to Studies of Apoptosis in Mammalian Cells
- Brad Rosen** – Surface Modification of Biodegradable Poly (ε-caprolactone) Nanospheres: Cationic Nanospheres as a Carrier for DNA
- Ian M. Rousseau** – Analysis of a High-Temperature Supercritical Brayton Cycle for Space Exploration
- Jamie Rubin** – A Novel Mislocalization System for Identification of the Spatially Instructive Mediators of Eukaryotic Chemotaxis
- Kate Rudolph** – Maximizing Packing Densities of Randomly Packed Spheres in High Dimensions
- Karl Rumerhart** – Design and Creation of a Voice-Controlled Speech Store and Forward System to Facilitate the Editing of Database Files
- Laurie A. Rumker** – The Effect of Culture Axenicity on *Prochlorococcus marinus* Phage Infection Kinetics
- Rasheed Sabar** – Integral Products of Laguerre Polynomials and Their Discrete Analogues
- Jacob Sanders** – Glucocorticoid Regulation of Cell Survival in Normal and Cytokine-Treated Gastric Chief Cells
- Evan Scannapieco** – Thermal Optimization of the Electron Beam Window Foil Support Structure
- Emma Schmidgall** – Inferring Surface Lattice Structure from Scanning-Tunneling Microscopy Measurements of the High-Temperature Superconductor  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$
- Marine Schroer** – The Use of Laser-Induced Fluorescence in Distinguishing Between Inks
- Alexander Schwartz** – On Exact Covering Systems of the Integers and Partitions of  $\mathbb{Z}_n$  into Translates of Sublattices
- Elizabeth Schwartz** – Kinetic Investigations of UDP-N-Acetylglucosamine Enolpyruvyl Transferase and Its Inhibitor Phosphomycin
- Kim Scott** – A Partial Characterization of Ehrenfeucht-Fraïssé Games on Fields and Vector Spaces
- Kathy Seggerson** – Thymic T Lymphocyte Phenotypic Shifts in Response to Lipopolysaccharide
- Sourav Sengupta** – A Comparison of Ganglioside Content and Distribution in Normal Murine Neural Tissue and Murine Neural Tumor Tissue
- Sapan Shah** – The Role of the GTP-Binding Protein Rac in Oxidative Stress-Induced Apoptosis
- Rohini Shivamoggi** – Analysis of Clustering in Color-Magnitude Diagrams to Detect Gravitational Microlensing Events
- Andrew Shum** – Time Correlation Functions, Dynamic Universality and Rare Events in Deeply Supercooled Glass Forming Liquids
- Ben Silberman** – Functional Significance of ALG7 as a Tumor Suppressor Gene in Mammalian Epithelial Cells
- Anna Kornfeld Simpson** – Local Layering of Images with an Efficient User Interface: Improving the Utility of a Novel Graphics Manipulation Technology
- Isani Singh** – Investigating the Developmental Requirements of Sex Chromosome Genes Affected in Turner Syndrome
- Venkatesh Sivaraman** – Simplified Audio Production: Live Voice Editing Based on Speech-to-Text Transcription
- Christopher Skinner** – On the Diophantine Equation:  $ap^x + bq^y = c + dp^zq$
- Stephan D. Skjei** – An Analysis of Calretinin Presence in the Alzheimer's Brain
- Kaloyan Slavov** – On the Unicity Conjecture for the Hurwitz Equation
- Geoffrey Smith** – Use of the Linkage Computer Analysis Program to Map the Gene for Thiamine-Responsive Anemia, Diabetes and Deafness



# Research Science Institute

## Top Oral and Written Presentations

- Robin Smith** – Effect of High Dose of Creatine on Doxorubicine-Induced Cardiotoxicity
- Lawren Smithline** – Parallel Processed Singular Value Decomposition
- Adam Snowden** – The Effect of Wnt/Beta-Catenin Signaling Inhibition on Oral Squamous Cell Carcinoma
- Justin Solomon** – Extracting Face Shape from Skin Reflectance: Reconstructing Three-Dimensional Face Surfaces and Reflectance Models from Digital Video
- Janet Song** – Brain Volumetric Measures in Alcoholics: A Comparison of Two Segmentation Techniques
- Kannan Soundararajan** – On the Behavior of a Sparse Series
- Robert Southworth** – Consistency Testing to Identify Errors in Weather Data
- Galin Stalov** – Fermat-Euler Dynamics
- Lauren Stephens** – Bounds on the Relative Sizes of Sumsets
- Daniel C. Stevenson** – Electrochemical Deposition Simulated by Generalized Diffusion Limited Aggregation
- Hristo Stoyanov** – Cryptographically Secure Detection of Mirror Worlds
- Rahul Subramaniam** – Investigation of a Novel Medication for Treatment of Multiple Myeloma
- Marissa Sumathipala** – Network-Based miRNA-Disease Model for Enhancing Drug Discovery
- Jae Ho Synn** – Interfacing the Lecroy 3500 Data Acquisition System
- Jie Tang** – On the Properties of Protection Systems in Finite Random Networks
- Junger Tang** – Design and Implementation of a Neural Network for the Evaluation of Protein Secondary Structure Prediction Using the DSSP and Chou-Fasman Algorithms
- Luke Tang** – Finite Range Couplings in a Tensor Renormalization Group Approach to 2D Classical Lattice Models
- Aaron Tievsky** – The Decomposition of Integers as the Sums of Squares in General Number Fields
- Nilesh Tripuraneni** – On the Relativistic Generalization of the Navier-Stokes Equations to Quark-Gluon Plasmas
- Karolina Trocka** – Changing the Substrate Specificity of PDE7B by Mutation and Selection in *Schizosaccharomyces pombe*
- Jennifer Walsh** – Searching for the Oldest, Most Metal-Poor Stars in the SkyMapper Survey
- Svetla Tzenova** – Tyrosine Receptor Kinase C in a Subset of Cultured Cortical Neurons
- Dennis Ugolini** – Effect of Annealing on High- $T_c$  Superconductors
- Max Uhlenhuth** – Visual Searches of Natural Scenes
- Dmitry Vaintrob** – A Relationship Between Hochschild Cohomology and the Goldman Bracket for Compact Oriented Two-Dimensional Manifolds
- Debra Van Egeren** – Synthesis, Characterization and SERS Functionalization of Hollow Gold Nanoparticles
- Vera te Velde** – Determining the Effect of Diffuse X-ray Emission on Point Source Detection
- Sara Volz** – In Vivo Targeted Mutagenesis in *Saccharomyces cerevisiae*: Increasing Point Mutation Rates at Selective Double-Strand Break Repair Sites
- Marina Voulouva** – The Boundaries of a DNA-Binding Domain as Defined by Proteolytic Digestion
- Bobby Xu** – Neural Basis of Inhibition: A Study of Antisaccades using fMRI and MEG
- Iris Xu** – **The N-Glycosylation Status of E-Cadherin Controls the Intercellular Adhesion in A253 Cells**
- Anne Wang** – Development of a Multiplex Luminescence Immunosandwich Assay for Assessing Total SRC Protein and Phosphorylation Levels in Cancer Cell Lines
- Frances Wang** – Determination of Lipid: Water Partition Coefficients for Acetylcholine Receptor Imaging Candidates By Ultraviolet Spectroscopy
- Ivy Wang** – Determination of the Intrinsic Rotational Period of Jupiter with Ulysses
- Kelvin Wang** – Homomorphism in Minuscule Posets
- Lee Hug Wee** – Inhibition of Human Ovarian and Breast Cancer Cell Growth by Telomere-Specific DNA
- Josanna Weeks** – The Impact of Power Histories and Initial Gas Pressure on Fission Gas Release in High Burnup Nuclear Fuel
- Dena Weinstein** – Use of DNA Probes to Identify Hybrids Between Partially Self-Incompatible Alfalfa Plants
- Kenneth Weinstein** – A New Model for DNA Fragment Assembly

# Research Science Institute

## Top Oral and Written Presentations

**Linda Westrick** – Investigations of the Number Derivative

**Stephen Wilgus** – Precision Measurement in Muon Drift Chambers for the Superconducting Supercollider

**Elizabeth Williams** – Visual Search: A Novel Psychophysics for Preattentive Vision

**Lawrence Wilson** – Communications Efficiency as an Extremal Problem in Graph Theory OR Decreasing Communication Time Through a Wise Arrangement of Communication Links

**David Wu** – Nonuniform Distributions of Patterns of Sequences of Primes in Prime Moduli

**Jessica Wu** -- Claudin-18 as a Tumor Suppressor for Gastric Cancer in Mice

**Woon Teck Yap** – Synthesis of a New Ligand: N,N'-trans-bis-(tert-butyl)-9,10-dihydro ethano-anthracene-11,12-dimethanamine

**Michelle Yakubek** – Quantitative Analysis of Diachronic Characteristics in Beowulf and Other Old English Poems

**Debbie Yeh** –Tissue Distribution of Low Molecular Weight Human Salivary Mucin, MUC7, Gene Expression

**David Yin** – Titania Nanatubes for Solar Energy and Catalysis

**Cahnning Yu** – Modifying an Existing English Natural Language Interface to Process French

**Jirundon Yuvaniyama** – The Molecular Biology of Gaucher's Disease

**Kristine Zhang** – Fracture Mechanics of Monolayer Molybdenum Disulfide Using Molecular Dynamics

**Timothy Tan Zhen Xin** – Efficacy of Taxoid Nanoemulsions Against Mouse Pancreatic Cancer

**Ning Zhou** – Quantitative Trait Loci: Modulating Corpus Callosum Size in the Mouse Brain

**Monib Zirvi** – Discourse Analysis

**Corinna Zygourakis** – Mapping Genes that Moderate Cerebroventricular Enlargement



# Research Science Institute Alumni

## 1984

Shay Abramson  
Allison Armour-Garb  
Tom Bechtold  
Daniel Blum  
Hiroshi C. Bowman  
Laura Call-Berry  
Carolyn Chang  
Kent Churchill  
Eric Claeys  
Taliah Cohen  
Cathleen Compton Von Hippel  
Kathryn Coulter  
John M. Dorffler  
John Edwards  
Ingrid Eisgruber  
Kenneth Erdley  
Scott Ettinger  
Omri Gat  
Patricia Gulbis Paul  
Roger F. Horton  
Todd Hurt  
Christopher Jones  
Mark Kantrowitz  
Diana Knickrehm  
Robert L. Leheny  
Er Liu  
Anthony J. Lombardo  
Jeff Longcore  
Kevin McFarland-Porter  
Gregory Meyer  
Susan Hass Miller  
Abigail S. Mitchell  
Christopher B. Moore  
Kevin Murdock  
Jonathan Nemirovsky  
Eli V. Olinick  
Howard Park  
Matt Parker  
Parwane Parsa  
Paul Rhinehart  
Blair Rodgers  
Frederick Roeber  
Daphne Rommereim-Madden  
Andrew Roy  
Andrea Sachs  
Alexander Samorodnitsky  
Scott A. Schaffer  
Jerry Schmauch  
Marnie Schroer  
Jeff Senn  
Catherine Sewell  
Steve Shreve  
Amy Sillman  
Steve Strong  
Jae-Ho Synn  
Chiwu Tang  
Albert Tsai  
Al Wickers  
P. Clark Williams-Derry  
Arthur Woerheide

## 1985

Pam Bee-Lindgren  
Oded Ben-David  
Katrina Brown  
Geoffrey Buchan  
Sharif Burdzik  
Kell Canty  
Cathryn Carson  
Robert Chen  
Stanley Chen  
Douglas M. Church  
William Cottrell  
Stirling Dodd  
Jason Eisner  
Marc Friedman  
Archon Fung  
Stefanie Goldstein  
Meredith Golomb  
Philip Gross  
Chris Hamilton  
David Hoffman  
Ron Hohauser  
Timothy Hsu  
Michael Israel  
Ira Kantrowitz-Gordon  
Michael Kim  
Daniel P. Kirkwood  
Jason Koh  
David LaFollette  
Brian LaMacchia  
Andy Lange  
Daniel Lee  
David Lee  
Chunliang Leng  
Owen Li  
Vivian Lin  
David Loh  
Tina Lu  
Eldad Maniv  
Tatiana Masters  
Ann Pennington  
Conrad Poelman  
Kasey Rueggesser  
Karl Rumelhart  
Christian Ryan  
Evette Sanborn Radisky  
Kenneth Schultz  
Li Serra  
Yehuda Shalom  
Geoff Skillman  
Stanley S. Stadnicki  
Cynthia Hess Tanner  
Pam Tanner  
John Tillinghast  
Marc Umeno  
Erik Wayda  
Brien L. Wheeler  
Glen Whitney  
Kim Whittlesey  
Xiao D. Wu  
Jennifer Wu  
William Yang  
Jon Yoshiyama  
Moshe Zafrany

Thomas Annau  
Rex Babiera  
Peter Berman  
Katie L. Byl  
Alex Chachkes  
Andrew Charman  
Prashant Chavarkar  
Franklin Chen  
Frederick Chen  
Danny Chou  
Jeffrey Doering  
Darren Dowell  
Roland Dreier  
Michael Elwood  
James Ford  
Kathy A. Gleason  
Andrew Greene  
Pamela Greene  
Gregory M. Gunn  
Carrielyn Guymon  
Joseph Hildebrand  
Xin Y. Huang  
Emily Huang  
Janice Hudgings  
Punit Jain  
Shamit Kachru  
David Kuo  
Jeff Kuo  
Anne Langley  
Elsie Lee  
Steven Lee  
Cheryl Ann Lenser  
Jian-wei Liu  
Zui H. Low  
Steven Lumetta  
Bhawna Malhortra  
Melissa Margolis  
Himanshu Mehta  
Michael Mitzenmacher  
Grant Murray  
Gary Ng  
Susan Olson  
Alice Peng  
Hataichanoke Prapaipong  
Stephen Racunas  
Eric Rains  
Tim Rapp  
Charles Roosen  
Soham Roy  
Vivek Sahota  
Adam Shaywitz  
Oren Shemesh  
Naland Shenoy  
Jay Shrauner  
Richard Simon  
Bonnie Singh  
Jeffrey Snyder  
Robert Southworth  
Patrick Tan  
Rekha Vemireddy  
Dongmei Wang  
Tessica F. Wang  
David Wolfgang-Kimball

## 1986

Jeremy S. Woodburn  
Jirundon Yuvaniyama  
Zheng Zhong  
Heng Zhou  
Shahar Zitronblat

## 1987

Sarah Allmand  
Gordon Bellamy  
Scott Berger  
Charles Buchan  
Jeffrey Cagle  
Rolla Chng  
Ann Choi  
Francis Chong  
Charles F. Doran  
Illanti Dromi  
Johnny Fan  
Gregory Galperin  
Rachel Gollub  
Joshua Goodman  
James Gutierrez  
Marc H. Horowitz  
Leon Hsu  
Tricia Huang  
Shih-jen (Jenko) Hwong  
Christopher Johnson  
Brian Kantsiper  
Jay L. Koh  
Amit Kohn  
Dean J. Lee  
Laurance Lee  
Albert C. Lin  
Alexander Lin  
Jeffrey Lussman  
Sanjay Mehta  
John Miller  
Linda Momohara  
Samuel Nelson  
David Nieporent  
David Patrick  
Devandra Prashar  
Rajesh Rao  
Robert C. Rhew  
Sangeetha Sampath  
Amanda Shaw  
John Smith  
Aaron Swihart  
Caroline Tan  
Joshua Thaler  
Anant Vailaya  
Adam Wagman  
Marc Wallace  
Elizabeth Wolff  
Cara Wong  
Dallas Wrege  
Sarah Hung Ying

## 1988

Deepak Ayyagari  
Aaron Barzilai  
Rachel J. Beane  
Grace Bhudhikanok  
Robert E. Bird



# Research Science Institute Alumni

Clay Blankenship  
Robert Bosch  
Oliver Bueltel  
Peter Cacioppi  
K. Eric Carmichael  
Fabio Ceccanti  
Phillip Cheng  
Shi-Lu Chia  
Sung Chung  
Amy Chused  
Damian Connolly  
Michael Connors  
Sergio Conti  
Klee Dienes  
Matthew Ender  
Tony Eng  
Gerald Etsitty  
Steve Fast  
Eva Garcia  
Balasubramanian Girish  
Melissa Graebner  
Peggy Hsia  
Edward C. Hsiao  
Robert Irie  
T. Raymond (Thouis) Jones  
Sean Kanuck  
Megan L. Koh Chung  
Andrzej Krauze  
Isaac Kuo  
Vui C. Lam  
Ricardo Lastra  
Kevin Lee  
Richard Lee  
Jacob Lesgold  
Judy Chii-Wen Liu  
Karen Lopez  
Hussain W. Malik  
James Mashek  
Amy E. Matthews  
Steven McCarroll  
George McLean  
Jessica Millar  
Christopher Murphy  
John Quisel  
Keith A. Renouard  
Cole Robison  
Brian Rubineau  
James Sarvis  
Timothy Schmidl  
Ursula Schroeter  
James Schuyler  
Robert Seum  
Vellanthurai Shankar  
Renee T. Sheehy  
Michele Shirasu-Hiza  
Christopher Skinner  
Vijay Srinivasan  
Stephanie Tai  
S. Venkatesh  
Karl Wirth  
Alexander Wu  
Channing Yu  
Omar Zafarullah  
Monib A. Zirvi

## 1989

Amy B. Adams  
Laura Auwers  
Francios Barbancon  
Justin Bernold  
Cecilia Bracchini  
Dana Caulder  
Steven Cha  
Stephen Chang  
Joseph Chuang  
Clare G. Crawford  
Francesca d'Acunzo  
Vincent Del Vecchio  
Sandra C. Eltringham  
Michael Fast  
Steven Fein  
Thomas Z. Feng  
David Goldhaber-Gordon  
Thomas Graber  
Benjamin Gum  
Rita Hao  
Scott Hemphill  
Jonathan Higa  
Johann F. Hornstein  
Melissa Klein  
Alex Kulczycki  
Michael Lang  
John Larason  
Kristin Larson  
Andrew Liebeskind  
Chee K. Lim  
Theresa Loong  
Leon Cin I. Low  
Michael Lowe  
Jed Macosko  
Guy Maor  
Melissa McSherry  
Pablo Mena  
Howard Min  
Christie Nelson  
Lenhard Ng  
Jason Nielsen  
Vishal Nigam  
Matteo Paris  
Sonia Parsons  
David Pasquale  
Royce Peng  
Rinaa Punglia  
Katherine A. Ray  
Sendhil Revuluri  
David Rindal  
John Rothermich  
Jahan Sagafi  
David Schairer  
Olivier G. Schiffman  
Roland Secody  
Michael Serrano-Wu  
Lawren Smithline  
Kannan Soundararajan  
George Stone  
Lara Strick  
Matthew Swank  
Eric Tang  
Terence Tao  
Win Travassos

Arasanipalai K. Vasudevan  
Wayne A. Whitney  
Elizabeth I. Winston  
Robyn Yilmaz

## 1990

Bernardo M. Abrego  
Michael Agney  
Joelynn Ashley  
Theodore Barnhill  
Martha Benitez  
Dana N. Berinde  
Betty Bhudhikanok  
Kip A. Bishofberger  
Marc Borkan  
Nicholas Branstator  
LeeAnn Brash  
Emily Brodsky  
Francisco J. Burguete  
Carolyn Calfee  
Alexander Chan  
David Chang  
Jeremy Y. Choo  
Lawrence Chou  
Rebecca Christianson  
Dean Chung  
Richard Chung  
Cristina A. Constantin  
Aimee Crago  
Vincent Dameron  
Brian Davison  
Michael C. Deierling  
Christine DeLorme  
Giovanni Fabietti  
Peter Falus  
Silvia M. Fernandez  
Frantisek Gemperle  
Taro Goto  
Michelle Griffin  
Elizabeth Gross  
David Hale  
Brent Halsey  
Edgar Ho  
George Ho  
Cedric M. Hobbs  
Carole Hohwiller  
Gili Houpt  
Grace Chen Huang  
Thomas Hudgings  
Jesse Hull  
Andrew Iletto  
Antal A. Jarai  
J. Banning Jasiunas  
Amanda Johnson  
Patricia A. Jones  
Peter Kabos  
Patrick M. Kenny  
Daniel Kim  
Edward O. Kim  
Ronald Kim  
Tamora Kimmitt  
Brian G. Kirsch  
Vikram R. Kumar  
Jason Kumar

Harry Lai  
David LaMacchia  
Adrian Langer  
Christopher Le  
Eunice Lee  
Irwin Lee  
Larry K. Lee  
Yueh Lee  
Margaret Lin  
Arle Lommel  
Kimberly Lu  
Michael Magde  
Krzysztof A. Maik  
Matthew Malchow  
Ruben A. Martinez  
Sean Mauch  
Lauren Meyers  
Forrest Michael  
Carleton Miyamoto  
Joel Moore  
Tomasz D. Motylewski  
Mathue Moyer  
Priya Vishnu N. Natchu  
Kelvin M. Neu  
Katherine Olsson-Carter  
Mark Osterman  
Arvind Parthasarathi  
Parth Patwari  
Luca Petaccia  
Melvin P. Phua  
Rageshree Ramachandran  
Oliver Rando  
Kevin Reed  
Ashley Reiter Ahlin  
Petra Reyna  
Ina Rhee  
Laurie Russell  
Shannon Ryan  
Peter Salzman  
Rachel Schiff  
Christopher Shabsin  
Stephen Skjei  
Eric Smith  
Shawn Smith  
Sam Spencer  
Ashok Srinivasan  
Daniel Starr  
Alexis Summerfield  
Benjamin Sun  
Amy Szczepanski  
Andrew Y. Tan  
Diane Tang  
Matthew Tien  
Thomas Tillinghast  
Angela Tobias  
Linus Tsai  
Tomas Tyc  
Dennis Ugolini  
Jean Ung  
Angel M. Verdugo  
Eduardo G. Villasenor  
Shannon Wrege  
Elaine Yang  
Lan Ye

# Research Science Institute Alumni

## 1991

Priya R. Aiyar  
Angelica A. Alvarez-Wallace  
Pehr C. Anderson  
Damian E. Arvizu  
Connie Y. Baik  
Olga B. Bakajin  
Peter L. Beebee  
Donald W. Bond  
Joshua Brody  
Nathan D. Bronson  
Jeremy D. Buhler  
Gardienia Chavez  
Alice M. Chen  
Howard H. Chen  
Melissa Chen  
Leslie B. Chun  
Eric H. Chung  
Nicola Ciulli  
Rita W. Coore  
Anca Corondan  
Dave A. DaCosta  
Ron O. Dror  
Anne M. Dudzik  
Robert T. Dunbar  
Matthew A. Feigin  
Matthew W. Garbett  
Jeff G. Gardner  
Seo K. Goh  
Philippe Golle  
Neil K. Goyal  
Joel S. Grus  
Daniel Gutierrez  
Olgun Guvench  
Knut Haberkant  
Daniel J. Hanish  
Eric E. Hewett  
Kenneth Hung  
Shine-May Hung  
Remy Indebetouw  
Mihajlo Ivanovski  
Daniel D. Jagnow  
Arun Kalyanasundaram  
Kunal D. Kanitkar  
Jonathan D. Kemp  
Aaron S. Kesselheim  
Peter G. Khalifah  
Katherine Y. King-Casas  
Imre Kondor  
Florence Kraemer  
Vikram A. Kumar  
Martin Lancz  
Peter Y. Lee  
Susan S. Lee  
Susan Lee Ko  
Ben Leong  
Jennifer L. Leong  
Wei-Yen Lim  
Shih-Chieh D. Lin  
Albert C. Lin  
David W. Liu  
Reuben B. Logsdon  
Thomas Lorenz  
Eric D. Miller

Anna Minguzzi  
Zigmond Nagy  
Andrew T. Natenshon  
Ji Hyun Oh  
Raluca Pais  
Matthew J. Paschke  
Chandana Paul  
Mark R. Penney  
Wendy M. Peters  
Marek Pycia  
Vijayshankar Raman  
David E. Reich  
Bill J. Riehemann  
Dena E. Rifkin  
Abel Rodriguez  
Sarah S. Sarvis Milla  
Evan Scannapieco  
Kajal V. Sitwala  
Cezary Sliwa  
Paul J. Smith  
John E. Stafford  
Michael D. Sullivan  
Jennifer Sun  
Oliver S. Tai  
Prasanna B. Tambe  
Andrew Teng  
Alice Y. Ting  
Merchelle R. Tohonnie  
Art R. Tontiplaphol  
Harrison K. Tsai  
Inaki Ugartechea  
Jeremy M. Veenstra-VanderWeele  
Juan Luis Velez  
David Viduna  
Ivy A. Wang  
Jamie L. Wells  
Lawrence E. Wilson  
Yir-Shyuan L. Wu  
Dona T. Wu  
Pamela J. Yeh  
Graciela Zarate

## 1992

Marie Alfaro-Breeze  
Seth L. Altman  
Robert G. Au  
Anne E. Barnhill  
Benjamin A. Barreto  
Ela Ben-Ur  
Ernest L. Bonner  
Darius A. Boquin  
Juan M. Burwell  
Adrian M. Campbell  
Matthew F. Cesario  
Amanda M. Chan  
Martin C. Cole  
Jason I. Comander  
Chandreyee Das  
Rachel Donovan  
Brent R. Doran  
Moon Duchin  
Guillermo Fernandez  
Monique A. Ford  
Terence Gan

Brian M. George  
Momchil Georgiev  
Michael Ginsberg  
Adam L. Ginsburg  
Sara Goldhaber-Fiebert  
Matthew B. Grice  
Srishti Gupta  
Moahmad A. Hashash  
Katherine E. Hoover  
Charles S. Hsu  
Jon Hsu  
Colleen B. Johnson  
Majed F. Kabaha  
Ravi S. Kamath  
Kimberly A. Knowles Nico  
Kamen N. Kolev  
Cosmo K. Lee  
Darlene D. Lin  
Amy Lo  
Erich J. Muehlegger  
Joseph L. Ngai  
Sahar Nissim  
Jacob M. Orenstein-Cardona  
Gergely Palla  
Margaret Pizer  
Mariana Quintana  
Raul Quiroz  
Brant W. Richards  
Scott A. Rifkin  
Mark C. Roh  
Ann D. Schiff  
Ann-Marie E. Sevcsik  
Michael R. Shirts  
Edward G. Smith  
Daniel C. Stevenson  
David H. Su  
Jade J. Sung  
Nicholas R. Szumski  
Michaelle S. Teo  
Blake W. Thomas  
Janice M. Tsai  
Robert R. Tupelo-Schneck  
Alissa K. Wall  
Emily A. Wang  
Andras Zsenei

## 1993

Gretta E. Bartels  
Matthew W. Buckley  
Rachel E. Casiday  
William G. Chang  
Wang F. Cheang  
Won T. Cho  
Erik C. Chu  
Kevin Chu  
Armin B. Comana  
Laura K. DeLong  
Gergely Dervandelin  
Laritz E. Diazgosen  
Muhamad A. Dik  
Nadine H. Farah  
David S. Fergemann  
Stephen R. Glassman  
Sarah M. Groff

Nilupa S. Gunaratna  
Amr Haggag  
Wendy F. Hanakahi  
Mircea D. Hernest  
Tracey Ho  
Andres Horvath  
Emily M. Hunter  
Wissam A. Jaber  
Ramesh O. Johari  
Morgan W. Kelly  
Bernard Khor  
Rahul M. Kohli  
Daniel A. LaFave  
Daniel T. Larson  
Gregory S. Lauer  
Amy L. Lawson  
Patrick R. LeClair  
Alice S. Lee  
Vivian M. Lee  
Andrea L. Leistra  
Sarah M. Leming  
Rodrigo Leroux  
Sarah A. Lord  
Adrian Shoen Low  
Erin M. Lynch  
Vandana L. Madhavan  
Dragan M. Manoev  
Joshua H. McDermott  
Regan F. Miller  
Toma A. Milouchev  
Hong-Ki Min  
Megan M. Moore  
Gualberto Padilla  
Cedar R. Riener  
Robert C. Sarvis  
Daniel K. Schepler  
Elizabeth M. Schwartz  
Eric G. Sheu  
Robert Y. Shih  
Geoffrey Smith  
Tanya D. Smith  
Maciej Stachowiak  
Philip Tan  
Pam R. Taub  
Aurelio A. Teleman  
Alma Teliti  
Jacques C. Tham  
Ryan Vinroot  
Eric C. Wang  
Jonathan L. Weinstein  
Steven E. Wilgus  
Leejay Wu  
Endri Xhomo  
Hareendra Yalamanchili  
Kyungmin Yoon

## 1994

Anand Acharya  
Jessica J. Allison-Kerr  
Asheesh Bedi  
Etienne S. Benson  
Daniel K. Biss  
Edward Boas  
Rebecca A. Brown-Scarborough



# Research Science Institute Alumni

Van Bui  
Supinda Bunyavanich  
Andrew S. Chang  
Daniel L. Chen  
Michelle Chen  
Hyung-Jin Choi  
Deborah C. Chong  
Dawen Choy  
Jay H. Chyung  
Jacinta C. Conrad  
Viorica C. Cristian  
Jayatri Das  
Rhiju Das  
Shamik Das  
Samit Dasgupta  
Nina R. Daskalova  
Benjamin M. Davis  
Matt DeBergalis  
Illes J. Farkas  
Adrius Gaurilcikas  
Chad M. Gerson  
Benjamin M. Goetz  
Cristian A. Gonzalez  
Khaled O. Haggag  
Roger C. Han  
Nader M. Hariri  
Neil A. Hattangadi  
Terence W. Ho  
Jennifer E. Hoffman  
Kai-yuh E. Hsiao  
Chienlan Hsu-Hoffman  
Mark L. Huang  
Harrison Hung  
Curi H. Joanna Yun  
Peter Jung  
Tamer S. Kayal  
Jared A. Kesselheim  
Caleb Lee  
Joyce F. Liu  
Liudmila F. Malenovschi  
Shana E. McCormack  
Koan Mercer  
Sang-Min Oh  
Robert H. Olson  
Sei-Wei Ong  
Katherine A. Paur  
Sara A. Perry  
Mardi J. Pinkney  
Benjamin A. Rahn  
Michal Rewiński  
Aileen M. Richmond  
Umesh Shankar  
Jie Shen  
Rajeev N. Shenoy  
Raminta Shtuikyte  
Piotr W. Sniady  
Alison M. Snodgrass  
Mark A. Spencer  
Martin T. Stiaszny  
Borislav I. Stoyanov  
Nabil Tarraf-Kojok  
Minh Thai  
Dezso Varga  
Sam J. Waldman

Lauren K. Williams  
Kevin W. Wilson

## 1995

Chee Wee Ang  
Nils R. Barth  
Wes S. Beebee  
Saurabh Bhargava  
Meghana A. Bhatt  
Douglas J. Brown  
Allen Bryan  
Ugnius Bucinskas  
Francesca Y. Chang  
Ryan E. Dorris  
Malek El-Yaman  
Eric B. Ford  
Henry C. Fu  
Swiatoslaw R. Gal  
Mana Golzari  
Bruce M. Haggerty  
Douglas E. Heimburger  
Leslie Hsu  
Connie Ing  
Munir Javeri  
Anthony M. Johnson  
Gytis Karciauskas  
Joey A. Kimball  
Paulina S. Kuo  
Aram J. Lee  
Jimmy C. Liu  
Zhi H. Loh  
Jeff Lu  
David R. Manz  
Joyance Meechai  
Shishir S. Mehrotra  
Bassel Miari  
Daniel S. Morris  
Marcin I. Mucha  
Leah G. Nichols  
Lahav Nissim  
Jake Parrott  
Brian Patton  
Anand M. Prabhakar  
Kyle W. Pudenz  
Henry C. Quillen  
Ryan Radecki  
David Ratajczak  
Chandan Reddy  
Lori E. Rifkin  
Jocelyn M. Rodgers  
Christopher B. Roland  
Matthew F. Rose  
Angela C. Shiu  
Rachna D. Shroff  
Joseph E. Subotnik  
Tamara R. Suderman  
Anne K. Sung  
Junger Tang  
Anna R. Terry  
Mark J. Tilford  
Gilbert Tyan  
Svetla K. Tzenova  
Detelina V. Vasileva  
Jeffrey Wang

Luke Y. Wang  
Omar Zurkiya

## 1996

Shalini Agarwal  
Yael L. Alali  
Keabetswe Baipaakanyi  
Hristo V. Balavessov  
Lawrence Bleicher  
Andras Bodi  
Charles M. Casey  
Samidh Chakrabarti  
Emmanuel Chang  
Li-Chung Chen  
Gillian Chesney  
John Clyde  
Michael Colsher  
Elena Dicus  
Bistra N. Dilkina  
Stephanie Eucker  
Adam A. Friedman  
Nandini Gandhi  
Michael Gelfand  
Joshua Gewolb  
Yamini Howe  
Yong Hwang  
Amitha Jagannath-Knight  
Witek M. Jarnicki  
Janice Jin-Hwang  
Daniel Kaganovich  
Konstantin Kakaes  
Cheng H. Kee  
David Khoo  
Peter Kim  
Logan Kleinwaks  
Gina LaRossa  
Joey Liaw  
Ee T. Lim  
Charles Lin  
Tennyson Liu  
Thomas Matrai  
Adam G. Matthews  
Daves Maulik  
Ng Ming  
Piotr Mitros  
Gautam Mukunda  
Amol Navathe  
Josh P. Nichols-Barrer  
Tshenolo Nkwe  
Jessica Noffsinger  
Ying Pan  
Brenna Peterson-Rubio  
Eng Joo Phua  
Ryan Porter  
Lisa Powell  
Naomi Reece  
Adam P. Rycerz  
Shaumo Sadhukhan  
Brennan Sellner  
Jay Sengupta  
Patience Sethaba  
Jonathan Shapiro  
Colin Sindle  
Agnieszka Stachowiak

Adeline Tan  
Joseph Turian  
Jeffrey Viereggs  
Elizabeth Walker  
Dylan Weed  
Boris Zbarsky

## 1997

Salim Ahmed  
Joshua Bao  
Sanjay Basu  
Alok Bhushan  
Matthew Cain  
Amy Chang  
Andrew H. Chatham  
Jacqueline Choi  
Wee K. Chua  
Adrienne Clark Clough  
Robert Cooper  
Kirk Doran  
Julia Einbond  
David Farris  
Catherine Foo  
Eleanor Frajka-Williams  
Helena Fu Orlik  
Jennifer Garza  
Alexander Gelber  
Lianne Habinek  
Nicole Herschenhou  
Francis Ho  
Steve Hoberman  
Elizabeth J. Hong  
Calvin K. Huang  
Cindy Hwang  
Filip Ilievski  
Kong J. Kah  
Kendrick Kay  
Connie Kim  
Ralf Kittler  
Marton Kormos  
Lewis Kotredes  
Paul Laskowski  
Michael Y. Lee  
Sebastien Lion  
Helen G. Lo  
Romanos D. Malikiosis  
Kalina Manova  
Bryant Mathews  
Rebecca Mease  
Christopher C. Mihelich  
Eran Mukamel  
Jeff Ndivhuwo  
Athinodoros Panagiotidis  
Timothy Quek  
Kristin Nielsen Ray  
Goutam Reddy  
Karen Robinson  
Alison Rogers  
Tomasz Romanczukiewicz  
Marcin Rybak  
Firas Sammoura  
Travis Schedler  
Ella Schwartz-Nave  
Ravi Shah

# Research Science Institute Alumni

Sapan Shah  
Adrienne Shapiro  
Graham Sheldon  
Han S. Soo  
Karsten Sperling  
Laszlo Szenthe  
Carey Tanner  
Zaw Lynn Thet  
Mdivhuwo Tshikhudo  
Eugene van Rensburg  
Marina H. Voulova  
Andrew M. Wallace  
Emily Waters  
Jake Wildstrom  
Jonathan Y. Yu  
Corey Zehngebot

## 1998

Iris Ahronowitz  
Raag Airan  
Christopher J. Akerman  
Nancy Akerman  
Spyridon Antonakopoulos  
Denes Balatoni  
Ilya Baran  
Trevor Bass  
Judson Bowman  
David Bradley  
Michael Broxton  
Lisa Carlivati  
Justin T. Carroll  
Omari Carter-Thorpe  
Mingjun Chin  
Dave A. Chokshi  
Ann Marie Cody  
Paul Cook  
Richard Corley  
Anda Cornea-Hasengan  
Aidan Craig  
Frans David  
Christos Diaz  
Jeremy L. England  
Matthew Espy  
Dina Feith  
Piotr Fita  
Adrian Foo  
Mark C. Gebhard  
Delwyn H. Goh  
Christopher Guo  
Altay Guvench  
Daniel Haspel  
Lutz Heyne  
Alice Hsiung  
Jane James  
Camille M. Jeanneney  
Bonenfant  
Lavanya Krishnan  
Amy E. Laird  
Jean Lee  
Ryan Seungjoo Lee  
Agnes Li  
Fiona Loke  
Robbie Majzner  
Benjamin B. Mathews

Charles Mathis  
Nicola E. Maughan-Brown  
Neil Melville  
Ivan Merev  
Otsile Molalapata  
Sherwin Naidoo  
Kalin Nenov  
Chedza S. Ngada  
Yi-Ching Ong  
Kalani Oshiro  
Eftichios Pnevmatikakis  
Arthur S. Rallu  
Simon Roessner  
Mary Ross  
Daniel Roy  
Amit Sabharwal  
Isaac See  
Ben Silbermann  
Jan K. Skupien  
Hisham H. Sleem  
Robin Smith  
Neil Snyder  
Matthew Thrasher  
Aaron M. Tievsky  
Gayani Tillekeratne  
Natalia Toro  
Daniel Van Meter  
Balint Veto  
Eamon Walsh  
Kenneth Weinstein  
Shaffiq Welji  
James Whittle  
Ka-Lo Yeh  
Wenzheng Yeo  
Raul Zapata

## 1999

Jean-Claude N. Bassila  
Jordan Brayanov  
Benjamin Chen  
David Cheng  
Joshua Chong  
James E. Christie  
Alexander Clark  
Christopher Cueva  
Christopher Davis  
Rebecca H. Dezube  
Tejaswini Dhawale  
Michael G. Dimakos  
Niels Dreyer  
Kristen Ghattas  
Allison Gilmore  
Claire Gordy  
Charitha Gowda  
Christen Gray  
Ron Gross  
Owen G. Gwilliam  
Geza Herczegh  
Shaudi Hosseini  
Samuel Hsiung  
Jason Hsu  
Susan Huang  
Mai-Anh Huynh  
Mia Jackson

Hady K. Joumaa  
Irene Kim  
Robert M. Kotredes  
John Kulesza  
Soowhan Lah  
David Leung  
Loretta Li  
Percy Liang  
Amerson H. Lin  
Yuen-Jong Liu  
Dagny L. Looper  
Andras Mathe  
Yinkai Ouyang  
Rachana Oza  
Jennifer Powers  
Guillaume Rioult  
Viviana Risca  
Gabriel D. Rosenberg  
Peter Saldarriaga  
Anthony Scelfo  
Alexander B. Schwartz  
Sourav Sengupta  
Colette J. Shen  
Siddharth Shenai  
James P. Skelley  
Emma Smith Zbarsky  
Radoslaw Smolec  
Alexey Spiridonov  
Kartik Sreenivasan  
Taren K. Stinebrickner-Kauffman  
Zachary B. Stone  
Toi-Ngee Tan  
Wojciech Wasilewski  
Iris Wei  
Elizabeth Williams  
Youngeng Xu  
Woon-Teck Yap  
David Zhang  
Feng Zhang  
Linda Zhang  
Jinger Zhao

## 2000

Michael R. Areen  
Karim A. Arnaout  
Abigail T. Berman  
Amro Y. Bohsali  
Ahn-Vu Bui  
Sasen Cain  
Gabriel D. Carroll  
Andrew Chi  
Jason W. Chiu  
James C. Chuo  
Nathaniel J. Craig  
Elod Csirmaz  
Zane A. Curtis-Olsen  
Shaunak K. Deepak  
Lajos Deli  
Finale Doshi-Velez  
Matthew H. Drake  
Richard D. Eager  
Malak A. El-Rahi  
Michael Foeller  
Eleanor J. Fraser

Thomas G. Griffiths  
Stanislav N. Harizanov  
Heather C. Higgins  
Gary B. Huang  
Jeffrey B. Huang  
Lukasz Kaiser  
Emily A. Kendall  
Rafal Klajn  
Ekaterina V. Krasnenko  
Udhay Krishnan  
Ann Lai  
Carol S. Lee  
Douglas Levine  
Joline S. Lim  
Yong C. Lim  
Winston H. Lin  
Alvin L. Lin  
Cambrian Y. Liu  
Haley E. Lobland  
Huanqian Loh  
Yuran Lu  
Susan Mathai  
Karola Meszaros  
Yingting Mok  
Matthew S. Moon  
Malcolm E. Murdock  
Oanh T. Nguyen  
Jacqueline Ou  
Molly S. Peeples  
Galen E. Pickard  
Kelly E. Pratt  
Dominik Rabiej  
Melissa A. Radecki  
Brad M. Rosen  
Daniel S. Rosenbloom  
Rasheed Sabar  
Evan M. Schwartz  
Julia I. Silvestri  
Kejia Sun  
Aditya V. Sunderam  
Shiyi Teo  
Christine S. Tsai  
Loassis A. Tsoukalidis  
Florence Twu  
Kartik S. Venkatram  
Kenneth E. Walden  
Thomas L. Widland  
Yelena Yasinnik  
Jeremiah Y. Yu

## 2001

Rami Abdullah  
Christina L. Adams  
Lin Stella Ang  
Jacob Aptekar  
Jennifer S. Balakrishnan  
Arrak Bhattacharyya  
Jakub Byszewski  
Shan Cai  
Chee Wei Winston Chin  
Johann F. Cutiongco  
Guillaume Dangles  
Joshua S. Dezube  
Manal Dia

# Research Science Institute Alumni

Ronli P. Diakow  
Colin R. Dillard  
Heather M. El-Amamy  
Eleonora I. Encheva Andreeva  
William Fithian  
Jacob Fox  
Alexandra Fradkin  
Claudio D. Freire  
Thomas H. French  
Sheel C. Ganatra  
Josanna D. Haspel  
Gaelen T. Hess  
Jennifer H. Hou  
Susan Hu  
William L. Hwang  
Mark Kaganovich  
Natalie D. Karabel  
Colleen M. Kaul  
Grace Kenney  
Peter Kevei  
Ariel J. Kleiner  
Maithilee Kunda  
Amit Lakhanpal  
Kari K. Lee  
Michelle A. Lightfoot  
Meng Mao  
Jonathan A. Marcus  
Sean P. Markan  
Douglas T. McClure  
Michael J. Miller  
Shyh Chang Ng  
Zbigniew Pianowski  
Shou Yi Poon  
Alexander P. Power  
Gregory N. Price  
Zsolt Pszota  
Emily E. Riehl  
Drew E. Roberts  
Vinay F. Rodrigues  
Rebekah L. Rogers  
Jessie C. Rosenberg  
Natalie Saathoff  
Andrew R. Schwartz  
Benjamin M. Schwartz  
Kaloyan S. Slavov  
Siddharth Srivastava  
Konstantinos Stavropoulos  
Chun Ghee Tan  
Lispeth J. Tibbits-Nutt  
Nina Vasan  
Vivek Venkatachalam  
Thomas H. Willwacher  
Elizabeth B. Wood  
Miling Yan Harrington  
Kevin Yang  
David T. Yoshida  
Mohammad Zaatari  
Corinna Zygorakis

## 2002

Boris M. Alexeev  
Kapil Amarnath  
Lyudmil V. Antonov  
Hannah A. Arnson

Jared A. Bass  
Hans R. Borchardt  
Robert A. Bryant  
Steven J. Byrnes  
David A. Carr  
Allen B. Chao  
Sihui Sylvia Chen  
Christopher E. Cutler  
May Daher  
Parmita P. Dalal  
Walid Daou  
Lana S. Dbaiibo  
Adam de la Zerda  
Anand R. Dharan  
Cristina Domnisoru  
Songzi Du  
Eve P. Egelhof  
Jaline Gerardin  
Ben W. Glass  
Joshua D. Gottlieb  
Stephen D. Guo  
Andrea J. Hawksley  
Grant R. Howard  
Steven R. Howard  
Ronald D. Hsu  
Sheila Kannappan  
Angela E. Kilby  
Kevin Koo  
Yan Choi Lam  
Hng Wee Lee  
Evelyn Lilly  
Lester W. Mackey  
Karim Majzoub  
Melissa S. Makar  
Hermie Mendoza  
Eleanor A. Millman  
Soja-Marie C. Morgens  
Caitlin T. Mueller  
Konstantin H. Muller  
Kikhil S. Nadkarni  
Eric R. Nielsen  
Wee Ming Peh  
Dimitrios Pouloupoulos  
Anatoly Preygel  
Paul G. Puskarich  
Anna N. Rafferty  
Shachar Raindel  
Iva P. Rashkova  
Michelle Rengarajan  
Aidan J. Ross  
Caitlyn J. Ross  
Jamie E. Rubin  
Aleksander B. Sadowski  
Emma R. Schmidgall  
Kyra L. Sedransk  
Ying Qi Shirleen Soh  
Vidhya D. Srinivasan  
Heidi S. Stiehl  
Edward J. Su  
Carrie Y. Sun  
Vera L. te Velde  
Jacob E. Temme  
Tomasz M. Tyranowski  
Jiun Haur Wang

Zachary D. Wissner-Gross  
Jialing Xu  
Jennifer Yeh  
Oliver L. Yeh  
Yao Yu  
Yan X. Zhang

## 2003

Hachem Alaoui-Soce  
Hans E. Anderson  
Baris Aygoren  
Samer S. Bazzi  
Yee Ming Leslie Beh  
Victor Borzov  
Kyla L. Bye-Nagel  
Ann Cardona  
Can Cenik  
Yuyin (Allen) Chen  
Cynthia Chi  
Yong He Chong  
Jason Chu  
Karen L. Chu  
Michael Coulter  
Robert C. Crowell  
Yehya Darwiche  
Ellen M. De Obaldia  
Logan J. Dean  
Vesselin Dimitrov  
Lyric Doshi  
Timothy Ebdon  
Joumana El Jamal  
Julie N. Finkelstein  
David Galkowski  
Shantanu Gaur  
Delbert A. Green  
Lewis D. Hahn  
Qilei Hang  
Jonathan Hanover  
Michael Hell  
Timothy Hsiao  
Juliusz Jablecki  
Michael B. Jacokes  
Risa Kawai  
Jonas Ketterle  
Farah N. Khachab  
Todor Kolev  
Andrew P. Kositsky  
Nathan T. La Porte  
Min Wai Serene Lee  
Connie Leung  
Lisa Leung  
Jason Li  
Yu Xian Lim  
Hongwan Liu  
Tiankai Liu  
Amos Lubin  
Sarah J. Marks  
Kacey L. Meaker  
Patrick J. Mihelich  
Youssef Moussaoui  
Jennifer Nan  
Abdel-Azim Osman  
Oded T. Padon  
Sara Peek

Vishal M. Prabhu  
David A. Puckett  
Drew A. Reese  
Alec M. Resnick  
Jesse D. Rosenberg  
Ho Seung P. Ryu  
Arup Sarma  
Brianna Satinoff  
Mydassar Shahid  
John Shen  
Aditi Shrikumar-Muralidharan  
Ansam A. Sinjab-Fayed  
Robert Sinnott  
Rola Sleiman  
Tiap Ching Matthew Sng  
Marta M. Swierczynska  
Jie Tang  
Shane Treadway  
Peter P. Wang  
Shuyu Wang  
Jeremy Warshauer  
Linda B. Westrick  
Bobby Xu  
Jessica Yang  
Yen T. Yeh  
Ning Zhou

## 2004

Robin Abraham  
Szymon Acedanski  
Usman Ahmed  
Abdullah Almana  
Khaled Al-Rabe  
Xin Lin (Priscilla) Ang  
Shao Xian (Harold) Au  
Yael Ben-David  
Ahmad Berjaoui  
Shubha Bhat  
Ez-Zobair Bidine  
Madison Capps  
Marissa Cevallos  
Rohan Chabukswar  
Albert Chen  
Jason Chen  
Sisi Chen  
Yifei Chen  
Allen Cheng  
Debbie Chiang  
Hannah Chung  
Robert Cordwell  
Christina Dhanaraj  
Connemara Doran  
Omer Durak  
Hussein El-Bolbol  
Joline Fan  
Nickolas Fortino  
Genya Frenkel  
Andreas Galanis  
Jason Gonsalves  
Maxwell Grazier G'Sell  
Jiaqi Guo  
Jerry Guo  
Sarah Harrison  
Steven Hershman



# Research Science Institute Alumni

Wenxian Hong  
Camden Jansen  
Wei Ying Jen  
Lewis Jones  
Pooja Jotwani  
Stefan Kathman  
Hazem Khayat  
Mohammad Khderat  
Tyler Kieft  
Andrew Klein  
Johann Komander  
Scott Kominers  
Justin Komisarof  
Stephanie Kraft  
Michael Laues  
Samuel Lederer  
Shi Ling Leow  
John Lesieutre  
Randolph Li  
Da Lin  
Po-Ling Loh  
Grace Lu  
Dawn Mackey  
Paul Magyar  
Alan Malek  
Olga Mandelshtam  
Advay Mengle  
Caleb E. Ng  
Nghi Nguyen  
Xiaoyun (Eva) Nong  
Mark Norsworthy  
Christopher Palmer  
Richard Pang  
Eric Paniagua  
Renee Park  
Samuel Powell  
Eric Price  
Antoni Rangachev  
Christopher Reed  
Kimberly Reinhold  
Jacob Sanders  
Alex Schwendner  
Nicholas Semenkovich  
David Sheets  
Parth Sheth  
Alexander Simeonov  
Pawel Sledz  
Miranda Stewart  
David Stiebel  
Zuoyu Tao  
Dmitry Taubinsky  
Shriharsh Tendulkar  
Daniel Thai  
Zachary Travis  
Ryan Tsukamoto  
Kaya Tutuncuoglu  
Christopher Varenhorst  
Veena Venkatachalam  
Lynwood Walker  
William A. Webb  
Christopher Wulff  
Yuetian Xu  
David Yang  
Diana Ye

Owen Yeh  
Yue Ying  
Bruna Zacka  
Yu Zheng

## 2005

Zachary R. Abel  
Ashish Agrawal  
Abdulaziz Albahar  
Abdulaziz Al-Falih  
Laith M. Alkurdi  
Aditi Balakrishna  
Asilata A. Bapat  
Vivek Behera  
Tewfik R. Cassis  
Ezra Centinkaya  
Sarika Chandiramani  
Isabel Y. Chang  
Zheng Hao Chen  
Cindy Cheng  
Stephanie Cheng  
Elizabeth Cook  
Gregory A. Corkran  
Wang Dong  
Ann Du  
Patrick G. El-Hage  
Sara El-Shaker  
Zhou Fan  
Shiv M. Gaglani  
Arun Gupta  
Yang (Helen) Han  
Brett Harrison  
Kallie J. Hedberg  
Jennifer J. Huang  
Fatima-Ezzahra Izma  
Razan S. Jammal  
Umar Javed  
Ilyes Kamoun  
Elizabeth Kao  
Lubna M. Kayyali  
Nour Kibbi  
John Kim  
Veselin K. Kulev  
Gillianne Lai  
Winston W. Larson  
Sue Lin  
Daniel A. Litt  
Huan Liu  
Yangyang Liu  
Wen Xi (Aylwin) Low  
Anders Lundberg  
Fatma Luy  
Eric J. Maldonado  
Lisa M. Marrone  
Frederick McCollum  
Piotr K. Migdal  
Vinayak Muralidhar  
Jeff D. Nanney  
Mohammad H. Nsouli  
Shu Ren Sarah Ong  
Ryan G. Orley  
Hubert A. Orlik-Grzesik  
Yousef A. Osman  
Minas Pagonakis

Xin Pan  
Manisha Pandita  
Geeta Persad  
Vladislav Petkov  
Michael Pizer  
Nimish P. Ramanlal  
Raj Ranade  
Sukrit Ranjan  
Syed Raza  
Matthew Rognlie  
Ian Rousseau  
Peter Rusev  
Andrew Scacco  
Kimberly Scott  
Quentin E.J. Smith  
Justin Solomon  
Yi Sun  
Charles Tam  
Yi-Meng Tan  
Toan Tran-Phu  
Alice Tzeng  
Jason J. Uh  
Ameya Velingker  
Genevieve Williams  
Tsz Yeung (Emmett) Wong  
Hann-Shuin Yew  
Livia Zarnescu Yanez  
Luyi Zhao

## 2006

Khaled Al Turkestani  
Sultan T. Alkusayer  
Yazeed M. Alturki  
Xianyi Alex Ang  
Kyle R. Antonini  
Thilini Ariyawansa  
Karim F. Atiyeh  
Beatrice S. Bienvenu  
Todor A. Bilarev  
Megan Blewett  
Leif Bogen  
Kenneth Brewer  
Sophie Cai  
Melike Can  
Grayson L. Chadwick  
Nong Shin Amelia Chang  
Arhana Chattopadhyay  
Yiwei Chen  
Harrison I. Chen  
Robert E. Chen  
Radoslaw Chrapkiewicz  
David Crowell  
Caroline B. Drucker  
Sadika M. El Hariri  
Jeffrey A. Enderton  
Eren Eren Bolukbasi  
Marshall B. Everett  
Zachary Frankel  
David S. Greenberg  
Amardeep S. Grewal  
Adi Hajj-Ahmad  
Marie K. Herring  
Adam C. Hesterberg  
Keone Hon

Sarah L. Howell  
Susan C. Hu  
Kathy Y. Huang  
Nathan Keyes  
Jad A. Khalife  
Frances Y. Kim  
Fragkiskos Koufogiannis  
Prateek Kumar  
Daniel Langkilde  
Jason R. LaRue  
Brian Lawrence  
De Xian Lim  
Monica Lu  
Yifan Mai  
Frederick M. Mako  
Vladimir B. Marinov  
Mary Masterman  
Lauren M. McClain  
Matt McCutchen  
Sohan V. Mikkilineni  
Omar Mysore  
Soumya Netti  
Jie Rui Jezreel Ng  
Krzysztof Niemkiewicz  
Sin Hwee Ong  
Corina Oprescu  
Annie Ouyang  
Jiabei Pan  
Palak M. Patel  
Samira Rahman  
Vivek Raman  
Beth Schaffer  
Jing Wei Sim  
Karis R. Tang-Quan  
Nathaniel Thomas  
Vinay Tripuraneni  
Dmitry A. Vaintrob  
Emily L. Wang  
Jeffrey Wang  
Liang En Ian Wee  
Geoffrey Woo  
Yin Yin Wu  
Leah Y. Xue  
William J. Zeng  
Hai Zhou

## 2007

Hashim Akeel  
Mishari Albulushi  
Wael Alghamdi  
Kit Armstrong  
Utsav Bhat  
Vivek Bhattacharya  
Harrison Brown  
Sarah Brubaker  
Bilgehan Certel  
Christina Chang  
Alex Chen  
Jeff Chen  
Alexander Churchill  
Benjamin Dozier  
Myriam Zaia Fayad  
Yingyu Dan Gao  
Rawan Hakawati

# Research Science Institute Alumni

George Hansel  
Nathaniel Hipsman  
Kyla Horn  
Melody Hu  
Philip Hu  
Dina Kanaan  
Abdullah Kanee  
Or Katz  
Ryan Khanna  
Heejung Kim  
Edward Kogan  
Paul Kominers  
Swara Kopparty  
Boping Lai  
Gregory (Kang Ruey) Lau  
Justin (Wen Hao) Leong  
David Levary  
Vicky Li  
Spencer Liang  
Lauren Lisann  
Winston Luo  
Ana Lyons  
Fern McAllan  
Ping Fung Ng  
Zhi Guang Ng  
Nicole Nova  
Robert Obyrk  
Boyan Petrov  
Samantha Powers  
Ananth Ram  
Sana Raoof  
Nikolaos Rapanos  
Yasin Razlik  
David Rolnick  
Sanjay Saraf  
Cameron Shelton  
Andrew Shum  
Kailan Sierra-Davidson  
Ashutosh Singhal  
Tomasz Smolenski  
Emma Stromdahl  
Caroline Suen  
Jan-Niklas Tants  
Nikola Tchipev  
Joshua Thai  
Ben Topping  
Max Uhlenhuth  
Ada Undieh  
Andrew Wang  
Samantha (Shin Nee) Wong  
Yichao Xu  
Nancy Yang  
Anne Z. Ye  
David (Jianyang) Yin  
Qiaochu Yuan  
Laney K. Zamos  
Susan Zhang  
Emily Zhao  
Junliang Zhu  
Yu Tong Zhu  
Danny Zhu  
Christina Zou

## 2008

Abdulrahman M. AlBallaa  
Abdul Aziz K. AlKattan  
Hashem F. Al-Mahmoud  
Musleh O. Al-Zahrani  
Noah M. Arbesfeld  
Christine E. Ashton  
Yavuz C. Aslan  
Divya S. Bajekal  
Varoon K. Bashyakarla  
Diana Cai  
Daniel Chew Wen Chao  
Michael S. Cherkassky  
Bronwyn Cockburn  
Kristin R. Cordwell  
Mary C. Davies  
Joseph P. Dexter  
Sarah M. Don  
Miles D. Edwards  
Amhad El Sabeh Ayoun  
Emily Elhacham  
Katrina Evtimova  
Seth Gordon  
Burhan Gucmen  
Axel R. Hansen  
Lily L. Hsiang  
Sandy Huang  
Dalton Hubble  
Hyun-Sub Hwang  
Andrew P. Hyer  
Rafic M. Itani  
Jesper K. Jacobsen  
Mike Jin  
Yousef E. Khalaf  
Anna Kornakiewicz  
Alec C. Lai  
Nitish Lakhanpal  
Eric Larson  
Paul Lee  
David S. Levonian  
Patricia Z. Li  
Zane K. Li  
Xi Ao Tian Liew  
Jia Wei Lim  
Zhonglin Liu  
Youngwook Lyoo  
Mariana Mao  
Benjamin Mirabelli  
Vikram Nathan  
Michael Newman  
Christopher T. Olund  
Hao Yi Ong  
Dimitrios Papadimitriou  
Jay H. Patel  
Eliyahu Putterman  
Maxim Rabinovich  
David Richman  
Rajarshi Roy  
Adam Sealfon  
Sarah Shareef  
Alexander Sharp  
Jean Shiao  
Rohini Shivamoggi  
Rafal Sledziwski

Sang-Hun Song  
Janet Song  
Galin Statve  
Se-Young (Jenny) Sul  
Amy Tai  
Nilesh Tripuraneni  
Sujoy Tyle  
Daniel Vitek  
Anne Wang  
Jeanette Wat  
William Whitney  
Christopher Willson  
Brent Woodhouse  
Zhongyuan Zhang  
Inar Zhang  
Peter Zhang

## 2009

Bilge Zeren Aksu  
Abdulmohsen M. Al Belushi  
Abdulaziz K. Alghunaim  
Timothy B. Alsobrooks  
Marc Atiyeh  
Anjali Balakrishna  
Anirudha Balasubramanian  
Jade-Adonia Battello  
Ahmad Bayonis  
Michael Birk  
Anne V. Cai  
Martin A. Camacho  
John V. Capodilupo  
Jeffrey D. Chan  
Moyukh Chatterjee  
Lawrence Chiou  
Maesen A. Churchill  
Ian S. Cinnamon  
Robert J. Costa  
Shataakshi Dube  
Abdallah El-Bizri  
Yale W. Fan  
Helen R. Farrants  
Lina H. Fattah  
Ryan W. Gao  
Shannon M. Grammel  
Peter Hashaka  
Benjamin W. Horkley  
Jonathan Hung  
Jacob B. Hurwitz  
John Imbrie-Moore  
Aiman Jabaren  
Tian-Yi D. Jiang  
Nolan Kamitaki  
George G. Kerchev  
Carl E. Lawhon  
Benjamin Lei  
Yvette S. Leung  
Derrick Lewis  
Daniel Li  
Kathy S. Lin  
David C. Liu  
Jenny Lu  
Eric Manzi  
Pol Sopena Martinez  
Akhil Mathew

Husain Mogri  
Angel Nikolov  
Bersan Ozcan  
Dimitrios Pagonakis  
Arjun R. Puranik  
Sonika Reddy  
Katherine Rudolph  
Max R. Shayer  
Basel Shbita  
Anna K. Simpson  
Anubhav Sinha  
Lauren Stephens  
Jack Sul  
Anton Tarasenko  
Dennis Tseng  
Montserrat Pamies Vila  
Elizabeth Y. Wang  
Haojun Xu  
Iris Xu  
Lynnette L. Ye  
Ahmed A. Zarban  
Connie Zhong  
Mo Zhou

## 2010

Rohit Agrawal  
Majid Al-Beeshi  
Faisal Alshaker  
Mohammed Alsobay  
Jodi Balfe  
Abdullah Baras  
Akshai Baskaran  
Arjun Bhattacharya  
Ayesha Bose  
Kevin Burdge  
Christopher Cai  
Wenyu Cao  
Matthew Chang  
Fei Chen  
Lucy Chen  
Hong En Chew  
Jao-Ke Chin-Lee  
Daniel Comber-Todd  
Katharine Daly  
Anna Das  
Andrew Das Sarma  
Maria Eid  
Aubrey Faust  
Tristan Fitch  
Michael Fu  
Divya Garg  
Alexander Gilbert  
Jan Gong  
Tessa Green  
Victoria Gu  
Amita Gupta  
Christopher Guthrie  
Luke Hansen  
Edward "Kimo" Hon  
Kevin Hu  
Michael S. Hughes  
Mikael Ingemyr  
Sophie Janaskie  
Randy Jia



# Research Science Institute Alumni

Lili Jiang  
Samih Kabalane  
Steven Keyes  
Ahmad Khogeer  
Matthew Kilgore  
Se-Ho (Brian) Kim  
Benjamin Kraft  
Gary Lee  
Matthew Lee  
Yuri Lenskiy  
Tommy Liu  
Qin En Looi  
Adithya Murali  
Yukino Nagai  
Lynn Nehme  
Styliani Pantela  
Jordi Vila Perez  
Ofir Pupko  
Rafael Rafailov  
Laurie Rumker  
Hillary Ryan  
Amrit Saxena  
Gabriel See  
Jacob Shearer  
Jeffrey Shen  
Sara Sinno  
Xuan Tan  
Edward Vargas  
Katerina Velcheva  
Amruth Venkatraman  
David Ye  
Leon Zhang  
Aina Martinez Zurita

## 2011

Mariona Bandenas Agusti  
Rayan A. Al Rubaish  
Majd Alabandi  
Omar Alhadlaq  
Mohammed Almomtan  
Noora J. Al-Muftah  
Dennis H. Alp  
Stanislav Atanasov  
Sam Backwell  
Megan P. Belzner  
Meena Boppana  
Anni Cai  
Mohamad F. Chehab  
Ruitang Chen  
Rebecca S. Chen  
Sitan Chen  
Shirley Suet Leng Chin  
Clarisse Yen-His Chu  
Amy C. Chyao  
Jasper Danielson  
Anirudh Dasarathy  
Michelle R. Deng  
Sidharth Dhawan  
Shada Suheil Diab  
Swetha K. Doppalapudi  
Ghina M. El Sabbagh  
Whitney T. Gao  
Sami S. Ghoche  
Mahmoud M. Ghulman  
Marie-Elise Goetzke

Anthony V. Grebe  
Jiahe Gu  
Felipe Hernandez  
Kristina S. Hu  
Ali H. Hussain  
Annabel M. Imbrie-Moore  
Hadass Inbar  
Ryota Ishizuka  
Siddhartha G. Jena  
Changlin Ke  
Katherine M. Kem  
Jonece M. Layne  
Chia-Yu Liao  
James Lim  
Kay Yi Low  
Peter Y. Lu  
Michael S. Ma  
Andrew-Moussa A. Malek  
Eric L. Mannes  
Todor S. Markov  
Colin P. McDonnell  
Lukas L. Missik  
Chen Hui Ng  
Jessica Oehrlein  
Johannes Orstadius  
Roger J. Pellegrini  
Daniel A. Pollack  
Ramya Rangan  
Matthew Rauen  
Ivan Valencia Sanchez  
Rahul Shankar  
Abraham Shin  
Thomas S. Silver  
Adam H. Su  
Lynn Tan  
James J. Thomas  
Zacharias Tsampasidis  
Joe Wan  
Dominic Weiller  
Eloise M. Wheeler  
Albert Wu  
Hao Xing  
Xue (Lucy) Zhang  
Jeffrey Zhao  
Lisa Zheng

## 2012

Faisal Alhomidan  
Nawaf Alnaji  
Ibrahim Alsaffar  
Bennett Amodio  
Mariam Andersson  
Wajdy Awad  
Matthew Babbitt  
Surya Bhupatiraju  
Joshua Brakensiek  
Anna Broms  
Shyamal Buch  
Danielle Carrol  
Justin Carrus  
Karthik Chellamuthu  
Ava Chen  
Jason Chen  
Yimo Chen

Andrea Chew  
Amanda Choo  
Albert Chu  
Katherine Cordwell  
Taide Ding  
Ioana Dobre  
Connor Duffy  
Ola El Kebbi  
Kevin Garbe  
Simanta Gautam  
Gil Goldshlager  
Osama Hassan  
Johnny Ho  
Matt Hoogsteder  
Alex Huang  
Robert Jones  
Jonah Kallenbach  
Mohamed-Faisal Kassir  
Bryce Kaw-uh  
Lawrence Kim  
Gil-Ad Kishony  
Allan Ko  
Nathan Kondamuri  
Henry Lin  
Robert Mahari  
Matthew McDowell  
Jacob McNamara  
Dennis Alberto Mendoza-Solis  
Rachel Milam  
Paul Mitchell  
Jade Moon  
Arthi Narayanan  
Antoine Nasr  
Eulalia Nicolau  
Courtney Noh  
Zera Ong  
Charles Pasternak  
Kalina Petrova  
Or Sagy  
Naomi Shah  
Lilly Shen  
Maurice Shih  
Han Yung Sia  
Aradhana Sinha  
Caroline Snowden  
Valeria Staneva  
Sindy Tan  
Bartosz Tarnawski  
Devan Tisdale  
Karolina Trocka  
Mariela Villarreal Brito  
Sara Volz  
Michael Wallace  
Jennifer Walsh  
Maxwell Wang  
Rick Wong  
Catherine Wong  
Kaiyuan Yang  
Wan Qian Yang  
Kimberley Yu  
Cindy Zhao  
Kathleen Zhou  
Chenye Zhu  
Daniel Zuo

## 2013

Salam H. Al-Abdullatif  
Mohammed A. AlDajani  
Ebrahim Aljohani  
Jose Maria Amich Manero  
Lachlan Arthur  
Steven Ban  
Archis R. Bhandarkar  
Leigh Marie Braswell  
Phoebe Cai  
Ali Cakal  
Stanley J. Cen  
Evan Chen  
Steven W. Chen  
Jia Yi Joan Chew  
Molly Cinnamon  
Alexander Clark  
Jason S. Cui  
Mikolaj Cup  
Rumen R. Dangovski  
Jon Luca DeCaro  
Stephanie Ding  
Philip Frick  
Zijing "Michael" Gao  
Rim R. Ghadir  
Noa Glaser  
Lydia Goldberg  
Marcus V. Gomez  
Wassim F. Hage Chehade  
Helena Harris  
Qingyang "Annie" Hu  
Jinghui Huang  
Claudia Huang  
Ravi Jagadeesan  
Nishant Jain  
Nathanael Y. Ji  
Chloe J. Joray  
Yerin Kim  
Nikhil K. Kunapuli  
Frederick Lee  
Catherine Y. Li  
Jonathan Li  
Eric H. Li  
Kit Mark Lim  
Nicole T. Lim  
Tammy T. Lim  
Pawel Matryba  
Neel Mehta  
Fredric Moezinia  
Isabella M. Morgan  
Georgia E. Murray  
Tara Murty  
Gerard Orriols  
Rohil R. Prasad  
Rahi D. Punjabi  
Raj K. Raina  
Divya Ramakrishnan  
Elaine C. Reichert  
Keyuree K. Satam  
Mehmet Tugrul Savran  
Steven C. Schmatz  
Tarek F. Senjab  
Sarah L. Shader  
Jinglin Shan

# Research Science Institute Alumni

Eli Shayer  
Jessica Shi  
Rachit Singh  
Albert B. Soh  
Anand Srinivasan  
Bertrand A. Stone  
Nickolay E. Stoyanov  
Min Ji Suh  
Anna Thomas  
Rajet Vatsa  
Yuxing (Jocelyn) Wang  
Elisabeth A. Werner  
Chun Jie Wong  
Jon Y. Xia  
Jingjing Xiao  
Richard B. Yip

## 2014

Sally M. Akaoui  
Mara Al Jardali  
Abdulrahman Alhamdan  
Ali AlShehry  
Ersin Arioglu  
Niranjan Balachandar  
Szymon Baluszek  
Jordan T. Benjamin  
Ylvali Busch  
Michelle Campeau  
Helena Casademunt  
Andrew Chen  
Michael P. Connors  
Mingkai Deng  
Valerie Ding  
Zachary Effman  
Lochie Ferrier  
Enrico Fontana  
Kavish Gandhi  
Maya Ganesan  
Petar Gaydarov  
Berfin Gogercin  
Xin Rong Goh  
Noah Golowich  
Angela J. Gu  
Anvita Gupta  
Sarah B. Hamerling  
Christopher Hillenbrand  
Liu Hongzhan  
Nicholas M. Hougland  
Matthew Z. Huang  
Andrew C. Jin  
Jeewoo Kang  
Theodore R. Katz  
Lev H. Kendrick  
Shashwat Kishore  
Girish Kumar  
Kriti Lall  
Cheng Lu  
Jonathan Mackaman  
Yelena Mandelshtam  
Alexander Mayorov  
Heba Naffah  
Shyam Narayanan  
Lachlan Oberg  
Richard Ouyang

Dhaivat Pandya  
Gerard Pascual-Lopez  
Bovey Rao  
Ruchir Rastogi  
You Jin Reo  
Guifre Sanchez Serra  
Karan Sarat  
Luc Schnell  
Joshua Segaran  
Michael Shao  
Sola S. Shirai  
Emma Sloan  
Meera R. Srinivasan  
David W. Stoner  
Hristo Stoyanov  
Sofia M. Svensson  
Naomi S. Sweeting  
Farita Tasnim  
Peter Tian  
Fan Shuen Tseng  
Abhinav Venigalla  
Christopher L. Wang  
Jenny Wang  
Kelvin Wang  
Maxmilian A. Wei  
Chin Ying Wu  
Jessica Wu  
Shangzhou Xia  
David Xu  
Catherine Xue  
Daniel Yang  
Phillip Yu  
Dekel Z. Zeldov  
Ingrid Zhang  
Jesse T. Zhang  
Jiren Zhu  
Yazeed K. Zoabi

## 2015

Haneen R. Al Khalili  
Ahmed A. Albahhar  
Faisal Y. Alsalloum  
Khodr H. Badih  
Neehar M. Banerjee  
Matheus E. Batinga  
Haydn Bradstreet  
Victoria E. Buckland  
Claire B. Burch  
John Chapman A. Caddell  
Anthony L. Cheng  
Amy A. Chou  
Jonathan D. Chow  
Jake Cui  
Aya M. Daouk  
Disha Dasgupta  
Anne B. Davis  
Tony Ding  
Ramya A. Durvasula  
Baris Ekim  
Brandon R. Epstein  
Selena C. Feng  
Luana J. Ferreira  
Cher Ying Foo  
Sahaj Garg

Kristian G. Georgiev  
Pol Gomez Riquelme  
Thomas A. Graul  
Brian H. Gu  
Dylan H. Hendrickson  
Adrian E. Hindes  
Vivian Huang  
Meena Jagadeesan  
Ajay Jain  
Anirudh Jain  
Emily C. Jia  
Sule Kahraman  
Louie D. Kam  
Robert Q. Kao  
Yo-whan (John) Kim  
Liam B. Kimel  
Abijith Krishnan  
Allen J. Lee  
Brian J. Lee  
Paul S. Lee  
Jiaqi Li  
Christina Y. Li  
Wilbur Y. Li  
Olivia Y. Long  
Anton C. Moller  
Hoang-Thi Morselli  
Sarayu J. Narayan  
Nicole Odzer  
Marti Oller Riera  
Suzanne B. O'Meara  
David Oort Alonso  
Natalia M. Pacheco-Tallaj  
Marion W. Pang  
Jungyeon Park  
Amol D. Punjabi  
Yan Hsien Quah  
Sarvasva Raghuvanshi  
Sanjana J. Rane  
Uma Roy  
Mana Shams Latifi  
Ming Hui Melodies Sim  
Venkatesh S. Sivaraman  
Elijah B. Stanger-Jones  
Hristo S. Staykov  
Jerzy K. Szuniewicz  
Chuang K. Tang  
Jared A. Tramontano  
Sreya Vemuri  
Albert Z. Wang  
David H. Xiang  
Michelle D. Xu  
Xiangqi Yan  
Alexander Y. Yang  
Michael C. You  
Casey H. Zhang  
Kristine A. Zhang  
Yue Zhang  
David Y. Zhao

## 2016

Rakan Albarghouty  
Fares S. Alshehri  
Jessica Baral  
Alexandra A. Berg

Foster Birnbaum  
Naveena A. Bontha  
Pawel A. Burzynski  
Sichen (Shawn) Chao  
Benjamin Y. Chen  
Jenning N. Chen  
Clara-Ann Cheng  
Matthew J. Craigie  
Dhweeja Dasarathy  
Ashwin N. Datta  
Adithya Dattatri  
Angela Deng  
Rawan M. Diab  
Andy K. Dienes  
Tom J. Dienes  
Joshua Dong  
Lia G. Eggleston  
Ghina M. El Darazi  
Steven T. Elliott  
Joseph R. Feffer  
Tolson K. Frantzen  
Mihir T. Garimella  
River C. Grace  
Caleb He  
Chih Ying Ho  
Joel Jun Han Hong  
Seung Hyun Hong  
Yilin Huang  
Anis D. Ismail  
Dona-Maria R. Ivanova  
Krithika S. Iyer  
Morgan E. Kane  
Zeynep Karacan  
Dimitar N. Karev  
Ryan K. Kim  
Viney Kumar  
Jiwoo Lee  
Yuhua Lim  
Kathy F. Liu  
Magali Luna  
Raphael I. Mahari  
Gabriel L. Mintzer  
Marc Montalbo Burges  
Prathik Naidu  
Chen Lin Ng  
Jan Olivetti  
Adam A. Pahlavan  
Arundhati Pillai  
Omer R. Prives  
Kalyani Ramadurgam  
Asha Ramanujam  
Nolan M. Reilly  
Sonia M. Reilly  
Dhruv W. Rohatgi  
Berke Saat  
Nicolas R. San Miguel  
Kavita A. Selva  
Dina M. Shehata  
Nishita Sinha  
Adam B. Snowden  
Varsha R. Sridhar  
Aarohi Srivastava  
Avi Z. Swartz  
Chaoqun Tao

# Research Science Institute Alumni

Xuan Rong Thong  
Pranav A. Upadhyayula  
Sushil B. Upadhyayula  
Divya Vatsa  
Mukund Venkatakrishnan  
Elias W. Waagaard  
Anushka Walia  
Jeffrey M. Wang  
Jennifer R. Xiao  
Emily Z. Xie  
Helen J. Xu  
William Yin  
David Zhu

## 2017

Abdulelah S. Alkhamis  
Musab A. Almajnoui  
Mythri Ambatipudi  
Arushi Arora  
Sidhika Balachandar  
Salim Ballouz  
Matthew S. Bauer  
Ratip Emin Berker  
Sílvia Casacuberta  
Shrikant Chand  
Avi J. Cohen  
Arnob Das  
Rohan Deshpande  
Flavia Dumitrascu  
Amy Dunphy  
Michael A. Fein  
Elizabeth Fitzgerald  
Winston Fu  
Isabel O. Gallegos  
Samaksh A. Goyal  
Rami B. Hafez  
Ruobin Han  
Kylie Y. Hansen  
Oishi Hawlader  
Charley R. Hutchison  
Ivan D. Ivanov  
Rucha Joshi  
Keerthana Kasi  
Ga-eun Kim  
Anne L. Lee

Jordan J. Lee  
Anqi Li  
Johanna S. Lidholm  
Viktor K. Lövfors  
Sophia J. Luo  
Sydney L. Marler  
Joshua Marsh  
William F. McInroy  
Daniel Michael  
Begüm Ortaoglu  
Tanya I. Otsetarova  
Dhruvik S. Parikh  
Advait A. Patil  
Syamantak Payra  
Thanushi R. Peiris  
Alan E. Peng  
Indumathi Prakash  
Matthew Radovan  
Agnes S. Robang  
Joel Romero Hernández  
Julian A. Rubinfien  
Ghina H. Sabbagh  
Aleix Seguí  
Michelle C. Shen  
Harshal K. Sheth  
Isani Singh  
Erin Smith  
Daniel J. Stein  
Marissa Sumathipala  
Sophia Sun  
Timothy Tan  
Utkarsh Tandon  
Andrea Y. Teo  
Jacob Teo  
Grace M. Tian  
Michael N. Truell  
Grzegorz E. Uriasz  
Vinjai Vale  
Julius R. Vering  
Franklyn H. Wang  
George Wang  
Zoe Weiss  
David X. Wu  
YuQing Xie  
Michelle Yakubek  
Michael J. Yan

Karthik Yegnesh  
Qianqia Zhang  
Hannah H. Zhang

## 2018

Harshal Agrawal  
Zaid Albarghouty  
Yosef Alsuhailani  
Divya Amirtharaj  
Walker Anderson  
Sepehr Asgari  
Sebastian Baez  
Macinley Butson  
Anjali Chadha  
Yatin Chandar  
Anika Cheerla  
Alexander Cheng  
Jiwon Choi  
Naveen Durvasula  
Sean Elliott  
William Ellsworth  
Karen Ge  
Albert Gong  
Kayson Hansen  
Kaiying Hou  
Hazem Joueidi  
Chantal Kander  
Aknazar Kazhymurat  
Sarah Kennedy  
Hangyul Lyna Kim  
Jack Knickrehm  
Jonathan Ko  
Chavdar Lalov  
Simon Lam  
Jing Wesley Leong  
Lauren Li  
Qingfeng Li  
Aditi Limaye  
Benjamin Liu

Bowei Liu  
Gabrielle Liu  
Kevin Liu  
Jonathan Lu  
Anushka Nair  
Jing Ni Ng  
Hassan Osman  
Roshni Padhi  
Liam Parker  
Nikolaj Pashov  
Siona Prasad  
Tarun Prasad Murali Prasad  
Yuan Qui  
Sanjay Raman  
Eshika Saxena  
Rachel Seevers  
Shasvat Srivastava  
Rahul Subramaniam  
Vignesh Subramaniam  
Javen Yih Ruay Ran  
Matthew Tan  
Yong Yi Tan  
Faith Kai En Teo  
Evan Vogelbaum  
Anderson Walker  
William Wang  
Roshan Warman  
Catherine Wu  
Mason Xiao  
Charles Xu  
Guanpeng Xu  
Anusha Zaman  
Sara Zangi  
Nader Zantout  
Saba Zerefa  
Phyllis Zhang  
Howard Zhong  
Claire Zhou  
Alan Zhu  
Roanna Zou





# Research Science Institute

## Nations Reperesented at RSI

Albania	Italy	Romania
Argentina	Jamaica	Russia
Australia	Jordan	Rwanda
Bosnia & Herzegovina	Kazakhstan	Saudi Arabia
Botswana	Kuwait	Scotland
Bulgaria	Lebanon	Serbia
Canada	Lithuania	Singapore
Chile	Mexico	South Africa
Czech Republic	Montenegro	Spain
Egypt	Morocco	Sweden
France	Namibia	Switzerland
Germany	Pakistan	Taiwan
Greece	People's Republic of China	Thailand
Hungary	Phillipines	Turkey
India	Poland	United Kingdom
Ireland	Qatar	Venezuela
Israel	Republic of Korea	Vietnam

*"Sit down before fact with an open mind. Be prepared to give up every preconceived notion. Follow humbly wherever and to whatever abyss nature leads or you learn nothing. Don't push out figures when facts are going in the opposite direction."*  
- H.G. Rickover



# USA Biology Olympiad

The United States Biology Olympiad (USABO) began in 2002 and is a four-tier competition that demands the very best of students' biology knowledge. The top four students from this annual competition earn selection to Team USA for the International Biology Olympiad (IBO). The mission of the USABO is to encourage excellence in biology education throughout the United States and challenge students and their teachers to reach the gold standard in biology.

More than 80,000 high school students have participated in USABO since it was created. In 2018, nearly 10,000 students from 47 states registered to take the initial open exam, which is open to any U.S. high school biology student in a registered school. The top 10 percent of the Open Exam advance to take the Semifinal Exam and the top 20 semifinalists are selected to attend the USABO National Finals at the University of California San Diego.

The National Finals consists of two weeks of intensive theoretical and practical tutorials, where students work with leading biologists while residing on campus. At the conclusion, students take a Theoretical Exam and four Practical Exams to compete for one of the four places on Team USA.

Since 2003, each member of Team USA has medaled at the IBO, and on eight occasions each of the four team members has won a gold medal. The 2007, 2011 and 2013 teams were ranked No. 1 in the world. As with all CEE programs, USABO is free of cost to all participants.

USA  
BIOlympiad



# USA Biology Olympiad Finalists

## 2003

Kay Aull  
Yicheng Chen  
Mattie Fitch  
Elizabeth Fouts-Palmer  
Caitlin Golden  
Bradford Hargreaves  
Kelley Harris  
Allison Hoy  
Kristin Hughes  
Alina Iarve  
Si Hyun Kim  
Victor Li  
Robert Moffatt  
Maureen Murphy-Ryan  
Corinne Pender  
Hari Prabhakar  
Phillip Steindel  
Nakul Vyas  
Michael Xiang

## 2004

Kay Aull  
Mikhail Belyaev  
ZeNan Chang  
Adam Chmelynski  
Alexandra Denby  
Ruwan Gunaratne  
Clinton Hansen  
Steven Hao  
Bradford Hargreaves  
Kelley Harris  
Ryan Jamiolkowski  
Benjamin King  
Christopher Krueger  
Michael Oh  
Craig Schindewolf  
Wei Xie  
Larry Wang  
Jingyuan Wu  
Robin Zhou

## 2005

Megan Beems  
Parisa Chavoshi  
Grace Garcia  
Steven Hao  
Jonathan Kent  
Christopher Krueger  
Jessica Lacy  
Allen Lin  
Eric Mukherjee  
Michael Oh  
Corinne Pender  
Joseph Perla  
Craig Schindewolf  
Mary Schnoor  
Daniel Shanin  
Mark Shteyn  
Xiao Wei  
David Yang  
Zhengyang Zhang  
Bob Zheng  
Robin Zhou

## 2006

Jawon Breed  
Neeraj Edward  
Gerardo Flores  
Ylaine Gerardin  
Curtis Hansen  
Meng Xiao He  
Robert Hung  
Allen Lin  
Jimmy Ma  
Angelo Mao  
Jose Ordovas  
Kai Qiu  
Julia Rogers  
Abigail Schiff  
Andrew Shie  
Bing Xia  
Jessica Wang  
Victoria Wong  
Jason Wu  
Jiang Yio

## 2007

Alexandre Boulgakov  
Zachary Frankel  
YingYu Gao  
Francois Greer  
Yin-Zen (Johnny) Hwang  
Margarita Krivitski  
Meng Xiao He  
Ping He  
Jun Kim  
Seungsoo Kim  
Benjamin Lee  
Jonathan Liang  
Barry Liu  
Asad Moten  
Annie Ouyang  
Julia Rogers  
Andrew Shie  
Mark Shteyn  
Damon Wang  
Helen Yang  
Jingkun Yang

## 2008

Judy Baek  
Alexandre Boulgakov  
Jonathan Gootenberg  
Alexandra Hanin  
Winthrop Harvey  
Michael Hirshleifer  
Kenneth Hu  
David Huang  
Yunxin Jiao  
Seungsoo Kim  
Maria Krupenkin  
Yoonjoo Lee  
Jonathan Liang  
Surya Nagaraja  
Shu Pang  
Tingwei Tsai  
Katherine Xue

Lyndon Zhang  
Kaili Zhou  
Michael Zhu

## 2009

Judy Baek  
Erica Chung  
Marino Di Franco  
Jonathan Gootenberg  
Kuang Hua Guo  
Alexandra Hanin  
Winthrop Harvey  
David Huang  
David Huang  
Alvin Jeon  
Seungsoo Kim  
Maria Krupenkin  
Yang Li  
Jonathan Liang  
Eric Liaw  
David Park  
Antonia Rubell  
Rebecca Shi  
Sasha Targ  
Jeffrey Wang

## 2010

Charles Adelman  
Anthony Bishop  
Charles Du  
Zachary Gold  
Brendan Huang  
David Huang  
Russell Islam  
Son Le  
Niel Lebeck  
Gun Ho Lee  
Eric Liaw  
Joseph Park  
Hong Yang Sun  
Christina Tsai  
Debra Van Egeren  
Chelsea Voss  
Shulin Ye  
Andrew Yu  
Fred Yu  
Yuqing Zhang

## 2011

Alexander Brie  
Nikhil Buduma  
Angela Chen  
Lauren Chung  
Victoria Cui  
Lei Ding  
Charles Du  
Nhi Ho  
Audrey Huang  
Russell Islam  
Min Cheol Kim  
Dong Lim  
Jing Liu  
Jonathan Pan

David Shabsovich  
Rebecca Shi  
Chelsea Voss  
Jeffrey Wang  
Shulin Ye  
Fred Yu

## 2012

Dani Bork  
Nikhil Buduma  
Sitara Chapman  
Lei Ding  
Owen Gray  
James Ha  
David Hao  
Bryce Hwang  
Andrew Jiang  
Min Cheol Kim  
Jing Liu  
Kevin Ma  
Rachel Paris  
Oliver Sun  
Tejas Sundaresan  
Siddharth Trehan  
Hamilton Trinh  
Ray Wang  
Dominic Yurk  
Yuqing Zhang

## 2013

Kevin Bao  
Nikhil Buduma  
Bingfei Cao  
Sidharth Chand  
Raghu Dhara  
Lei Ding  
Katie Dunn  
Michael Gao  
Charles Gleason  
Bryce Hwang  
Eric Li  
Karen Li  
William Long  
Abhijit Mudigonda  
Janice Ong  
Christopher Radcliffe  
Siddharth Trehan  
Ray Wang  
Karen Wong  
Catherine Wu

## 2014

Samineni Anesh  
Kevin Bao  
Boyang (Peter) Dun  
Grace Chen  
Jeff Chow  
Yilun Du  
Michael Gao  
Siddharth Guha  
Erin Kim  
Ming Liu  
William Long

# USA Biology Olympiad Finalists

Peter Lu  
Peter Luo  
Varun Mangalick  
Abhijit Mudigonda  
Buduma Nithin  
Jackie Osaki  
Austin Wang  
Catherine Wu  
Yan Zhongxia

## 2015

Kevin Bao  
Marcello Chang  
Grace Chen  
Rowan Cheung  
Jordan Docter  
Yilun Du  
Boyang (Peter) Dun  
Michael Gao  
Siddarth Guha  
Roger Jin  
Erin Kim  
Jueun Lee  
Varun Mangalick  
Neeraj Prasad

Aneesh Samineni  
Kentaro Tanaka  
David Wu  
David Xu  
David Yang  
Maxwell Zhu

## 2016

Varkey Alumootil  
Boyang (Peter) Dun  
Haydn Bradstreet  
Nanki Chugh  
Roger Jin  
Bowen Jing  
Mihir Khambete  
Jasper Lee  
Rick Li  
Rachana Mudipalli  
Rahul Nagvekar  
Venkat Sankar  
Ashwin Srinivasan  
Alexander Tsao  
Catherine Wang  
Xuchen Wei  
David Wu

Thomas Xiong  
David Yang  
Jamie You

## 2017

Nithya Attaluri  
Prem Chintalapudi  
Nanki Chugh  
Charles Dai  
William Ellsworth  
Andrew Hennes  
Allen Huang  
Kartik Iyer  
Mihir Khambete  
Pranav Lalgudi  
Edward Lee  
Neeraj Prasad  
Alexander Tsao  
Jacob Umans  
Catherine Wang  
Xuchen Wei  
Daniel Wu  
Wenbo Wu  
Thomas Xiong  
Forest Yang

## 2018

Sabrina Cai  
Lucy Chen  
Allen Huang  
Charles Huang  
Bhav Jain  
Edward Lee  
Eugene Lee  
Derrick Liang  
Shree Mohan  
Atharv Oak  
Nithin Parsan  
Henry Shen  
Kimberly Shen  
Alexander Tsao  
Jessica Woo  
Wenbo Wu  
Helen Yang  
Jason Yang  
Jason Zhang  
Lucy Zou

*"The more you sweat in peace,  
the less you bleed in war."  
- H.G. Rickover*



# International Biology Olympiad

## Team USA 2003

### 2 Silver Medals, 2 Bronze Medals

Katherine Aull *Thomas Jefferson HS for Science and Technology, Alexandria, Va.*

Kelley Harris *McClatchey HS, Sacramento, Calif.*

Victor Li *Monta Vista HS, Cupertino, Calif.*

Michael Xiang *Bridgewater-Raritan HS, Bridgewater, N.J.*



## Team USA 2004

### 4 Gold Medals

Katherine Aull *Thomas Jefferson HS for Science and Technology, Alexandria, Va.*

ZeNan Chang *Santa Monica HS, Santa Monica, Calif.*

Clinton Hansen *Oneida HS, Oneida, N.Y.*

Bradford Hargreaves *Caddo Parish Magnet HS, Shreveport, La.*



## Team USA 2005

### 2 Gold Medals, 2 Silver Medals

Grace Eckhoff *Bellaire HS, Bellaire, Texas*

Steven Hao *Silver Creek HS, San Jose, Calif.*

Christopher Krueger *Smoky Hill HS, Aurora, Calif.*

Robin Zhou *Alhambra HS, Alhambra, Calif.*



## Team USA 2006

### 2 Gold Medals, 2 Silver Medals

Meng Xiao He *East Chapel Hill HS, East Chapel Hill, N.C.*

Jawon Lee *Torrey Pines HS, San Diego, Calif.*

Allen Lin *Holmdel HS, Holmdel, N.J.*

Jason Wu *Ladue Horton Watkins HS, St. Louis, Mo.*

## Team USA 2007

### 4 Gold Medals and #1 Team in the World

Meng Xiao He *East Chapel Hill HS, East Chapel Hill, N.C.*

Barry Liu, *State College Area HS, State College, Pa.*

Mark Shteyn *East Brunswick HS, East Brunswick, N.J.*

Helen Yang *Clarkstown South HS, New City, N.Y.*





# International Biology Olympiad



## **Team USA 2008 and 2009 4 Gold Medals Both Years**

Jonathan Gootenberg *Montgomery Blair HS, Rockville, Md.*  
David Huang *Charter School of Wilmington, Hockessin, Del.*  
Seungsoo Kim *Mountain View HS, Vancouver, Wash.*  
Jonathan Liang *Thomas S. Wootton HS, North Potomac, Md.*

## **Team USA 2010 3 Gold Medals, 1 Silver Medal**

Charles Du *University of Chicago  
Laboratory Schools, Chicago, Ill.*  
Eric Liaw *Punahou School, Honolulu, Hawaii*  
Debra Van Egeren *Detroit Country Day School,  
Beverly Hills, Mich.*  
Chelsea Voss *Cupertino HS, Cupertino, Calif.*



## **Team USA 2011**

### **4 Gold Medals and #1 Team in the World**

Charles Du *University of Chicago  
Laboratory Schools, Chicago, Ill.*  
Rebecca Shi *West Windsor-Plainsboro HS South,  
West Windsor, N.J.*  
Chelsea Voss *Cupertino HS, Cupertino, Calif.*  
Shulin Ye *Texas Academy of Mathematics  
and Science, Denton, Texas*

## **Team USA 2012 4 Gold Medals**

Nikhil Buduma *Bellarmino College  
Preparatory, San Jose, Calif.*  
Lei Ding *The Charter School of Wilmington, Wilmington, Del.*  
Jing Liu *Mission San Jose HS, Fremont, Calif.*  
Kevin Ma *East Brunswick HS, East Brunswick, N.J.*



## **Team USA 2013**

### **4 Gold Medals and #1 Team in the World**

Nikhil Buduma *Bellarmino College Preparatory, San Jose, Calif.*  
Lei Ding *The Charter School of Wilmington, Wilmington, Del.*  
Charles Gleason *Bergen County Academies, Hackensack, N.J.*  
Catherine Wu *Canyon Crest Academy, San Diego, Calif.*



# International Biology Olympiad

## Team USA 2014

### 3 Gold Medals, 1 Silver Medal

Yilun Du *Pullman HS, Pullman, Wash.*

William Long *Thomas Jefferson HS  
for Science and Technology, Alexandria, Va.*

Varun Mangalick *Mounds View HS, Arden Hills, Minn.*

Abhijit Mudigonda *Westview HS, Portland, Ore.*



## Team USA 2015

### 4 Gold Medals

Grace Chen *Bridgewater-Raritan HS, Bridgewater, N.J.*

Yilun Du *Pullman HS, Pullman, Wash.*

Boyang (Peter) Dun *Canterbury School, Fort Wayne, Ind.*

Varun Mangalick *Mounds View HS, Arden Hills, Minn.*



## Team USA 2016

### 3 Gold Medals, 1 Silver Medal

Varkey Alumootil *Canyon Crest Academy, San Diego, Calif.*

Boyang (Peter) Dun *Canterbury School, Fort Wayne, Ind.*

Bowen Jing *West Lafayette Junior-Senior HS,  
West Lafayette, Ind.*

Thomas Xiong *Seven Lakes HS, Katy, Texas*



## Team USA 2017

### 4 Gold Medals

Edward Lee *Liberal Arts and Science Academy, Austin, Texas*

Alexander Tsao *Troy HS, Fullerton, Calif.*

Thomas Xiong *Seven Lakes HS, Katy, Texas*

Catherine Wang *Lexington HS, Lexington, Mass.*



## Team USA 2018

Lucy Chen *Mounds View HS, Arden Hills, Minn.*

Allen Huang *Canyon Crest Academy, San Diego, Calif.*

Alexander Tsao *Troy HS, Fullerton, Calif.*

Jason Yang *West Windsor-Plainsboro HS North,  
Plainsboro Township, N.J.*

# Teacher Enrichment Program

The Teacher Enrichment Program helps to assure a future talented and diverse U.S. workforce in science, technology, engineering and mathematics (STEM) by providing opportunities for rural and urban middle and high school science teachers to connect with experts from industry and academia to explore cutting-edge research and make meaningful professional links with direct benefits for their students. Since it was launched in 2012, TEP has impacted more than 2,700 teachers and nearly 472,000 students by providing multiple opportunities for professional development:



Teacher  
Enrichment  
Program

- **Bite of Science:** An afterschool workshop bringing together middle and high school STEM teachers with scientists and/or engineers from industry, academia and/or government. Teachers learn about cutting edge research and innovation, how to connect the research to the classroom and discover ways to inspire and guide their students toward academic opportunities and STEM careers.
- **STEM Teacher Roundtables:** Forums connecting representatives from academic, industry, government and non-profit STEM organizations with teachers to create awareness of STEM career fields, the job skills required for the 21<sup>st</sup> century STEM worker and opportunities for teachers and their students to explore STEM subjects and career paths.
- **Lab Bench:** An interactive online resource providing access to Bite of Science and Teacher Roundtable presentations and videos, resources and low-cost activities related to Bite of Science topics, industry and teacher-contributed resources, and other helpful materials for the middle and high school STEM classroom.
- **Public/Private Partnerships:** An effort to connect companies, academic institutions, government agencies, and academic community groups with underserved teachers. TEP works to increase engagement of the STEM community with local schools to provide opportunities such as classroom speakers, mentorships, field trips, and additional resources for teachers and their students.

As with all CEE programs, TEP is free of cost to all participants selected to attend.





# Rickover Essay Competition

CEE's 35<sup>th</sup> Anniversary Rickover Committee recommended that a Rickover essay contest be developed to broaden understanding of the Admiral's many historic contributions in science, engineering and education.

The Center distributed essay guidelines to the Naval Service Training Command (NSTC), which oversees the nationwide NROTC and NJROTC programs. With the Navy's approval, NSTC leadership invited all 82 U.S. NROTC programs to participate. A total of 26 universities/consortia accepted the invitation, and 45 essays from NROTC midshipmen were submitted for review. Cash awards of \$500 for each winner were donated by Steve Strong, RSI '84.

CEE RSI and U.S. Naval Academy alumni on the Rickover Committee served as judges to determine the top three essays: Kent Churchill, Roger Horton, Pam Krah, Greg Meyer and John Stafford. Other committee members were Neil Todreas, Bill Becklean, Jack Cook, Mario Fiori, Charles Holloway, Morgan Kane and Admiral Bill Owens.

The Rickover Essay Competition was coordinated by Christopher Sedlock, CEE Vice President for Communications and Advancement. Check presentations will be made by the NROTC commanding officers of the winning entrants at the respective universities.

Following CEE's 35<sup>th</sup> Anniversary gala dinner, Michael Savageaux, CAPT, USN, Boston University Professor of Naval Science and MIT Visiting Professor of Naval Science, will communicate information regarding winning entries to awardees' commanding officers.



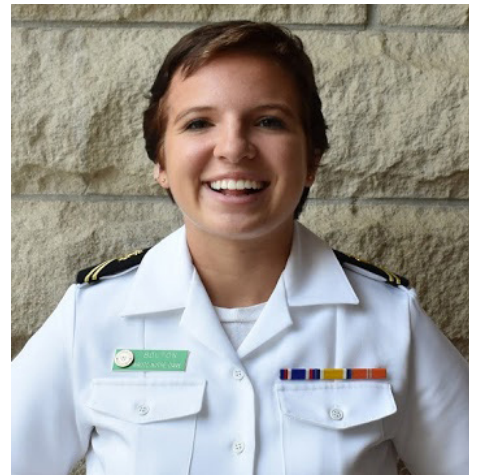
## **First Place**

Jason Alexander Bermudez,  
Officer Candidate  
NROTC State University of New York  
Maritime College  
Hometown: Bronx, N.Y.



## **Second Place**

MIDN Henry Roman 1/C  
NYC NROTC Battalion  
Hometown: Poughquag, N.Y.



## **Third Place**

MIDN Delany M. Bolton 2/C  
University of Notre Dame NROTC Unit  
Hometown: St. Augustine, Fla.



# Accolades and Honors

## **WATERMAN AWARD**

2008 – Terence Tao  
2014 – Feng Zhang

## **FIELDS MEDAL**

2006 – Terence Tao

## **SIMONS INVESTIGATORS**

2012 – Terence Tao  
2013 – Joel Moore,  
Kannan Soundararajan  
2015 – Christopher Skinner  
2017 – Shamit Kachru

## **RHODES SCHOLARS**

1986 – Gregory Gunn,  
Janice Hudgings  
1991 – Priya Aiyar  
1994 – Neil Hattangadi  
1995 – Anna Terry  
1997 – Sanjay Basu  
1998 – Dave Chokshi,  
Jeremy England  
1999 – Allison Gilmore  
2001 – William Hwang  
2006 – Zach Frankel

## **MACARTHUR AWARD**

2006 -- Terence Tao

## **BREAKTHROUGH PRIZE**

2015 -- Terence Tao

## **PUTNAM AWARD**

1987 -- John Tillinghast  
1993-94-95 -- Lenhard Ng  
1996 -- Daniel Schepler  
2000-01-02-03 -- Gabriel Carroll  
2007-08-10-11 -- Brian Lawrence  
2012 -- Eric Larson  
2014 -- Ravi Jagadeesan  
2016 -- Joshua Brakensiek  
2017 - David Stoner

## **MARSHALL SCHOLARS**

1985 – Jennifer Wu  
1986 – Michael Mitzenmacher

1990 – Aimee Crago  
1993 – Ramesh Johari, Joshua  
McDermott, Eric Sheu  
1994 – Rhiju Das  
1996 – Davesch Maulik  
2000 – Finale Doshi  
2002 – Emma Schmidgall  
2005 – Grace Eckhoff,  
Vinayak Muralidhar  
2006 – Nate Thomas  
2007 – Christina Chang  
2011 -- Allen Lin  
2015 – Felipe Hernandez  
2017 – Daniel Zuo

## **INTEL STS**

1985 -- Mark Kantrowitz (7<sup>th</sup>)  
1987 – Steven Racunas (6<sup>th</sup>)  
1989 – Christopher Skinner (1<sup>st</sup>)  
1991 – Ashley Reiter (1<sup>st</sup>),  
Dean Chung (4<sup>th</sup>)  
1992 – Michael Agney (3<sup>rd</sup>),  
Peter Khalifah (8<sup>th</sup>)  
1993 – Lenhard Ng (3<sup>rd</sup>)  
1994 – Robert Sarvis (4<sup>th</sup>)  
1995 – Martin Stiaszny (3<sup>rd</sup>),  
Samit Dasgupta (4<sup>th</sup>),  
Deborah Yeh (5<sup>th</sup>)  
1996 – Bruce Haggerty (4<sup>th</sup>)  
1997 – Davesch Maulik (4<sup>th</sup>)  
1998 – Christopher Mihelich (1<sup>st</sup>),  
Ravi Shah (2<sup>nd</sup>), Travis  
Schedler (5<sup>th</sup>)  
1999 – Natalia Toro (1<sup>st</sup>)  
2000 – Viviana Risca (1<sup>st</sup>), Feng  
Zhang (3<sup>rd</sup>), Sasha Schwartz (4<sup>th</sup>),  
Elizabeth Williams (8<sup>th</sup>)  
2001 – Nathaniel Craig (2<sup>nd</sup>),  
Gabriel Carroll (3<sup>rd</sup>)  
2002 – Jacob Licht (2<sup>nd</sup>),  
Emily Elizabeth Riehl (3<sup>rd</sup>),  
Vivek Venkatachalam (9<sup>th</sup>)  
2003 – Jamie Rubin (1<sup>st</sup>),  
Anatoly Preygel (3<sup>rd</sup>),  
Lester Mackey (6<sup>th</sup>),  
Emma Schmidgall (10<sup>th</sup>)  
2004 – Boris Alexeev (3<sup>rd</sup>),

Linda Westrick (4<sup>th</sup>),  
Qilei Hang (7<sup>th</sup>), Ann Chi (8<sup>th</sup>)  
2005 – Kelley Harris (3<sup>rd</sup>),  
Robert Cordwell (4<sup>th</sup>),  
Po-Ling Loh (10<sup>th</sup>)  
2006 – Yi Sun (2<sup>nd</sup>),  
Kimberly Scott (10<sup>th</sup>)  
2009 – Eric Kerner Larson (1<sup>st</sup>),  
Phillip Vidal Streich (3<sup>rd</sup>),  
Noah M. Arbesfeld (6<sup>th</sup>),  
Nilesh Tripuraneni (9<sup>th</sup>)  
2013 – Sara Volz (1<sup>st</sup>),  
Jonah Kallenbach (2<sup>nd</sup>)  
2014 – Anand Srinivsan (8<sup>th</sup>)  
2015 – Noah Golowich (1<sup>st</sup>),  
Andrew Jin (1<sup>st</sup>),  
Shashwat Kishore (3<sup>rd</sup>),  
Anvita Gupta (3<sup>rd</sup>),  
Catherine Li (3<sup>rd</sup>)  
2016 – Amol Punjabi (1<sup>st</sup>),  
Meena Jagadeesan (2<sup>nd</sup>)

## **REGENERON STS**

2016 – Prathik Naidu (7<sup>th</sup>)  
2017 – Isani Singh (3<sup>rd</sup>),  
Vinjai Vale (7<sup>th</sup>),  
Syamantak Payra (9<sup>th</sup>)

## **SIEMENS COMPETITION**

2003 – Steven Byrnes (1<sup>st</sup>)  
2004 – Linda Westrick (3<sup>rd</sup>)  
2005 – Po-Ling Loh (2<sup>nd</sup>)  
2006 – Luyi Zhao (5<sup>th</sup>)  
2007 – Dmitry Vaintrob (1<sup>st</sup>)  
2009 – Eric Kerner Larson (2<sup>nd</sup>)  
2010 – Lynelle Ye (2<sup>nd</sup>)  
2012 – Sitan Chen (3<sup>rd</sup>)  
2013 – Kavish Gandhi (2<sup>nd</sup>),  
Noah Golowich (2<sup>nd</sup>)  
2014 – Peter Tian (1<sup>st</sup>),  
Anvita Gupta (6<sup>th</sup>)  
2015 – Sanjana Rane (2<sup>nd</sup>),  
Andrew Chen (4<sup>th</sup>),  
David Zhu (5<sup>th</sup>)  
2016 – Anika Cheerla (2<sup>nd</sup>)  
2017 – Franklyn H. Wang (2<sup>nd</sup>),  
Gabrielle Liu (3<sup>rd</sup>)

*Excellence*

Center for Excellence in Education

**35<sup>TH</sup> ANNIVERSARY  
SPONSOR**



*Excellence*

Center for Excellence in Education

**35<sup>TH</sup> ANNIVERSARY  
SPONSOR**

 CITADEL

 CITADEL | Securities

*Excellence*

Center for Excellence in Education

**35<sup>TH</sup> ANNIVERSARY  
SPONSOR**

Claude Moore

CHARITABLE FOUNDATION



*Excellence*

Center for Excellence in Education

**35<sup>TH</sup> ANNIVERSARY  
SPONSOR**



*Excellence*

Center for Excellence in Education

**35<sup>TH</sup> ANNIVERSARY  
SPONSOR**

***REGENERON***

***SCIENCE TO MEDICINE®***

*Excellence*

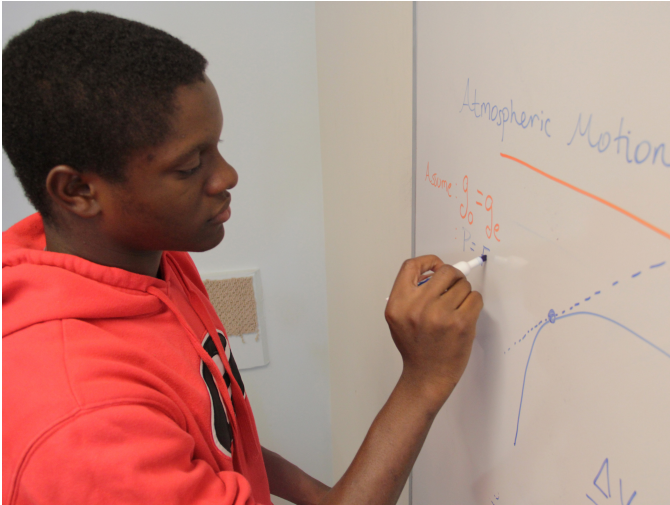
Center for Excellence in Education

**35<sup>TH</sup> ANNIVERSARY  
SPONSOR**



**TWO SIGMA**







*Excellence*

Center for Excellence in Education

**35<sup>TH</sup> ANNIVERSARY  
SPONSOR**



**GILEAD**

# **Center for Excellence in Education**

**8201 Greensboro Drive, Suite 215**

**McLean, VA 22012**

**(703) 448-9032**

**[www.CEE.org](http://www.CEE.org)**

***Creating Tomorrow's Leaders Today***