



# ARCS Foundation, Inc. 2016 Annual Report

FOSTERING SCIENTISTS WHO WILL CHANGE THE WORLD

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# ARCS MISSION

ARCS<sup>®</sup> Foundation advances science and technology in the United States by providing financial awards to academically outstanding U.S. citizens studying to complete degrees in science, engineering, and medical research.

### **ON THE COVER**

**Reid Messersmith** ARCS Metro Washington Scholar. The Johns Hopkins University, Medicine and Integrative Cell Biology

#### Maggie Johnson

ARCS San Diego Scholar, University of California at San Diego, Marine Biology, Scripps Institution of Oceanography, Geology/Earth Science

#### **Brigid Meints**

ARCS Seattle Scholar. Washington State University, Crop and Soil Science

#### Nicholas Pannunzio

ARCS Los Angeles Scholar, University of Southern California, Norris Comprehensive Cancer Center, DNA Repair and Chromosome Instability

"I am truly grateful to be an ARCS Scholar. In times like these, when government funding is scarce, organizations like ARCS are crucial for scientific progress."

Nicholas Pannunzio



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# This was a year for celebrating our achievements and for embarking upon bold changes to assure a bright and sustainable future.

This 2015–16 annual report tells the story of ARCS Foundation's impact during the past year and since its founding in facts and figures. Even more important is the impact of discoveries and innovations made by more than 9,500 ARCS Scholars, and in this report, you will meet many of them from our chapters across the nation.

We are proud that 2016 marked a milestone of cumulative scholar funding in excess of \$100 million. This achievement resulted from the hard work of our dedicated members and inspires our collective efforts to advance science in America.

At its June 2016 meeting, the Board of Directors approved a new strategic plan that builds upon ARCS Foundation's strengths and addresses its challenges. The five-year strategic plan has the following goals:

- Increase our impact on scholars,

This plan is for the entire ARCS Foundation enterprise and will achieve organizational changes designed to support greater fundraising to benefit our scholars and our operations. It will increase visibility of our mission, grow membership, and boost engagement. ARCS Foundation will continue to be an all-volunteer organization of women leaders, with the assistance of an association management company so that our leaders and members may continue to focus upon our esteemed academic partners and our ARCS Scholars.

During our discussions about increasing our impact on our ARCS Scholars, one shared theme emerged-our relationship with our ARCS Scholars does not end upon the granting of a degree. Our members seek to have a life-long relationship with ARCS Scholars, to celebrate their triumphs and to provide opportunities for continuing scholar engagement with ARCS and with each other as mentors, colleagues, and friends.

We have exciting and bold plans for the future built upon a strong foundation of past success-much like our scholars-as we all strive to advance science in America.

Sincerely, Lynne M. O. Brickner

Jore M.O Buchn



• Retain and attract community leaders to our membership, and

Build our capacity for success and financial sustainability.

# 2015-2016 BOARD OFFICERS & DIRECTORS LEADING THE WAY

# Officers



Lynne Brickner<sup>1</sup> President LOS ANGELES/UTAH



Roulhac Austin<sup>1</sup> VP Chapter Relations NORTHERN CALIFORNIA



Nancy Chambers<sup>1, 2</sup> VP Communications ATLANTA

Sherry Lundeen<sup>1,5</sup>

**VP** Finance

ATLANTA



Yolanda Walther-Meade<sup>1</sup> VP Membership LOS ANGELES/SAN DIEGO



Diana Alexander<sup>1</sup> VP New Chapter Development METRO WASHINGTON/PHOENIX





Carol Stockman<sup>1</sup> VP University Relations PITTSBURGH





METRO WASHINGTON

Anna Maria Matteucci<sup>1</sup> Treasurer PHOENIX



Nancy Spetzler Immediate Past President PHOENIX

### Directors

Jeanne Berdik Director PITTSBURGH/PORTLAND

Ann Brown Chair. Fund Development COLORADO

Christy Burton<sup>2</sup> Director PHOENIX

Patsy Caruso Chair, 2015 All Member Conference ILLINOIS

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Eileen Haga Chair, Audit PHOENIX

Sue Harter Chair. Administration PITTSBURGH

Jackie Henson<sup>4</sup> Chair, Governance METRO WASHINGTON

Ronnie Martin Chair, Evaluation ATLANTA

### STANDING COMMITTEES

<sup>1</sup>Executive <sup>2</sup>Audit Committee Committee Member Member

<sup>3</sup>Governance Committee Member

<sup>4</sup>National Affiliation Committee Member

Margaret McGann<sup>3</sup>

Director

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Judith Miller<sup>5</sup>

LOS ANGELES/UTAH

**METRO WASHINGTON** 

Angela Phillips-Diaz

**METRO WASHINGTON** 

Chair, National Newsletter

Chair, National Board Meetings

METRO WASHINGTON/ATLANTA

<sup>5</sup>National Endowment Fund Committee Member

# Council of Advisors (all non-voting except Chair)

Donna Casey, Chair <sup>1,3,4,5</sup>	Debbie Liss	S
NORTHERN CALIFORNIA	ATLANTA	C
Mary Davis	Sandra Matteucci	B
LOS ANGELES	PHOENIX	P
Cecelia Foxley UTAH	Mary Snitch ATLANTA	
Vicki Glant	Lynne Sonntag	

PHOENIX

### Chapter Presidents (Each chapter president is also a director of the national board.)



SEATTLE

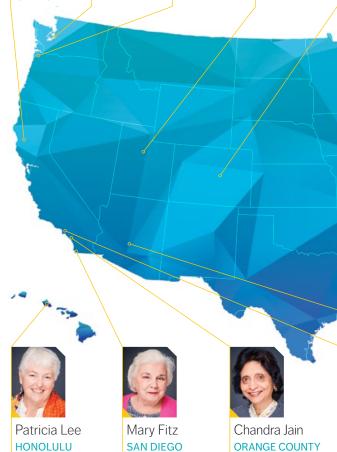




Susan Marcia Mooradian Lewis NORTHERN SEATTLE CALIFORNIA

Joan Foley OREGON

Laura Springhetti<sup>4</sup> UTAH



Shirleen Tucker COLORADO

Beth Wainwright PITTSBURGH





Penny Papadopoulos PHOENIX



# ADVANCING SCIENCE IN FY 2015-16: MILESTONES & ACCOMPLISHMENTS

Cumulative ARCS Awards bestowed on ARCS Scholars surpassed \$100 million in funding.

Expanded fund raising with first online giving campaign drawing contributions for chapters and national support.

ARCS Seattle Chapter surpassed \$15 million in cumulative scholar award funding.

**ARCS All-Members Conference** was held in Chicago where connections with scholars, advisors, academic partners, and members from across the nation were strengthened.



A unified **long-range strategic plan** for the entire enterprise was approved by ARCS National Board of Directors.

**ARCS** Colorado Chapter celebrated its 40th anniversary. having awarded more than \$3.7 million to 495 ARCS Scholars since its founding in 1976.

First ARCS Foundation annual report was produced, thanks to the Burton Communications Grant.

Redesigned ARCS Scholar pin was introduced and made available to all ARCS Scholar Alumni.

ARCS Foundation Oregon received the 2015 Outstanding Philanthropic Foundation Award from the Association of Fundraising Professionals.

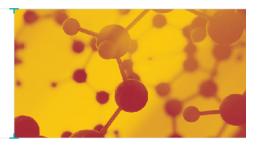
Roche/ARCS Scholars Kunal Parikh and Louis N. Schoettle participated alongside 100 of the world's top scientists in a prestigious Roche symposium, "Increasing Drug Development Success.

Important advances to increase ARCS awareness and chapter support were made possible by a two-year \$50,000 communications grant from Burton Family Foundation.

ARCS Scholar Alumni, Stephen M. Lichten, Ph.D. and Jeanne VanBriesen, Ph.D., P.E., were inducted into the ARCS Alumni Hall of Fame in recognition of their outstanding contributions to the advancement of science.

Four chapters received ARCS National approval for funding at six new, toprated programs at current academic partner institutions.

**ARCS** Foundation National increased its support of chapters by widening the scope of educational webinars for chapter volunteers and leaders.



ARCS Portland Chapter expanded its emphasis statewide and thus chose to be known as ARCS Foundation Oregon.

# MORE THAN 50 YEARS OF SCIENTIFIC INVESTMENT

Founded Awards\* 1958 16,601

Scholars\* 9,572

### IMPACT ON SCIENCE

ARCS Scholar Alumni make significant contributions in:



RESEARCH Publications, presentations, large-scale grants



# ECONOMIC DEVELOPMENT

Founding science-related companies



### INNOVATION

Acknowledged by significant scientific awards and patents



### **BUILDING THE** STEM PIPELINE

Teaching, mentoring K-12



# **ENDOWMENT BALANCES**

NATIONAL ENDOWMENT FUND (for operating expenses)



(as of June 30, 2015









Amount of Scholar Awards \$4,792,269

# OUR NATIONAL REACH









COMBINED CHAPTER ENDOWMENTS (for future Scholar Awards and operating expenses)



### IMPACT ON SCHOLAR **EDUCATION**

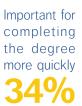








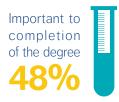














# SCIENTISTS WHO WILL CHANGE THE WORLD: OUR SCHOLARS

Single-minded focus, sharp intellect, years of hard work and sacrifice, strict discipline, and profound commitment to scientific exploration-these are the characteristics of scientists who will lead us to a better future. Hundreds of them are current ARCS Scholars, poised to make the discoveries that will lead to U.S. scientific progress, global competitiveness, and national security.



ARCS Foundation was established in 1958 to support these individuals, many of whom face extremely limited options to fund their work and living expenses. We've funded almost ten thousand of them since our founding and many continue to contribute-innovating, founding companies, and publishing groundbreaking research. Their work drives economic growth, our ability to compete, and the discoveries that lead to a better quality of life.

DEVON ANDERSON, ARCS Oregon Scholar, studies biomedical engineering at Oregon Health & Science University. He is working on a new treatment for osteoarthritis and joint damage.

# Guiding Principles for Scholar Awards

To ensure contributions make the strongest possible impact, ARCS Foundation follows strict standards:

- 100% of all contributions to scholar awards go directly to scholars.
- Scholars must be U.S. citizens, enrolled full-time, with a GPA of 3.5 or higher, and majoring in fields of science, engineering, or medical research.
- ARCS Scholars are selected by ARCS academic partner universities, which are approved by ARCS National Board on the basis of excellence in science, engineering, mathematics, or medical research.

### Areas of Study

**AERONAUTICS** AGRICULTURE ASTRONAUTICS ASTRONOMY ATMOSPHERIC SCIENCES BIOLOGY BOTANY CHEMISTRY COMPUTER/ INFORMATION SCIENCE DENTISTRY ECOLOGY ENGINEERING ENTOMOLOGY ENVIRONMENTAL STUDIES EPIDEMIOLOGY **FISHERIES** FOOD SCIENCE & NUTRITION FORESTRY GENETICS GEOLOGY IMMUNOLOGY MATHEMATICS MEDICINE MD/PHD & MSTP NEUROSCIENCE NURSING OCEANOGRAPHY PHARMACOLOGY PHYSICS PUBLIC HEALTH RANGE MANAGEMENT SPACE SCIENCE STATISTICS VETERINARY MEDICINE WILDLIFE MANAGEMENT ZOOLOGY

PETER FIRTH, ARCS Phoenix Scholar, studies nanoparticle coatings at Arizona State University. These coatings are deposited on textiles to make antibacterial fabrics, on solar cells to improve efficiency. and are the critical component of today's ultra-high definition displays.

"ARCS Foundation's award allowed me to transform my research into a business, paying for travel to meet with clients and investors. and for purchase of critical equipment."





"Thanks to ARCS Foundation. I'm able to submit a publication on my research and attend an international conference. enabling me to share my work more widely, learn about the latest developments in my field, and advance my thinking."

MICHELLE CHEN, ARCS San Diego Scholar, studies structural engineering at the University of California at San Diego. Her focus is on seismic technology that helps protect buildings during earthquakes.



# MAKING DISCOVERIES: OUR ALUMNI

Thousands of ARCS Alumni go on after graduation to make outstanding contributions to the advancement of science and to our nation's competitiveness. As evidence of ARCS Foundation's impact, alumni develop new therapies, secure patents for important technology, start innovative companies, become national science leaders, and push discovery forward.

# Honoring ARCS Alumni

Among this exceptional group are alumni to whom ARCS Foundation pays the highest tribute with induction into our Alumni Hall of Fame. Inductees have distinguished themselves by demonstrating leadership in one or more of the following areas:

- Scientific innovation and discovery
- Recognition by peers
- Mentoring future scientists to fill the STEM pipeline
- Founding or leading an organization that has had significant impact on the U.S. economy
- Increasing awareness of the importance of national scientific competitiveness

Dr. Lichten (2nd from left) with other JPL managers in front of one of NASA's 70-meter communications and tracking antennas at the NASA Deep Space tracking complex at Goldstone, California.

"Knowing that an organization like ARCS recognized my potential and now wants to reward the years of effort I have put into science has strengthened my resolve to work on critical problems and make a difference in the world."

# 2016 ARCS ALUMNI HALL OF FAME



- Duguesne Light Company Professor of Civil and Environmental Engineering and Director of the Center for Water Quality in Urban Environmental Systems (WaterQUEST) at Carnegie Mellon University
- Recognized expert in water policy, water sustainability, and biogeochemistry in drinking water
- ARCS Alumni Scholar at Northwestern University, from 1992–1997, sponsored by Illinois Chapter

Dr. VanBriesen believes engineers should be leaders across all segments of society and her contributions bear that out. A teacher, mentor, and innovator, she has conducted important research on water quality that impacts local, state, national, and international policy and engineering practices, work that has been funded by the National Science Foundation and the Department of Defense. She is devoted to supporting the next generation of engineers-especially women-and is a founding member of ARCS Pittsburgh Chapter. She is a member of numerous boards, including the Environmental Protection Agency Science Advisory Board.

"The ARCS award was very impactful for me, as my financial resources were quite limited at the time. ARCS is a wonderful organization that helps students and early career individuals when they need it most. I am very grateful to ARCS for this support."



# Stephen M. Lichten, Ph.D.

- Leads NASA Jet Propulsion Laboratory's (JPL) Communication, Tracking, and Radar Division
- Led development of JPL's most successful commercialization— Global Positioning System (GPS) technology for aircraft navigation
- ARCS Alumni Scholar at California Institute of Technology, 1981 and 1983, sponsored by Los Angeles Chapter

The GPS relied on by the Federal Aviation Administration (FAA) today to ensure reliability and accuracy of aircraft navigation is available thanks to Dr. Lichten's contributions. As leader of the team that determined Earth satellite orbits to better than one centimeter accuracy, he enabled the delivery of GPS software to the FAA, one of the most successful JPL commercialization efforts ever. Today, he leads a division of 550 engineers and scientists that provide scientific and technological expertise to NASA's JPL for deep space and planetary communications and navigational tracking. Dr. Lichten holds four patents and is a member of the Space Technology Hall of Fame.

# **BUILDING THE STEM PIPELINE:** ACADEMIC PARTNERS

A new cure for a disease or an innovative new technology is always a big story, but what's rarely reported is the critical work that led to these discoveries-basic research.

This is the research on which our scientific solutions and technology wonders are built, and it takes time, constant pursuit, and a collaborative, supportive environment.

Unfortunately, our government has steadily reduced its support for basic research at U.S. colleges and universities.

This is where ARCS Foundation steps in to fill the gap. For more than 50 years, we have partnered with U.S. universities whose science, technology, engineering, and mathematics departments are ranked in the top 50 in the country.



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Universitie

### "Johns Hopkins is truly grateful to ARCS Foundation for nearly 50 years of support to our outstanding doctoral scholars engaged

in basic research. In this challenging funding environment, your awards are more important than ever to allow these young investigators to pursue novel research at a crucial time in their careers."

Ronald J. Daniels President, The Johns Hopkins University

# **ARCS** Foundation Welcomes its Newest Approved Programs

#### Now Approved for Funding:

#### Georgia Institute of Technology

- School of Chemistry and Biochemistry in the College of Sciences
- School of Physics in the College of Sciences

#### The Johns Hopkins University

Molecular Microbiology and Immunology in the Bloomberg School of Public Health

#### Oregon State University

- Department of Geology in the College of Earth. Ocean. and Atmospheric Sciences
- Department of Pharmaceutical Sciences in the College of Pharmacy

#### University of California at San Francisco

Department of Epidemiology and Biostatistics in the School of Medicine and Graduate Division

> University of Colorado at Boulder University of Colorado at Colorado Springs University of Illinois at Urbana-Champaign

# "The Roche/ARCS Foundation award helps mitigate the financial stress that often comes with graduate school and will allow me to attend an international conference in my field. Most importantly, however, it's provided a framework that encourages the sharing of ideas with a diverse and exciting group of scientists."

AMY HAUCK, Minnesota Roche/ARCS Scholar, Department of Molecular Biology, Biochemistry, and Biophysics, University of Minnesota is studying the molecular mechanisms that may help slow or prevent the development of insulin resistance in obesity and diabetes.

related challenges to our nation's future

attracting high-value economic activity into the U.S.

# ARCS Science & Engineering Advisory Council

ARCS Foundation looks to its Science & Engineering Advisory Council, composed of national leaders in government, industry, and academia, for guidance on future advances in science and STEM education.



Angela Phillips Diaz SEAC Chair, Exec. Director, Govt. Research Relations UNIVERSITY OF CALIFORNIA AT SAN DIEGO

Dr. Norma Allewell Professor of Cell Biology and Molecular Genetics UNIVERSITY OF MARYLAND

Howard J. Bruschi Retired, Senior Vice President and Chief Technology Officer WESTINGHOUSE ELECTRIC COMPANY

Chad Evans Executive Vice President COUNCIL ON COMPETITIVENESS

Dr. Lennard A. Fisk Thomas M. Donahue Distinguished University Professor of Space Science UNIVERSITY OF MICHIGAN

Dr. Karin Hollerbach CEO

**TAKU GROUP** 

Dr. Steven E. Koonin Director, Center for Urban Science and Progress NEW YORK UNIVERSITY

ffiliated

California Institute of Technology Carnegie Mellon University Colorado School of Mines Colorado State University Emory University Georgetown University Georgia Institute of Technology Harvey Mudd College Illinois Institute of Technology Loyola University Morehouse College Northern Arizona University Northwestern University Oregon Health & Science University Oregon State University

Arizona State University

San Diego State University San Francisco State University Stanford University The George Washington University The Johns Hopkins University The Pennsylvania State University The Scripps Research Institute University of Arizona University of California at Berkeley University of California at Davis University of California at Irvine University of California at Los Angeles University of California at San Diego University of California at San Francisco University of California at Santa Cruz University of Chicago University of Colorado Anschutz Medical Campus

University of Colorado at Denver University of Georgia University of Hawai'i at Mānoa University of Maryland University of Minnesota University of Oregon University of Pittsburgh University of San Diego University of South Florida University of Southern California University of Utah University of Virginia University of Washington Washington State University

# Pomona College

WWW.ARCSFOUNDATION.ORG

# STRENGTHENING U.S. GLOBAL COMPETITIVENESS: OUR INDUSTRY PARTNERS

# ARCS Foundation works closely with corporate and trade organizations to address STEM-

The Council on Competitiveness invited ARCS Foundation to become an affiliate member in 2015. The organization brings together business, labor, academic, and government leaders in the work of

#### The Roche/ARCS Foundation Scholar Award Program in the

Life Sciences is in its second of three years. It is a partnership between ARCS and The Roche Foundation to grant \$805,500 to 36 scholars who will be this generation's life science originators and inventors.

#### Roche/ARCS Program AT A GLANCE

- 36 scholars
- Studying in 16 regions
- 25 universities
- 17 fields of study
- 183 publications and presentations
- 102 grants (other than ARCS)
- \$251,000 2nd year funding
- \$519,500 cumulative program funding
- 56% of awardees female; 44% male



Martin Kress Assistant Vice President for Research THE OHIO STATE UNIVERSITY

Margaret Niver McGann SEAC Secretary, Shareholder PARSONS. BEHLE & LATIMER

> Dr. Irene McGee HSEQ NAFTA and Regional Technical Services COVESTRO LLC

Dr. Norine E. Noonan Professor of Biology UNIVERSITY OF SOUTH FLORIDA Dr. Kathie L. Olsen Founder and Managing Director SCIENCEWORKS

Dr. Suneel I. Sheikh CEO & Chief Research Scientist ADVANCE SPACE TECHNOLOGY & RESEARCH LABORATORIES

Dr. Joe M. Straus Retired. Executive Vice President THE AEROSPACE CORPORATION

Mary L. Snitch Senior Staff, Industry Organizations LOCKHEED MARTIN SPACE SYSTEMS COMPANY

# FUNDING COLLEGE SCIENTISTS: OUR GENEROUS DONORS MAKE IT POSSIBLE

Our members, corporate sponsors, and foundations provide invaluable funding for the mission of ARCS Foundation National and its chapters.

# Mother-Daughter Duo Donate Wholeheartedly

Sandra and Anna Maria Matteucci are substantial contributors to ARCS Foundation because they "believe wholeheartedly in the ARCS mission, the fact that the organization supports U.S. citizen scholars and their accomplishments now and into the future," says daughter Anna Maria.

Recognizing the importance of ARCS Foundation National's role in sustaining current chapters and fostering new ones, Sandra recently posed a challenge grant that helped push the National endowment to nearly \$2 million.

And back in 2004, she established the Ralph Matteucci Endowment Scholar Award in memory of her late husband, but her contributions go beyond monetary. She continues to host scholars in her home, befriending and mentoring them, even after graduation. "I'm still in touch with many of the scholars we've awarded," she says.

Sandra and Anna Maria are both devoted members, having each served as president of ARCS Phoenix Chapter and on the National Board.

"We are inspired by the past, present and future of ARCS Foundation: The foresight of the founding members to encourage science in America; the excitement of the present members' energy and enthusiasm; and the bright future ensured by ARCS support of the nation's next scientific leaders."

Anna Maria Matteucci



SANDRA AND ANNA MARIA MATTEUCCI have made generous donations to not only their Phoenix chapter but to ARCS Foundation National as well.

# How ARCS Scholars Use Their Awards

ARCS unrestricted scholar funding may be used for:

- Research equipment and supplies
- Travel to conferences
- Symposia and conferences
- Basic financial needs

# ARCS National: The Umbrella Organization for ARCS Chapters

Donations to ARCS National are used for:

- Capacity building
- Sustainability
- Visibility and awareness
- Chapter growth and support

"We support ARCS out of great passion for this organization and the benefits it provides our society through the development of some of the greatest minds in the country." Sandra Matteucci





"The ARCS Scholar Award has helped advance my career in numerous ways, allowing me to grow professionally both as a scientist and educator and encouraging me to continue pursuing my doctoral degree in the sciences."

DINORAH CHACIN, ARCS Tampa Bay Scholar, University of South Florida, College of Marine Science



# www.ARCSFoundation.org

FOR DETAILS ON MAKING A GIFT. Thank you!



# **ARCS MEMBERS**: GOING ABOVE AND BEYOND

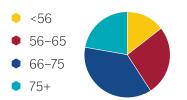
The women who join ARCS Foundation believe in the possibilities of science. They recognize the need to increase the number of students undertaking STEM research necessary to compete in today's global economy.

# Leaders in Their Communities

ARCS members are educated, accomplished women who are committed to maintaining an active relationship with ARCS over many years.



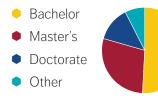
#### AGE OF MEMBERSHIP



# Illuminating Scholars' Paths: ARCS Lights

The ARCS Light award is given to an ARCS member selected by each chapter with profound appreciation for their ingenuity, sacrifice, and long-term service. These individuals are honored for the outstanding contributions they make at the chapter level. The 2015–16 honorees are:

EDUCATIONAL LEVEL



### MEMBERSHIP STATUS







Pat Anderson **ILLINOIS** 

"Nearly 60 years ago, a group of bold women created ARCS Foundation. leading the way for today's volunteers to leave their own bold legacy through their vitality, creativity and dedication."

Marcia McGreevy Lewis President, ARCS Seattle Chapter



# Join Us!

Interested in forming a chapter in your area? ARCS National can help:

- Initial start-up funding
- Assistance with recruitment at the local level
- Organization templates for marketing, media, and PR
- Mentoring and coaching/ forum for idea exchange
- Attendance at kick-off events



Janet Dickinson TAMPA BAY







Barb Goergen

MINNESOTA

Jeanine Ingber COLORADO

# ARCS Light Unifies the Community Around ARCS Scholars

Nancy Mueller, ARCS Light from the Northern California Chapter, is a prime example of the commendable contribution and dedication offered by our exemplary ARCS Lights. She recognized a chance to take scholar mentoring to a higher level and worked tirelessly to bring that vision to life.

"We thought the ARCS NCC Symposium would be a great platform to bring ARCS Scholars together with the greater business community," she says. She led the 2016 event, which was attended by almost 300 people, including a well-represented business component. Sixty-five ARCS Scholars shared their work and made new connections with potential employers.

Mueller's entrepreneurial background prompts her to always ask, "Can we do a better job?" It's the kind of question that epitomizes an ARCS Light, and it gave her the determination and stamina to expand the event. "It's one of the hardest things I've ever done, but was very rewarding!" she says. She's currently co-chairing the third ARCS Foundation Symposium, to be held in April 2017.

"I believe strongly in the ARCS mission, and it motivates my volunteerism. Our country's future is in the hands of these young scientists, and if we can help them be productive, it will benefit all of us."

Nancy Mueller ARCS Northern California Chapter



Jane Lawson

PHOENIX

Ellen Lewis





Margaret McGann UTAH





SAN DIEGO

Nancy Mueller **ORANGE COUNTY** N. CALIFORNIA

Barbara Silver OREGON

14 WWW.ARCSFOUNDATION.ORG

Peg Cooley ATLANTA





Angie Delaney METRO WASHINGTON

Sui-Lan Ellsworth HONOLULU







Because 75% of scholars seek corporate careers after graduation, Nancy Mueller spearheaded ARCS Northern California's effort to connect them with venture capitalists, startups, and other businesses in Silicon Valley.



Mary Lou Quick

Lvnn Thomsen SEATTLE

ADVANCING

IN AMERICA

SCIENCE



Missy Unkovic PITTSBURGH



# HISTORY CHANGED ON OCTOBER 4, 1957

Sputnik's launch startled the world that day. And for a group of women philanthropic leaders in Los Angeles, it signaled the heightening of a disturbing trend that seemed to challenge America's technological pre-eminence.



# Sputnik's Silver Lining

But the satellite sparked an idea. ARCS founders believed that the women of America could make a difference. With their leadership and support, our nation could increase its pool of top scientific talent and regain its position in the world.

In 1958, this group of visionaries met with California Institute of Technology President Lee DuBridge. Together they created a unique partnership between science and society. ARCS Foundation would become a source of much-needed support for young American scientists poised to make important discoveries.

# More Than \$100 Million in Contributions to College Scientists Since 1958

Today, ARCS Foundation continues its 58-year tradition of mentoring and providing financial awards to the best and brightest scholars in the U.S. We are more than 1,300 volunteer members strong, serving from our National Board and 16 chapters across the country.

Since its founding, this association of women philanthropists has made 16,601 awards to ARCS scholars. We partner with 51 of the top American universities, relying on their insight into which students are conducting the most important research.

#### SCHOLARS (counterclockwise from L to R)

- CHELSEA COOK, Ph.D., ARCS Colorado Scholar Alumna, University of Colorado at Boulder.
- 2. MILES DUNCAN, ARCS San Diego Scholar, Microbiology and Environmental Toxicology, University of California at Santa Cruz.
- 3. SUMNER NORMAN, ARCS Orange County Scholar, Mechanical and Aerospace Engineering, University of California at Irvine.
- 4. COLLETTE MILLER, Ph.D., M.S., ARCS Atlanta Scholar Alumna, University of Georgia, Toxicology and Children's Health.
- 5. GLEN CHEW, ARCS Honolulu Scholar, University of Hawai'i at Mañoa, John A. Burns School of Medicine.
- 6. NICHOLAS NOLTA. Ph.D., ARCS Utah Scholar Alumnus, University of California at San Diego, Bioengineering





# **ARCS<sup>®</sup>** Foundation

PO BOX 240 | ARTESIA, CA 90702-0240 national@arcsfoundation.org www.arcsfoundation.org

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