



"EDUCATION IS AT THE HEART OF OUR ABILITY TO STAY COMPETITIVE IN THE GLOBAL ECONOMY. THE KEY TO SUCCESS IS MAKING THE INVESTMENT NECESSARY TO ENSURE THAT OUR TEACHERS ARE PREPARED TO INSPIRE STUDENTS TO CREATIVITY AND ACHIEVEMENT."
— MIKE SPLINTER, PRESIDENT & CEO
APPLIED MATERIALS

INDUSTRY INITIATIVES FOR SCIENCE AND MATH EDUCATION (IISME) EXISTS TO ADDRESS THE CRITICAL NEED FOR A STRONG, HIGHLY-SKILLED WORKFORCE IN THE STEM FIELDS (SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH). THIS INDUSTRY-EDUCATION PARTNERSHIP FOCUSES ON TEACHERS AS THE PRIMARY AGENTS FOR EFFECTING MEANINGFUL CHANGE IN OUR SCHOOLS.

PROGRAM TIMELINE:

- BEGINNING IN OCTOBER SPONSORS PLEDGE TO HOST A SPECIFIC NUMBER OF FELLOWS AND IDENTIFY MENTORS/MANAGERS WHO WILL SUPERVISE TEACHERS.
- NOVEMBER TO JANUARY TEACHERS APPLY TO IISME ONLINE.
- JANUARY TO FEBRUARY MENTORS CREATE AND SUBMIT TO IISME MEANINGFUL SUMMER PROJECTS.
- BEGINNING IN MARCH SPONSORS REVIEW TEACHER APPLICATIONS TO IDENTIFY CANDIDATES WHO FIT THEIR PROJECT NEEDS. MENTORS INTERVIEW CANDIDATES AND MAKE HIRING DECISIONS BY EARLY MAY. IISME ACCOMMODATES ALL REQUESTS FROM SPONSORS THAT WISH TO TARGET TEACHERS FROM SPECIFIC PARTNER SCHOOLS.
- MID-JUNE THE EIGHT-WEEK FELLOWSHIP BEGINS. MINOR SCHEDULE ADJUSTMENTS MAY BE MADE TO MEET THE NEEDS OF MENTORS OR FELLOWS.

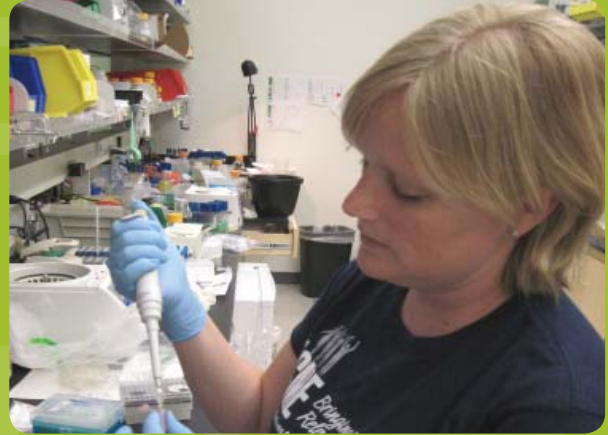
Shaping Tomorrow's Workforce

For the past 26 years IISME has placed K-16 teachers in 8-week Fellowships to provide them with unique, meaningful professional development and expose them to our ever-changing industry and research environments.

Through the Summer Fellowship Program, IISME provides companies and universities with skilled, cost-effective professional summer employees. Sponsors experience a direct way to reach their future workforce through one-to-one contact with local teachers. The Teacher Fellows spend 90% of their time working on meaningful and relevant projects for their host organization and 10% of their time on IISME professional development opportunities including an Education Transfer Plan to bring back to their classroom. IISME Teachers return to school able to leverage their new skills and experiences into powerful lessons and updated curriculum for their students.

“We have very high expectations, and the Fellows are consistently exceeding them. They are intelligent, great learners with excellent concentration, dedicated, and motivated. Their assignments not only perfectly utilize their skills but also fill a critical need here.”

— Carl Chamberlin, IBM



PROGRAM MILESTONES

- Over 200 Sponsors have offered 2,815 IISME Summer Fellowships to teachers.
- IISME Teachers have reached more than 2 million Bay Area students.
- IISME Fellows have left education at an average rate of 2% per year, compared to 8-10% annual attrition among their colleagues in the state and nation.
- 96% of Mentors report that they were pleased with the quality of work their Fellow produced.
- Typically 95% of IISME Fellows rate their IISME Summer Fellowship experience as “the best” or “in the top 10%” of professional development available.

IISME SUMMER FELLOWSHIPS:

- Offer Sponsors eager and skilled temporary professional employees to work on a project.
- Supply teachers with new knowledge and strategies for reaching their students.
- Provide a direct way for organizations to reach their future workforce through one-to-one contact with teachers.
- Reignite teachers’ passion for their subject.
- Motivate thousands of students with new, more relevant curriculum.
- Retain teachers in the classroom at more than twice the rate of their peers.
- Expose teachers to the complexities of career needs.

FOR MORE INFORMATION

For more information about hosting a Teacher Fellow at your organization please contact: Jennifer Bruckner 408-553-2249; jbruckner@iisme.org or Tisha Bacigalupi 408-553-2239; tbacigalupi@iisme.org

PROGRAM COST

Fellowship hosts provide most of IISME's funding. The cost is \$11,500 if the Fellow is employed directly by the Sponsor or \$13,000 if IISME is designated as employer of record. This includes \$8,200 in stipend and grants IISME Teacher Fellows earn. Through these funds, IISME Sponsors also support year-round educational services to enhance the effectiveness of Fellowships as teacher professional development experiences.



STEM PROJECT EXAMPLES

SCIENCE

Life Technologies

Developing a mutation detection system for EGFR and KRAS genes.

Stanford University

Studying the role of environmental change in controlling long-term evolutionary patterns.

TECHNOLOGY

Intel Corporation

Researching and developing the requirements and usage models to utilize Intel based mobile platforms.

Synopsys, Inc.

Working on a team to migrate Website/SharePoint site content.

ENGINEERING

Lawrence Berkeley National Laboratory

Assisting the Center for X-Ray Optics in the design, analysis and documentation of ongoing and future projects.

Lockheed Martin Space Systems Company

Applying Continuous Improvement methods to lower the cost and reduce schedule time for inert rocket motor development and fabrication.

MATH

Applied Materials

Analyzing financial statements and coordinating with internal finance personnel to help update pricing policy.

IBM

Producing 3-D thermal maps of labs and evaluating the possibilities for cost and energy savings.

OTHER PROJECTS

Cisco Systems, Inc.

Creating guidelines and teaching the IRE Team how to write technical documentation.

Hewlett-Packard Company

Assisting the education channels team with identifying information that helps grow the college bookstore business.

MiaSolé

Working with the Environment Safety & Health/HR Support Team to implement a new corporate wide learning management system.

Nordson ASYMTEK

Testing and validating the technical performance of product prior to its delivery.

ADDITIONAL PROGRAM SPONSORS

Agilent Technologies
Amgen Foundation
Bank of America Foundation
Bechtel, S.D., Jr. Foundation
Boston Scientific Foundation
Cisco Systems Foundation
City College of San Francisco
DeVry University
EMC Corporation
Fluor Foundation
Frieda C. Fox Family Foundation

Gordon Biersch Brewing Company
Hewlett-Packard Company
Integrated Device Technology, Inc.
Life Technologies Corporation
Intel Corporation
LifeScan, Inc.
Medtronic Foundation
Mentor Graphics Foundation
Merit Resource Group
Microsoft Corporation
Monta Vista High School

National Science Fdn (via SMCCD)
Nordson Foundation
Rockwell Collins Charitable Corporation
Salesforce.com Foundation
SanDisk Foundation
Santa Clara County Office of Education
Seagate Technology
Stanford University
WebEx
Wells Fargo

"MY FELLOW'S SUMMER PROJECT PROVIDED SOLID SCIENTIFIC DATA TO SUPPORT A CHANGE IN OUR RECOMMENDED PERIODIC MAINTENANCE PROCEDURES, SHORTENING THE TOTAL SEQUENCE TIME FOR SERVICE ENGINEERS. THIS CHANGE WILL SAVE MORE THAN \$200,000 PER YEAR IN LABOR COSTS ON MACHINES THAT ARE UNDER SERVICE CONTRACT."

— DAVID BUSECK, PRODUCT SUPPORT ENGINEER, VARIAN MEDICAL SYSTEMS

2009/2010 FELLOWSHIP SPONSORS

Adobe Foundation
Applied Materials, Inc.
BAE Systems
BD Biosciences
California Water Service Co.
Cisco Systems, Inc.
Coherent, Inc.
Cordis Corporation
Dow Chemical Company
EMC Corporation
Fairchild Semiconductor
Genentech, Inc.
Gladstone Institutes
Google, Inc.
Hewlett-Packard Company
IBM

Integrated Device Technology, Inc.
Intel Corporation
Intevac, Inc.
Intuitive Surgical, Inc.
KLA-Tencor Corporation
Lawrence Berkeley National Laboratory
LifeScan, Inc.
Life Technologies Corporation
Lockheed Martin Information Systems
and Global Services
Lockheed Martin Space Systems Co.
Lucile Packard Children's Hospital
Mattson Technology
MiaSolé
MoSys, Inc.
National Semiconductor Corporation

Nordson ASYMTEK
Northrop Grumman Marine Systems
Openwave Systems, Inc.
Renesas Electronics America
SanDisk Corporation
Santa Clara University
SETI Institute
Silicon Valley Leadership Group
SolFocus, Inc.
Space Systems/Loral
SRI International
Stanford University
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