Amgen’s Commitment to Inspiring the Next Generation of Scientists and Strengthening Scientific Literacy

Scott Heimlich, Ed.D.
Senior Program Officer
Amgen Foundation
HLC Workforce, STEM Briefing, Washington, D.C.

April 2, 2014

The Amgen Foundation Plays a Leadership Role in Advancing Science Education in the U.S. and Abroad

Two Priority Areas in Science Education

<table>
<thead>
<tr>
<th>Supporting Teacher Quality</th>
<th>Pivotal, Hands-On Science Experiences</th>
</tr>
</thead>
</table>

- Tie initiatives to company identity and core competencies
- Emphasize solicited, long-term signature initiatives with a measurable impact
- The Amgen Foundation leverages Amgen’s strengths, differentiating it from its peers and creating a meaningful impact as a leader in science education

The Amgen Foundation is the only bio/pharma entity represented in the top 50 of all U.S. foundations awarding grants for science and technology.

1. Source: Foundation Center, 2011 data.

Provided April 2, 2014 as part of an oral presentation and is qualified by such, contains forward-looking statements, actual results may vary materially; Amgen disclaims any duty to update. | Amgen Confidential.
Amgen Scholars Continues to Launch Hundreds of Undergraduates on the Path to a Scientific Career

Now in its 8th year, this premier summer research program at top universities is open to undergraduates across the U.S. and Europe.

Made possible by a $34 million, eight-year commitment, ensuring that all students are able to participate regardless of their financial status.

Unique U.S. and European Symposia highlight medical biotechnology and engage Amgen executives and staff.

An all-time high of 4,200 students from over 800 colleges & universities applied for the 325 slots.

Robust, independent evaluation in place since program launch allows for data-based decision-making, continuous improvement, and ability to track impact over time.

Access to Incredible Opportunities

Jose Rios of Arizona State University, one of over 2,100 Amgen Scholars to date, spent the summer under MIT Institute Professor Bob Langer, named by Forbes as one of the 25 most important individuals in biotechnology in the world. Jose was the first in his family to attend college, and is now in graduate school in biomedical engineering at Cornell.

Amgen Scholar Alumni are Pursuing Advanced Scientific Degrees and Careers in Large Numbers

**PROGRAM ALUMNI**

1,096

Current Status of Alumni Who Have Completed Undergraduate Degree*

552

Graduate School in Science (Masters and PhDs)**

67

MD/PhD Programs

139

Science-Based Career

176

Professional School in Science (MD, Other)

162

Non-Science Grad School or Career / Unknown

*Status as of February 2013. Note that 711 of the 1807 alumni are still pursuing their undergraduate degree and have not been included in the chart. **This number includes the 20 alumni who are currently pursuing specialty science programs, or post-bacc fellowships.

** Scholar Name
Ana Tufegdžić Vidakovic
Undergraduate Institution
University of Belgrade (Serbia)
Amgen Scholars Program
University of Cambridge (2009)

Ana’s experience as an Amgen Scholar inspired her to return to the University of Cambridge for graduate school, where she is currently pursuing her PhD in Oncology.
Amgen Biotech Experience

Scientific Discovery for the Classroom

- Developed through a special collaboration between Amgen scientists and educators, the first labs were used in 1990 at Newbury Park High School.
- This uniquely Amgen program opens students’ eyes to the world of biotechnology, bringing professional-grade lab equipment and the ‘wow’ factor to biology classrooms.
- Nearly $8 million invested to date has allowed the program to reach 300,000+ students across Amgen communities, and over 50,000+ students the past year alone.

Current Program Regions
- Greater Los Angeles / Ventura
- San Diego
- San Francisco
- Seattle
- Colorado
- Massachusetts
- Rhode Island
- Washington, D.C.
- Puerto Rico
- England

Additional Investments in STEM

Teach For America
- Strengthens science education in underserved communities across the U.S.
- TFA has more than tripled the number of math and science corps members from 800 in 2004 to over 2,600 today.
- Fellows each receive a $1,000 signing bonus and are eligible for additional financial support for classroom resources or professional development.

Nat’l Board for Professional Teaching Standards
- Strengthening science instruction and student achievement in Amgen communities
- Creates a cadre of National Board Certified Teachers in science in Amgen communities to improve student performance.
- Development of online courses using performance data to improve science teaching nationwide.

National Academy Foundation
- Network of career-themed academies for underserved high school students
- Course developed on the Principles of Biotechnology, part of the new Academy of Health Sciences
- Plans underway to develop additional courses on industry as well as specific sectors of the industry.

100Kin10
- A multi-sector network that responds to the national imperative to train 100,000 excellent science, technology, engineering, and math (STEM) teachers by 2021.
- Aims to increase the quantity and quality of STEM teachers.
- Ensures that all students have access to first-rate STEM teaching and learning.