



The President

February 2, 2009

Joanne Catlett
Director of Awards Program
CASE
1307 New York Avenue, Suite 1000
Washington, DC 20005

Dear Ms. Catlett,

It is my great pleasure to write to you today to nominate the ARCS Foundation (Achievement Rewards for College Scientists) for the 2009 James L. Fisher Award for Distinguished Service to Education. From the perspectives of my current position as the president of Pomona College, as the former dean of physical sciences at the University of Chicago, and as a research scientist, I can wholeheartedly say that there are few organizations that could be more deserving of this honor. Founded in 1958 in Los Angeles in response to the "Sputnik Shock," ARCS is a non-profit organization originally designed to address U.S. concerns about the nation's ability to hold its own in the scientific and technological arms race that characterized the Cold War period. In the 50 years since its founding, ARCS has added 13 chapters* and the Soviet Union has collapsed. Although I will refrain from implying a causal relationship between these two facts, I will say that ARCS' support for the sciences on a national level has been nothing short of astounding and has made a tremendous difference.

ARCS scholarships provide financial assistance to outstanding science students who have the promise of making significant contributions to the scientific and technological strength of the United States. This is an objective that is every bit as urgent today as it was when the Los Angeles Chapter of ARCS was founded. Today as then, the future well-being, security, and economic competitiveness of our nation hangs in the balance. Global mobility gives rise to the specter of pandemics; global climate change threatens the planet's environment and can bring about widespread social instability; international communication and trade open the door for products and services that compete with our own in the global marketplace. We look to science for the answers to many of the questions raised by this new, global environment. Scientists will be called upon to find the medicines we need to defend against disease, to safeguard our security, and to develop the technologically innovative products that will restore our nation's economic prosperity.

* Atlanta Chapter, Chicago Chapter, Colorado Chapter, Honolulu Chapter, Los Angeles Chapter, Lubbock Chapter, Metro Washington, D.C. Chapter, Northern California Chapter, Orange County Chapter, Phoenix Chapter, Pittsburgh Chapter, Portland Chapter, San Diego Chapter, Seattle Chapter.

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But training scientists is expensive, and it is a labor-intensive, hands-on process, as my colleagues at liberal arts colleges and research universities throughout the nation will confirm. Over the past five decades, ARCS has partnered with higher education in promoting the sciences by providing scholarship funding to talented students with a passion and a talent for science. Fifty years after three visionary Los Angeles women met to establish the Achievement Rewards for College Scientists Foundation, there are now 14 ARCS chapters with more than 1,500 members nationwide. Every donated dollar goes to scholarships, as all ARCS members give of their time, resources, and expertise freely, without compensation, because they believe in the Foundation's mission: to foster and promote science and technology education in the U.S. At this important juncture in the Foundation's history, ARCS can look back upon a record that is impressive by any standard: ARCS partners with 48 colleges and universities (please see enclosed list) and has awarded over \$66.3 million in scholarship support to young scientists since 1958. During this time period, the ARCS Foundation has awarded 12,084 scholarships to more than 7,700 individual scholars nationally, a record that is remarkable. Closer to home, the Los Angeles Chapter has funded nearly \$20 million in scholarships, and Pomona College's students have been the beneficiaries of more than \$1.2 million in generous scholarship funding over our long and close affiliation with the L.A. Chapter of ARCS.

ARCS scholarships are awarded to our best and brightest science students, and their record of achievement bears out the early trust that ARCS places in young scholars at the outset of their careers: Caltech trustee Louise Kirkbride, for example, started out as an ARCS scholar and has since founded three successful high-technology companies. "Grants like the ARCS Foundation award are extremely important. As a nation, we need to educate the best and brightest and to encourage the development of a supremely talented core of scientists." The ARCS scholarships create a small, elite group of science students who know and support each other. During annual visits of the ARCS University Relations Committee, the sponsored scholars have an opportunity to meet with ARCS representatives and to thank them personally for their support. ARCS Foundation donors keep in touch with "their" scholars throughout their academic careers, and often beyond. In a recent survey of past ARCS Foundation scholars, more than two thirds of those who responded indicated that the impact of ARCS awards was "great" or "significant" in their professional lives.

The ARCS Foundation has had a measurable impact on the advancement of science in America. Ninety-two percent of ARCS scholars surveyed received a degree in a field funded by the ARCS Foundation, and 89 percent are currently working or retired from a career in their field of study. Fifty-five percent are employed in academia, and 45 percent in industry, government, medicine, and research. More than a third of past ARCS scholars have received national or international science awards, and 12.4 percent have registered patents. These data indicate that ARCS scholarships, given at the outset of a career to promising young science students, have succeeded at several levels: they have enabled young men and women to lay the foundations for productive careers in the sciences; and they have resulted in innovative scientific and technological developments that have strengthened the U.S. economy.

President Obama said in his January 20 inaugural address,

For everywhere we look, there is work to be done. The state of the economy calls for action, bold and swift, and we will act — not only to create new jobs, but to lay a new foundation for growth. We will build the roads and bridges, the electric grids and digital lines that feed our commerce and bind us together. We will restore science to its rightful place, and wield technology's wonders to raise health care's quality and lower its cost. We will harness the sun and the winds and the soil to fuel our cars and run our factories. And we will transform our schools and colleges and universities to meet the demands of a new age.

There is no better partner for this important and inspiring undertaking than ARCS. The ARCS Foundation has been a steadfast and reliable ally for its 48-university partners through five decades of changing economic fortunes, and we believe that at a time when support for the sciences is needed as never before, ARCS deserves to be recognized for its defining vision of science as playing a central, indeed a driving role in American society. In light of the distinguished history of the ARCS Foundation and of the uncounted hours of service of the many women who have contributed both their work and their resources to promoting the Foundation's cause, it is my privilege to nominate the ARCS Foundation for the 2009 James L. Fisher Award for Distinguished Service to Education.

Sincerely,



David W. Oxtoby

Enclosures:

Letters endorsing the ARCS Foundation's nomination for the 2009 James L. Fisher Award for Distinguished Service to Education from:

- Jean-Lou Chameau, President, California Institute of Technology
- Mark A. Emmert, President, University of Washington
- C. D. Mote, Jr., President, University of Maryland
- J. K. Haynes, David Packard Professor and Dean of Science and Mathematics,
Morehouse College

ARCS Foundation Brochure

List of Schools and Universities Receiving ARCS Foundation Support

ARCS Foundation Achievement Rewards for College Scientists

ARCS Foundation University Quotations, 50-Year Survey



Caltech

CALIFORNIA INSTITUTE OF TECHNOLOGY

Pasadena, California 91125

Jean-Lou Chameau
President

January 27, 2009

Joanne Catlett
Director of Awards Program, CASE
1307 New York Avenue, Suite 1000
Washington, DC 20005

Dear Ms. Catlett:

It is my great pleasure as President of the California Institute of Technology to endorse the nomination of the ARCS Foundation, Inc., for the CASE James L. Fisher Award for Distinguished Service to Education.

Fifty years ago, four women from Los Angeles realized that education and the commitment to science and technology were among the United States' greatest challenges. With the help and advice of Lee DuBridge, then president of Caltech, these women took action and created ARCS—an organization committed to supporting young scholars engaged in engineering and science.

ARCS and Caltech have enjoyed a long and fruitful relationship. Caltech was the first university to receive scholarship support from the organization and the foundation has been a steadfast supporter of our young scientists ever since. To date, more than 500 Caltech students have been named ARCS Scholars. Growing over the years from a local philanthropy to a national organization with 14 chapters serving students from more than 40 American colleges and universities, the ARCS Foundation has cemented its vital role in advancing science and technology by supporting our nation's brightest scholars.

ARCS scholarship support plays a pivotal role in selected students' ability to pursue their academic passions. Likewise, these scholarship awards greatly enhance an institution's ability to recognize outstanding scholars and encourage their talents. There are countless stories from former ARCS scholars who credit this important scholarship support with making the crucial difference in their academic careers by helping with tuition and research activities. But perhaps the ultimate impact of ARCS is evident in the achievements of the remarkable men and women who have gone on to advance science and technology as educators, researchers, entrepreneurs, policy makers, and leaders of industry.

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While many organizations and individuals contribute funding for scholarships and fellowships, the ongoing commitment of ARCS volunteer members to the Foundation's core mission provides a unique and extraordinary service to the education of students across the United States and embodies the very ideals of James L. Fisher Award. Caltech is proud of its longstanding partnership with the ARCS Foundation and I give the organization my highest recommendation for this prestigious honor.

Sincerely,



Jean-Lou Chameau

JLC:vd



UNIVERSITY OF WASHINGTON

OFFICE OF THE PRESIDENT

Mark A. Emmert, President

January 23, 2009

Ms. Joanne Catlett
Director of Awards Program, CASE
1307 New York Avenue, Suite 1000
Washington, DC 20005

Dear Ms. Catlett:

The Achievement Rewards for College Scientists Foundation (ARCS) would be a highly deserving choice to receive the CASE James L. Fisher Award for Distinguished Service to Education. For 30 years, the dedicated members of the Seattle Chapter of ARCS have provided "extraordinary service" to the University of Washington. They clearly set "a high standard of excellence," not only through their remarkable financial support of graduate students, but also with their foresight in defining effective recruitment strategies and building community awareness of graduate students' vital contributions. More than 700 ARCS Fellows have graduated from the UW well prepared to address the most complex research questions of our time and to provide leadership for continued U.S. competitiveness.

In 2008 the Seattle Chapter of ARCS attained Presidential Laureate status for giving over \$10 million to support the UW's top doctoral students in science, engineering, math, and medicine. Dynamic fundraisers and inspiring leaders, the members of this all-volunteer women's organization have built a powerful funding model. ARCS fellowships attract the nation's best doctoral students to the UW, furthering the foundation's mission to help fill our country's need for scientists and engineers. In addition to giving more than \$500,000 annually, individual ARCS donors have also established 17 endowed fellowship funds. Their generosity ensures that ARCS funding will long continue to bring the finest scientific minds together on our campus and foster the synergy that leads to innovation and discovery.

With their visionary perspective concerning graduate education in the sciences, Seattle's ARCS members have made a significant impact at the University of Washington. It has been an honor to work with them to advance our science and technology communities. You could find no organization more worthy of receiving this year's award for distinguished service than the ARCS Foundation.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark Emmert".

Mark A. Emmert
President



UNIVERSITY OF MARYLAND

OFFICE OF THE PRESIDENT

Main Administration Building
College Park, Maryland 20742
301.405.5803 TEL 301.314.9560 FAX

January 28, 2009

Joanne Catlett
Director of Awards Program
Council for Advancement and Support of Education
1307 New York Avenue, Suite 1000
Washington, DC 20005

Dear Ms. Catlett:

It is my very great pleasure to support the nomination of the Achievement Rewards for College Scientists (ARCS) program for a CASE James L. Fisher Award for Distinguished Service to education. The service that ARCS provides in promoting science and engineering education through scholarships plays an extraordinary role in supporting higher education. The University of Maryland has a particularly strong and longstanding relationship with the Metropolitan Washington Chapter of ARCS, having received scholarships for our students for the past twelve years.

I have been associated with ARCS for several decades. In my positions at the University of California, Berkeley (faculty member and vice chancellor) and in my current position as the president of the University of Maryland I have had the good fortune to witness the intense dedication that this all-volunteer group brings to the challenge of funding higher education. ARCS was created in 1958 following the Soviet launch of Sputnik to provide undergraduate and graduate scholarships in science and engineering. That mission continues a half century later, with ARCS scholarships going to the most talented, high-achieving students in these fields. These scholarships provide consistent and dedicated support in science and technology, aiding talented students who might otherwise be unable to pursue these paths of study. The ARCS Foundation makes awards to 44 schools across the country, and has funded more than \$66 million in scholarships since its inception.

As a professor of engineering myself, and a member of the 2005 National Academies' Committee on Prospering in the Global Economy of the 21st Century, I have examined closely the major trends in American science and technology education. The urgency of filling the American pipeline with highly trained scientists and engineers has never been greater. Our competitors abroad are funding their students at higher rates than the U. S. government. Private sources of support, such the ARCS scholarships, are vital

to building the next generation of scientists and engineers. Particularly in these times of economic uncertainty, ARCS' support is essential to keep pace with other nations.

In addition to admiring the work of ARCS on an institutional level, my wife and I have been inspired to support ARCS privately for many years. We have both been impressed by the dedication and commitment of the ARCS members to the mission of higher education. The financial impact of ARCS scholarships is not its only contribution. The advocacy of ARCS helps to shape national discourse around education priorities. With 14 chapters across the country and 1,500 members, the members of ARCS are diligent spokeswomen for education in science, engineering and technology, which is so vital to the future of our nation.

ARCS' unwavering commitment to higher education is exemplary. Its tireless support of students, universities and the nation merit the distinction of a CASE James L. Fisher Award for Distinguished Service to education.

Yours sincerely,

A handwritten signature in black ink, appearing to read "C. D. Mote, Jr.", written in a cursive style.

C. D. Mote, Jr.

President

Glenn L. Martin Institute Professor of Engineering



January 30, 2009

Joanne Catlett
Director of Awards Program, CASE
1307 New York Avenue, Suite 1000
Washington, DC 20005

Dear Ms. Catlett:

This letter comes in support of the nomination of the ARCS (Achievement Rewards for College Scientists) Foundation for the CASE James L. Fisher Award for Distinguished Service to Education. Morehouse College has been affiliated with ARCS since 1993, when the first recipient of the ARCS award at Morehouse was Brian Derrickson. Dr. Derrickson is now a professor of Biology, and co-author of one of the leading textbooks of Physiology used in the country. I provide this information on Dr. Derrickson to indicate that while he is exceptional that the over 90 Morehouse Biology and chemistry majors who have received ARCS fellowships since then are doing extremely well in their educational programs or in their Professions. All of the students who have graduated are either working on or have received the Ph.D., M.D., or M.D./Ph.D., at such prestigious institutions as Yale, Harvard, Duke, Johns Hopkins and the University of California at San Francisco.

In light of the fact that over 70% of the students who attend the College receive financial aid, it is obvious that the ARCS fellowships received by Morehouse students over the years contributed much to their successful matriculation at the College because students were able to use these funds to pay for books and computers, as well as to pay for travel to interviews for entry into graduate and professional schools.

Over the fifteen years that we have been supported by ARCS, the number of our students who have received ARCS fellowships has grown from one (1) in the first year to nine (9) per year in recent years. I believe that Morehouse remains the only undergraduate institution whose students are supported by ARCS which otherwise provides funding for graduate students. In light of the fact that support of undergraduates is not their primary goal, the efforts involved in raising money for the increasing number of students supported at Morehouse shows not only a strong commitment to providing opportunity for all in the society, but an acknowledgement of the importance of research by undergraduates in producing the next generation of American scientists.

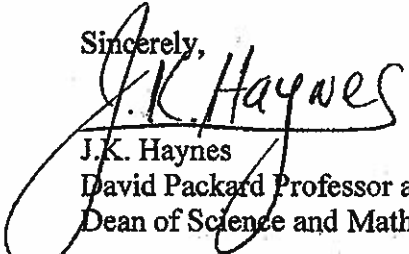
I have been extremely impressed with the strong commitment on the part of Atlanta ARCS to our students, which goes beyond just the financial support. I have been told many times by members of ARCS that they wanted our students to remain a part of the ARCS network by contacting ARCS members in whatever city that they attended graduate or medical school- asking for support if they needed it. Each year members of the Chapter come to the College to discuss various aspects of the application procedure and to attend seminars and programs sponsored by the Division of Science and

Mathematics. I have been impressed with their interest in learning more about the College and our students.

In summary, ARCS is making a major contribution to producing the next generation of scientists. Their selection of Morehouse as an undergraduate institution to participate in a fellowship program for graduate students is visionary in its implications, and has provided significant support for our students who were the recipients of the fellowships. All of the Morehouse fellowship recipients upon graduation have attended major universities in this country, and many of them are making significant contributions in their fields. In closing, I want to highlight the achievement of two additional ARCS recipients at Morehouse. Dr. Jason Sello, a recipient of the B.S. in Biology, received the Ph.D. in Biophysics at Harvard and is now an assistant professor of Chemistry at Brown University in Rhode Island, and Dr. Manu Platt, who received B.S. degrees in Biology from Morehouse and in Engineering from Georgia Tech through our Dual Degree Program, received the Ph.D. at Georgia Tech, and after a postdoctoral fellowship at M.I.T., is a new assistant professor at Georgia Tech. We fully expect that these two products of the Morehouse-ARCS collaboration will make significant contributions to science in the years ahead.

On behalf of Morehouse College, I am pleased to offer my enthusiastic support of the nomination of the ARCS Foundation for the CASE James L. Fisher Award for Distinguished Service to Education.

Sincerely,



J.K. Haynes
David Packard Professor and
Dean of Science and Mathematics

List of Schools and Universities Receiving ARCS Foundation Support

Atlanta:

Emory University
Georgia Institute of Technology
Morehouse College
University of Georgia

Chicago:

Illinois Institute of Technology
Loyola University, Stritch School of Medicine
Northwestern University
University of Chicago
University of Chicago, Pritzker School of Medicine

Colorado:

University of Colorado, Boulder
University of Colorado Health Sciences Center
Colorado School of Mines
Colorado State University

Honolulu:

University of Hawaii, Manoa

Los Angeles:

California Institute of Technology
Harvey Mudd College
Pomona College
University of California, Los Angeles,
Brain Research Institute
University of Southern California, Keck School
of Medicine
University of Southern California, Viterbi School
of Engineering

Orange County:

University of California, Irvine

Northern California:

San Francisco State University
Stanford University
University of California, Berkeley
University of California, Davis
University of California, San Francisco
University of California, Santa Cruz

Lubbock:

Lubbock, Christian University
Texas Tech University

Metro Washington:

Georgetown University
The George Washington University
Johns Hopkins University
University of Maryland
University of Virginia

Phoenix:

Arizona State University
Northern Arizona University
University of Arizona

Pittsburgh:

Carnegie Mellon University
Pennsylvania State University
University of Pittsburgh, School of Medicine
and Swanson School of Engineering

Portland, OR:

Oregon Health & Science University
Oregon State University

San Diego:

San Diego State University
The Scripps Research Institute
University of California, San Diego (including
Scripps Institution of Oceanography)
University of San Diego

Seattle:

University of Washington
Washington State University

ARCS® Foundation, Inc.

Achievement Rewards for College Scientists

Incorporated 1958

2007 - 2008 National Profile

Scholar Dollars Awarded		
2007-2008		\$ 4,553,958
1958-2008 Cumulative		\$ 66,342,962
# Scholarships Awarded		
2007-2008		544
1958-2008 Cumulative		12,084
Recipient Schools		44
Members		1,462
Number of Chapters		14

Endowment Balance as of June 30, 2007

Chapter Endowment (12 Chapters)		\$ 12,524,518
National Endowment		\$1,072,033.46

ARCS Mission Statement

*The ARCS Foundation provides scholarships
to academically outstanding United States citizens
studying to complete their degrees
in science, medicine and engineering,
thereby contributing to the worldwide advancement
of science and technology.*

**UNIVERSITY QUOTATIONS
50-YEAR SURVEY
ARCS® FOUNDATION, INC.**

"The ARCS Foundation and its supporters are celebrating far more than a golden anniversary. Indeed, we are celebrating the organization's phenomenal impact on our larger society at a time when we most need to prepare our best young minds to make dramatic breakthroughs in the realms of science and technology." **Dr. C. L. Max Nikias, Provost, University of Southern California**

"The ARCS Foundation is a vital partner of the University of Washington, not only because of its remarkable financial support of graduate students, but because of its truly visionary mission to promote graduate education, encourage first-class graduate students to find solutions, and create better lives for us all." **Dr. Mark A. Emmert, President, University of Washington**

"What you are doing and the funds you are providing are extremely important to the advancement of science. One ARCS Foundation dollar is worth 10 dollars in other major national science research grant because it is designed specifically for innovation." **Thomas E. Starzl, MD, PhD, Distinguished Professor of Surgery, University of Pittsburgh School of Medicine**

"The ARCS Foundation's generous support has been critical in maintaining the University's ability to recruit and train the best and brightest graduate students regardless of their financial circumstances. For this, we are most grateful." **Robert J. Birgeneau, Chancellor, Professor of Physics, University of California, Berkeley**

"ARCS understands the benefit in supporting exceptionally bright scientists and engineers in their pursuit of higher education and its significant impact to our state, country and world." **Dr. G. Wayne Clough, President, Georgia Institute of Technology**

"As a leading research university with top-ranking graduate programs in science and engineering, UC Davis attracts some of the brightest graduate students in the nation. Each year, the ARCS Scholarships give us the opportunity to recognize a few of the very best of these students as recipients of this prestigious award...I have had the pleasure of introducing the ARCS scholars to your members and donors for several years. I am inspired by their vision and encouraged by your commitment to excellence in science education. These are partnerships that will yield tremendous results for generations to come." **Larry N. Vanderhoef, Chancellor, University of California, Davis**

"The organization has demonstrated a strong and lasting commitment to supporting the advanced education of many of UGA's very best young scientists, and in so doing has benefited the state of Georgia in both tangible and intangible ways....Achieving excellence and successfully addressing society's challenges requires that we work in partnership, and the support that ARCS offers to students at UGA and other colleges and universities is a critical component of that partnership." **Dr. Michael F. Adams, President, University of Georgia**

"I think providing scholarship support to well-prepared young people interested in engineering is critical to this country's future...Thank you so much for the work ARCS has done for decades in this area. It made a substantial difference for me, and I'm sure it has made a difference for many others." **Richard K. Miller, President, Franklin W. Olin College of Engineering, Needham, MA, former Cal Tech ARCS Scholar**