



**SIAM ANNUAL BUSINESS
MEETING
July 2016**

Pam Cook
SIAM President

Jim Crowley
Executive Director

Meet Your Officers

President Elect: **Nicholas Higham**, University of Manchester

Secretary: **Simon J. Tavener**, Colorado State University

VP at Large: **Ilse Ipsen**, North Carolina State University

Treasurer: **Samuel Gubins**, Annual Reviews

VP for Publications: **Michael J. Miksis**, Northwestern University

VP for Programs : **Cynthia Phillips**, Sandia National Laboratories

VP for Science Policy: **C. David Levermore**, University of Maryland

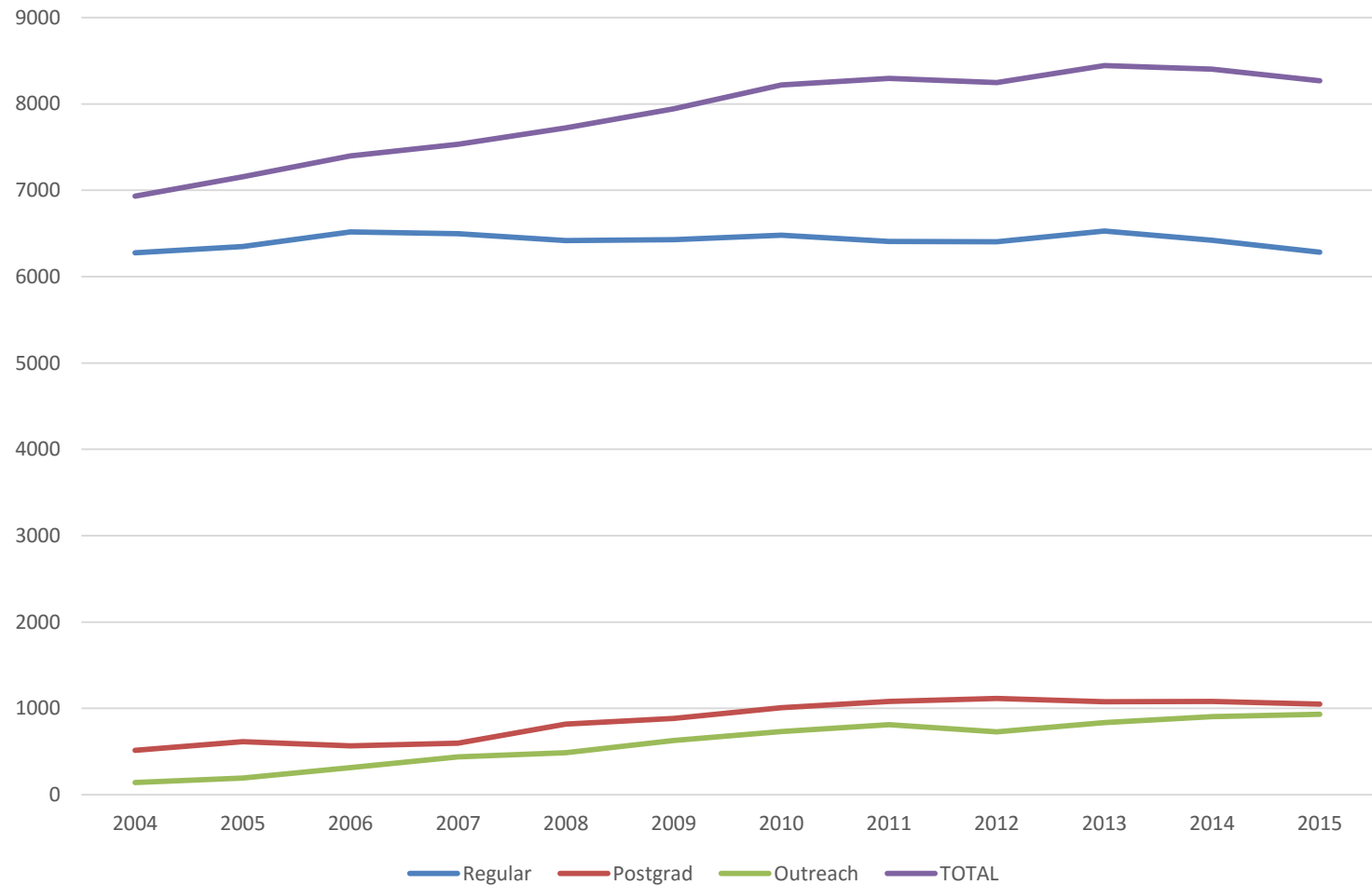
VP for Education: **Rachel Levy**, Harvey Mudd College

VP for Industry: **Thomas A. Grandine**, Boeing Company

Membership

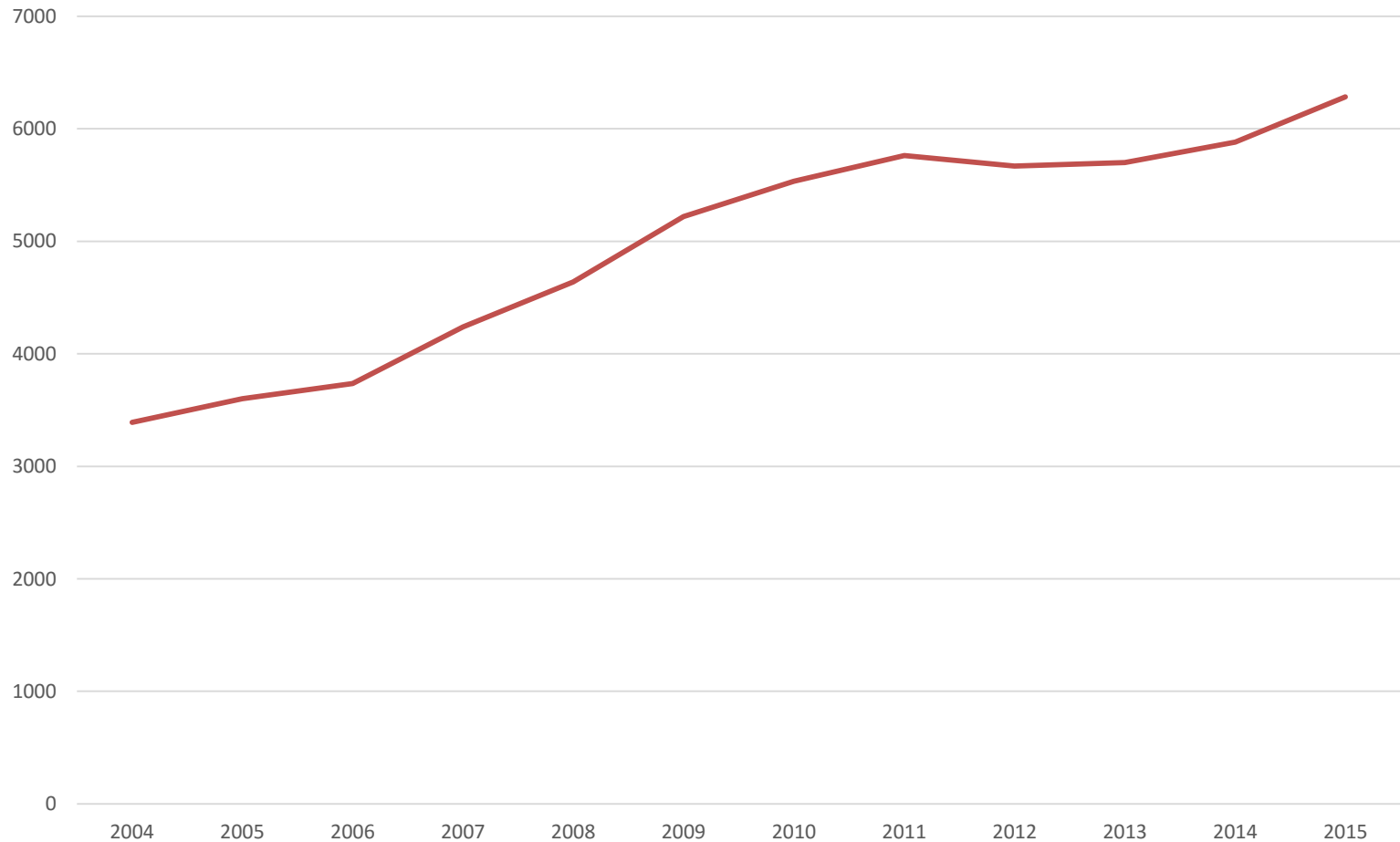
Membership Trends

SIAM Non-Student Membership

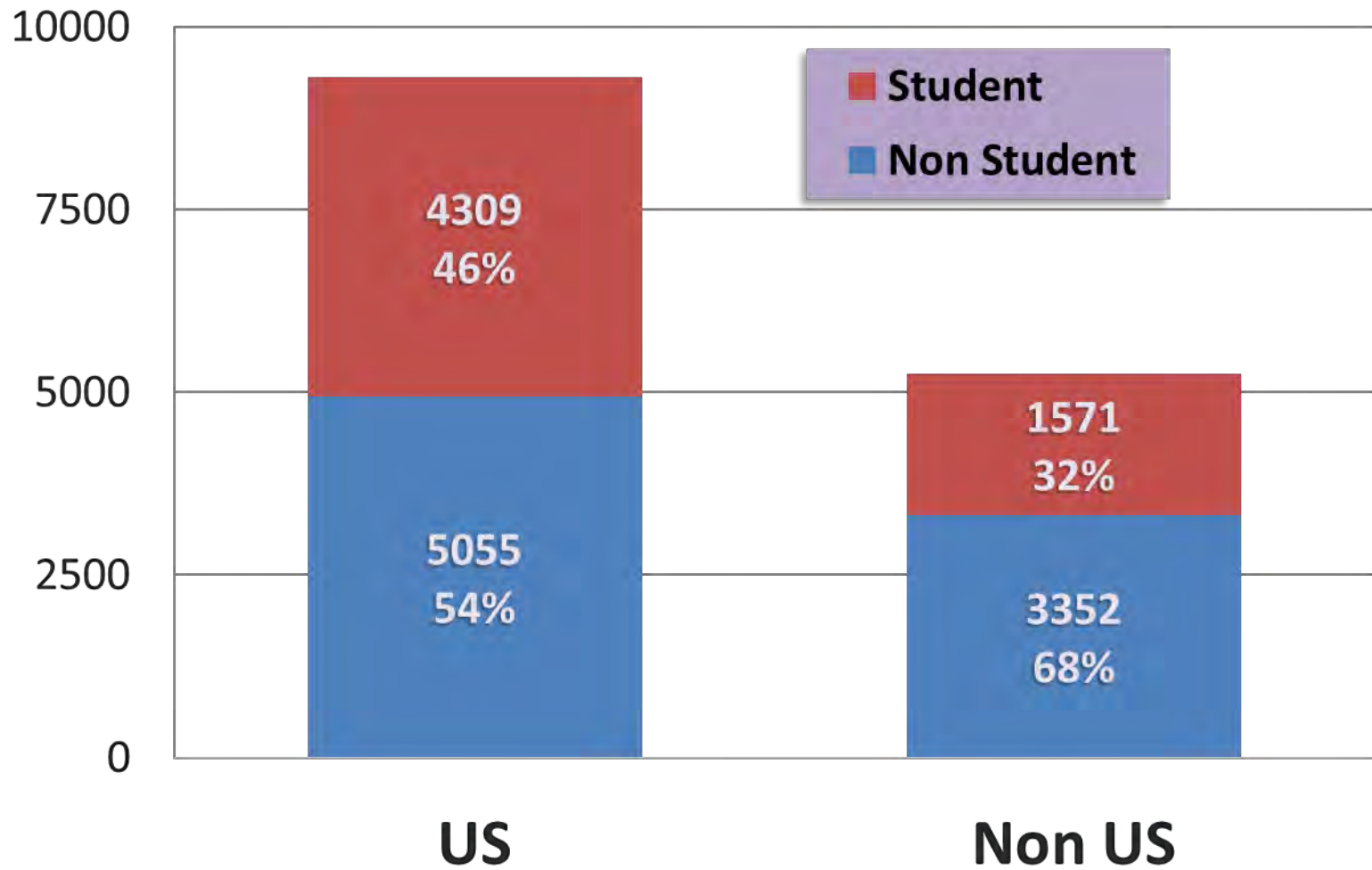


Membership Trends - Students

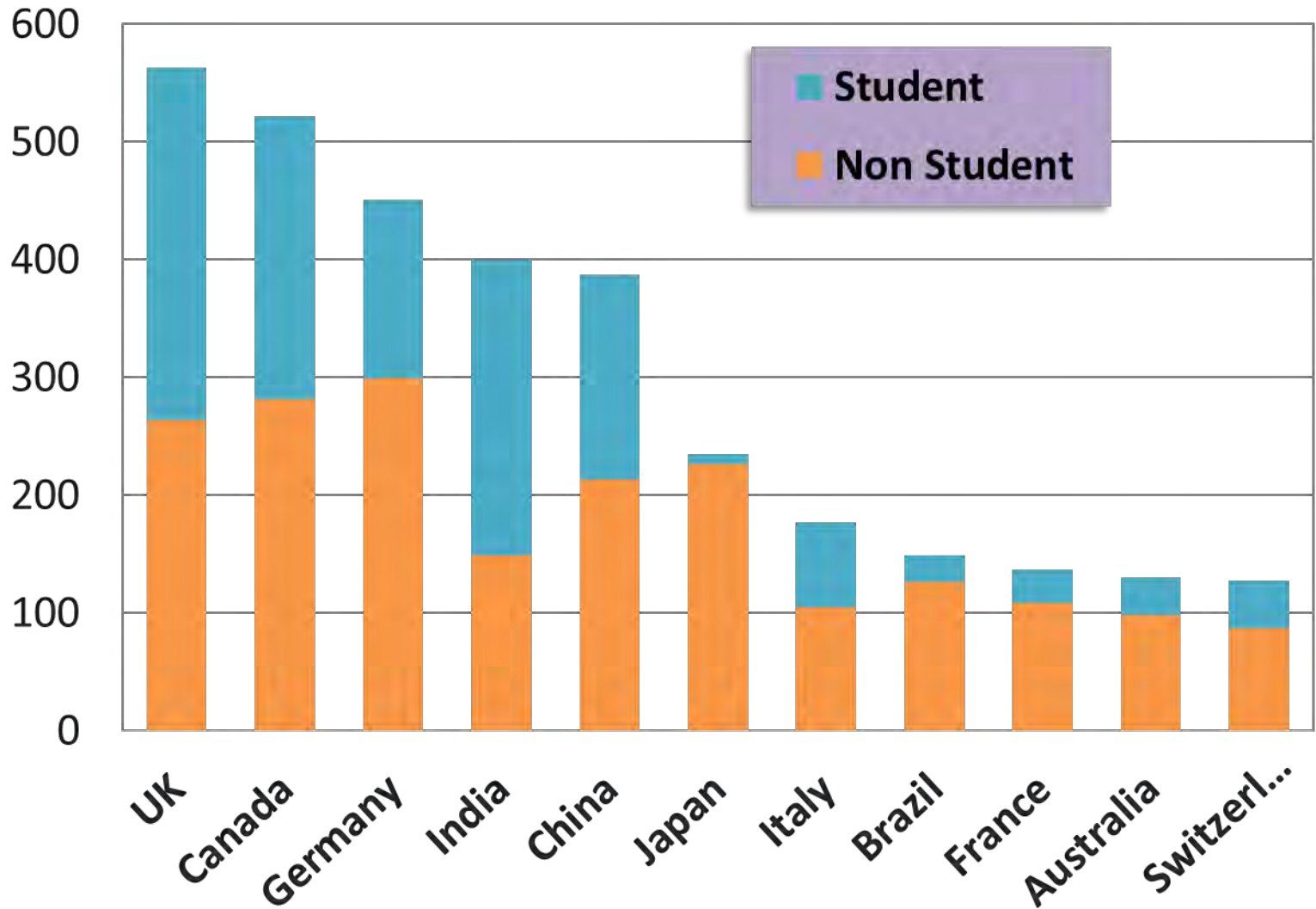
SIAM Student Membership



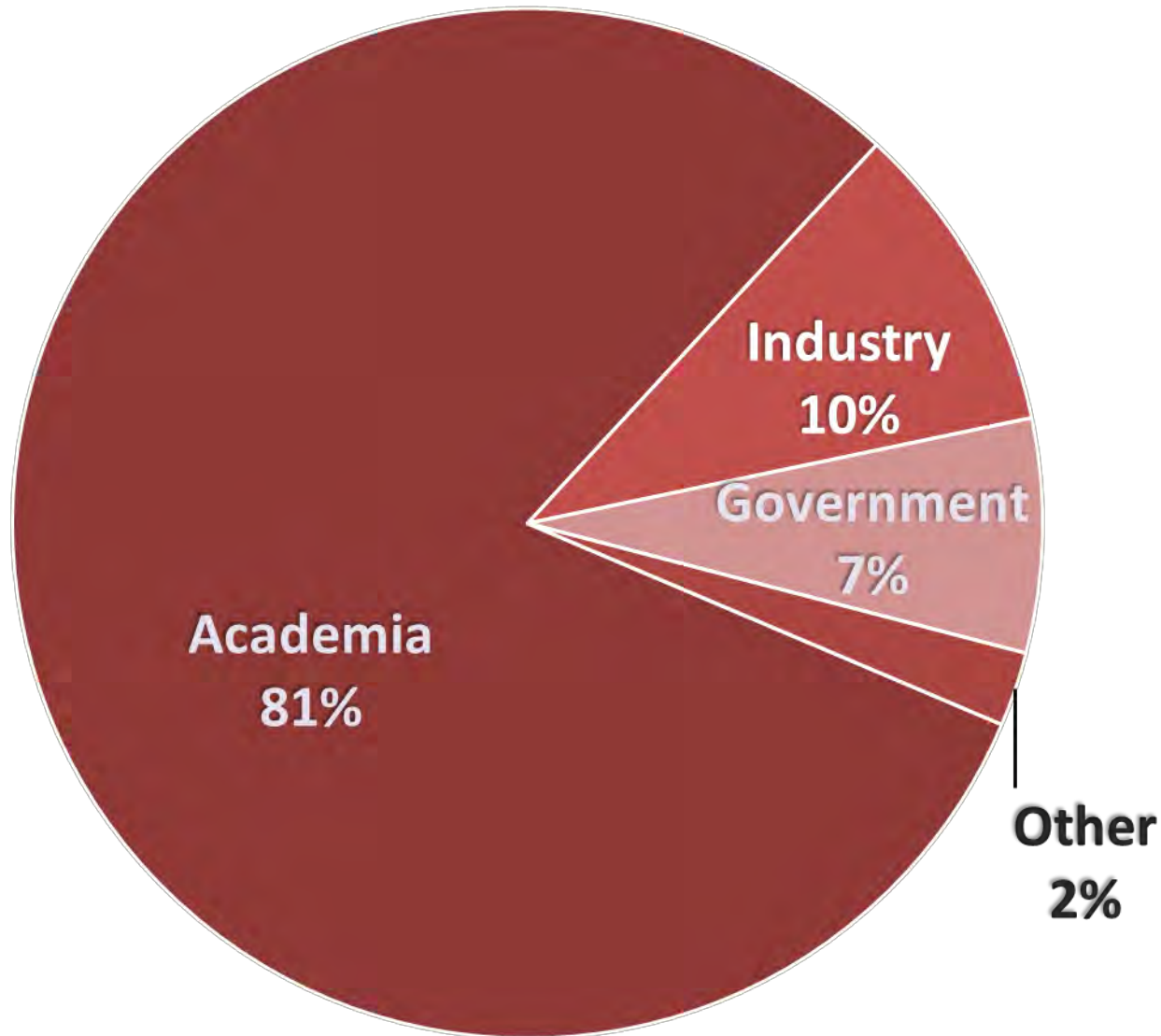
Geography



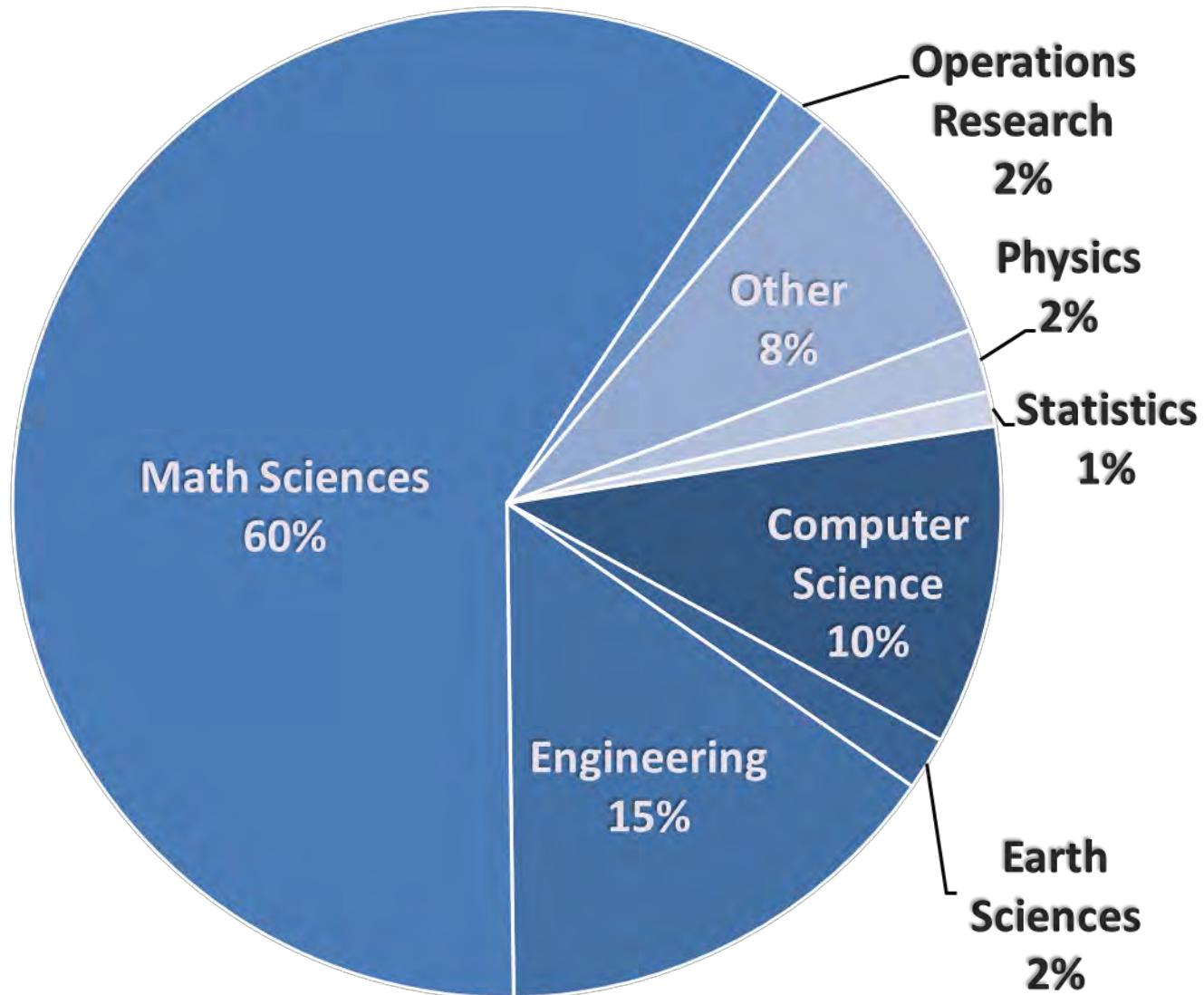
Top Non-US Countries of Residence



Employer Type (excluding students)



Department (excluding students)



SIAM Regional Sections

- The Great Lakes Section (GLSIAM)
- SIAM Southeastern Atlantic Section (SIAM-SEAS)
- Washington-Baltimore Section
- Southern California (SoCal)
- Northwest Pacific
- Texas-Louisiana
- Mid-America
- Argentinean Section (AR-SIAM)
- Bulgaria Section (BGSIAM)
- Colombia (COSIAM)
- East Asia Section (EASIAM)
- United Kingdom and Republic of Ireland Section (UKIE SIAM)

SIAM Student Chapters



171 Total
Chapters
(4 new
pending)

118 USA

53 Non-USA

SIAM STUDENT CHAPTERS

- **FUNDING** – Receive up to \$500 each per year **plus** travel for one to AN
- **INTERACTION** – Students representing chapters meet with SIAM leadership at AN
- **ACTIVITIES**

Student Travel Awards

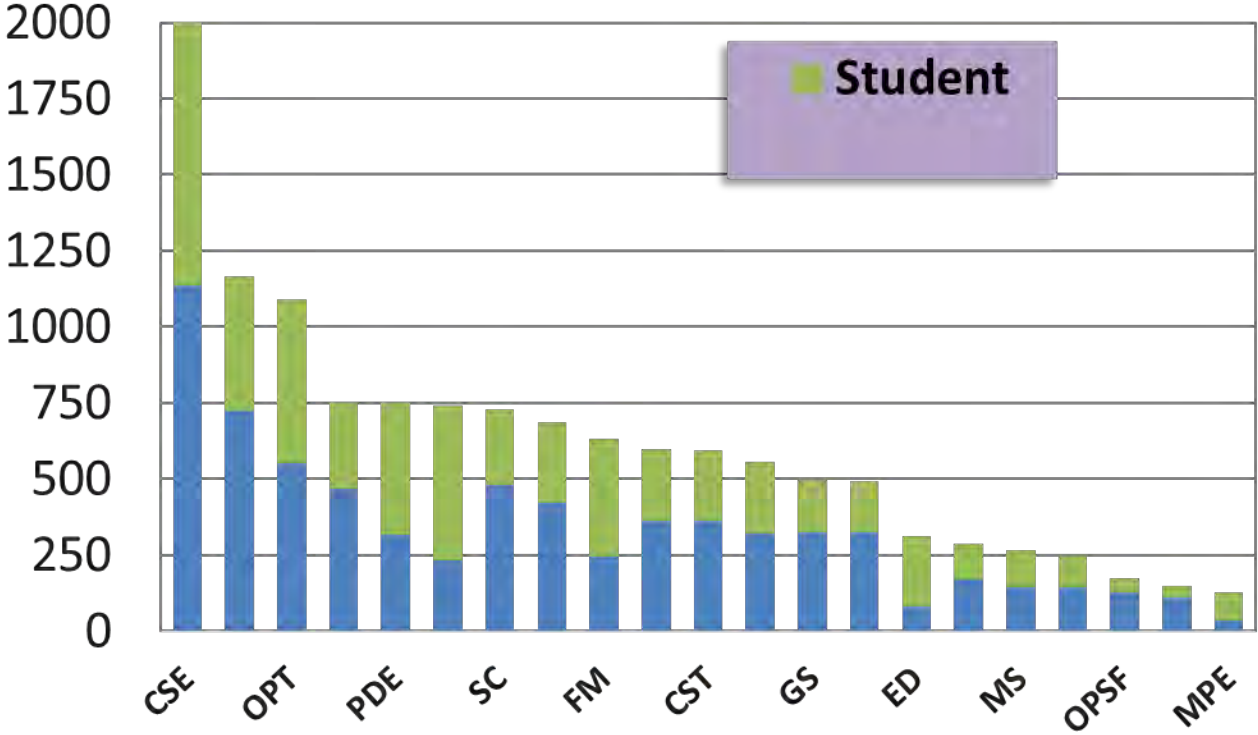
- Provides travel support for approximately 315 students to attend SIAM conferences
- Funding by NSF, various companies, and SIAM (\$200,000), book authors, and donors for a total of about \$240,000 per year.

ACTIVITY GROUPS – THE HEART OF SIAM

LA	1982
DMA	1985
SC	1985
Opt	1986
CST	1987
GD	1989
DS	1990
OPSF	1990
GS	1992
IS	2000
LS	2000

CS&E	2001
APDE	2003
FME	2003
NWCS	2003
MS	2008
AG	2010
DMA	2011
UQ	2011
AME	2016
MPE	2016

13,120 Activity Group Memberships



SIAM Fellows

- A total of 423 SIAM Fellows since the inception of the program in 2009.
- 30 new SIAM Fellows elected in 2016.

Fellows Demographics: All Fellows vs. Class of 2016

	SIAM Members*	% SIAM Members*	All Fellows	% All Fellows	2016 Fellows	% 2016 Fellows
Total			423		30	
US	4948	59.8%	324	76.6%	18	60.0%
Non-US	3323	40.2%	99	23.4%	12	40.0%
Male	6603	84.9%	373	88.2%	23	76.7%
Female	1171	15.1%	50	11.8%	7	23.3%
Academic	5247	80.5%	368	87.0%	27	90.0%
Industry	643	9.9%	29	6.9%	1	3.3%
Govt/Lab	479	7.3%	25	5.9%	2	6.7%
Other	152	2.3%	1	0.2%		

*Includes available demographic data for nonstudent members as of December 31, 2015

Fellows Demographics:

All nominations vs. Class of 2016 nominations

	SIAM Members*	% SIAM Members*	All nominees	% All nominees	2016 nominees	% 2016 nominees
Total			470		54	
US	4948	59.8%	365	77.7%	38	70.4%
Non-US	3323	40.2%	105	22.3%	16	29.6%
Male	6603	84.9%	413	87.9%	42	77.8%
Female	1171	15.1%	57	12.1%	12	22.2%
Academic	5247	80.5%	401	85.3%	47	87.0%
Industry	643	9.9%	22	4.7%	1	1.9%
Govt/Lab	479	7.3%	43	9.1%	6	11.1%
Other	152	2.3%	4	0.9%		

*Includes available demographic data for nonstudent members as of December 31, 2015

SIAM Major Awards

Do you know someone who has made a significant impact in the fields of applied mathematics or computational science?

The SIAM prize program provides you with an opportunity to recognize deserving people in your field by nominating them for a SIAM prize. SIAM values a diverse set of participants in all its activities and seeks diversity among prize nominees.

SIAM offers many different kinds of prizes. Some commend lifetime contributions and others acknowledge notable research by early career scientists or students.

Prizes are intended to distinguish individuals for outstanding contributions. And while many of the prizes carry monetary awards, it is the recognition by the mathematical sciences community for both the awardees and their institutions that matters most.

CALL FOR NOMINATIONS: 2016 SIAM Prizes and Awards

Nominate a deserving individual now for one of the SIAM prizes listed below.

All prizes will be awarded at the 2016 SIAM Annual Meeting (except where noted) and include reimbursement for travel.

The John von Neumann Lecture

SIAM's flagship prize is awarded for outstanding and distinguished contributions to the field of applied mathematical sciences and for the effective communication of these ideas to the community. The 2016 recipient will join the list of most distinguished John von Neumann Lecturers. SIAM welcomes your suggestions. This prize has a \$5,000 cash award.

AWM/SIAM Sonia Kovalevsky Lecture

Awarded jointly by AWM and SIAM to anyone in the scientific and engineering communities whose work highlights the achievements of women in applied and computational mathematics. The Association for Women in Mathematics (AWM) welcomes nominations.

Norbert Wiener Prize

Awarded at Joint Math Meetings (JMM) jointly by SIAM and AMS for an outstanding contribution to applied mathematics in the highest and broadest sense. The prize has a \$5,000 cash award. *Nominations should be sent to AMS by June 30.*

Frank and Brennie Morgan Prize for Outstanding Research in Mathematics by an Undergraduate Student

Awarded at Joint Math Meetings (JMM) jointly by SIAM, AMS, and MAA, the Morgan Prize recognizes a student (or students for joint work) for outstanding research in mathematics. Any student from USA or its possessions, or Canada, or Mexico, is eligible. This prize has a \$1,200 cash award. *Nominations should be sent to AMS by June 30.*



George Pólya Prize in Combinatorics

The George Pólya Prize in Combinatorics is awarded every four years for a notable application of combinatorial theory. The prize is intended to recognize specific recent work. This prize has a \$10,000 cash award.

W. T. and Idalia Reid Prize

The Reid Prize is awarded for research in, or other contributions to, the areas of differential equations and control theory, broadly defined. SIAM welcomes nominations for a single notable achievement or a collection of such achievements. The recipient is requested to deliver the Reid Prize Lecture. This prize has a \$10,000 cash award.

Richard C. DiPrima Prize

This best thesis prize will go to an early career scientist who has done outstanding research in applied mathematics and who has completed the dissertation and all other requirements for the doctorate within the two years, July 1, 2013, to June 30, 2015. This prize has a \$1,000 cash award.

SIAM Student Paper Prize

Up to three prizes will be awarded to the student authors of the most outstanding papers submitted. The prizes recognize outstanding scholarship by students in applied mathematics or computing and are based solely on the merit and content of the student's contribution. Recipients will be invited to present their papers. This prize has a \$1,000 cash award per student author.



Nominations are due fall 2015, except where noted. For more information or to submit a nomination, visit:
www.siam.org/prizes/nominations.php



Society for Industrial and Applied Mathematics

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SIAM Prizes

- Your inputs are needed, especially women, industry,...
- See <http://www.siam.org/prizes/nominations.php> for open calls
- John von Neumann, Kleinman, Polya, Reid, Kovalevsky, and Dahlquist prizes are all open for nominations.

SIAM Conferences and Workshops

SIAM Conferences

- 2015 was a successful year for SIAM conferences with about 4,500 paid attendees at ten SIAM conferences;
- Nearly 6,000 total attendees if you include CT15 (Paris) and AG15 (Korea)
- Increasing trend towards conferences outside U.S.
 - UQ16 (Lausanne), PP16 (Paris),...

Conferences

Other items of note:

- ICIAM 2015 held in Beijing August 10-14
 - No SIAM Annual Meeting that year

Student Travel Fund

- \$100,000 allocated by SIAM Board in 2013; increased to \$200,000 in 2014
- Funded 310 students in 2016 with SIAM Student Travel Funds (including donations)
- Additional 33 students funded through support from the NSF.

We thank SIAM members and book authors for their generous donations!

SIAM Publications

SIAM Publications

- The SIAM Journal on Uncertainty Quantification (UQ) was launched in 2013; SIAM Journal on Algebraic Geometry in 2016
- Supplementary Materials now part of most SIAM journals

SIAM Journals Online



SIAM Journals

SIAP	1953	Applied Math
SICON	1960	Control
SINUM	1964	Numerical Analysis
SICOMP	1970	Computing
SIMA	1970	Analysis
SIDMA	1980	Discrete Math
SIMAX	1980	Linear Algebra
SISC	1980	Scientific Computing
SIOPT	1990	Optimization
SIADS	2002	Dynamical Systems
MMS	2003	Multiscale Modeling and Sim.
SIIMS	2008	Imaging
SIFIN	2010	Financial Mathematics
JUQ	2013	Uncertainty Quantification
SIAGA	2016	Algebraic Geometry

SIAM Publications

Conference Proceedings for the following ongoing conference series:

- SODA (Discrete Algorithms), ALENEX, ANALCO
- SIAM International Conference on Data Mining
- SIAM Conference on Control and its Applications

Peer reviewed and available at epubs.siam.org



SIAM Publications

Books

SIAM Publishes 18-24 books per year (mostly monographs), with serious review and copyediting services.

SIAM welcomes potential authors and suggestions for new topics.

SIAM News

- Editorial Board under Hans Kaper, EIC
- New online format collects all new sources in one place
 - Easier for reader to locate information of interest

See <http://sinews.siam.org/>

Other Items of Interest

Committee on Science Policy (CSP)

- David Levermore is chair
- CSP meets twice in a year in DC
 - Meets with agency representatives
 - Goes to Capitol Hill to talk to Congressional committees, staff.
- Letters on issues important to SIAM
- Sign up for science policy mailing list at http://www.siam.org/about/science/sci_policy_form.php

SIAM Elections

- Nominating Committee chose slate for Fall 2016 Elections
- Nominating Committee (2 ex officio, 2 appointed by Council and 2 appointed by Board):
 - Pam Cook (President)
 - Amr El-Bakry
 - Nick Higham (President-Elect)
 - Sven Leyffer
 - Jill Mesirov
 - Hinke Osinga

2016 Election Candidates

- Board: Robert Kohn*(NYU), Tim Kelley*(NC State University), Randall LeVeque*(U of Washington), Andrew Wathen (Oxford U), Margot Gerritsen (Stanford U), Juan Meza (UC Merced)
- Council: *Liliana Borcea (U of Michigan), *Felix Otto (Max Planck Inst), Ya-Xiang Yuan (Chinese Academy of Sci), Martin Wechselberger (University of Sydney), Paula Milewski (U. Bath), Misha Kilmer (Tufts), Per Christian Hansen (TU Denmark), Helen Moore (Bristol Meyers Squibb)

*Denotes incumbent

Appointments

- Committee on Committees and Appointments (Secretary Simon Tavener, chair) filling dozens of committee appointments.

Volunteer!

Other Items – Reports

From the Education Committee:

- **GAIMME** (Guidelines for Assessment and Instruction in Math Modeling Education) [with COMAP], 2016.
- Modeling Across the Curriculum
 - SIAM workshop and report (2013) and (2014); new workshop in fall 2016.
- [Undergraduate Degree Programs in Applied Mathematics](#) (2014)

And from Industry Committee:

- SIAM Math in Industry report (2012); and (1995).

See <http://www.siam.org/reports/>

Additional news items

- SIAM is redoing web site (www.siam.org) – launch in early 2017.
- SIAM News Online – a second revision to incorporate all news feeds in one place:
 - <https://sinews.siam.org>
- A new Conference Management System (CMS) is being tested on a few limited conferences; if successful will be used for all SIAM conferences in 2018 or beyond.

SIAM Fellows

The New Class of 2016 SIAM Fellows

SIAM Fellows: Class of 2016

Linda J. S. Allen – *Texas Tech University*

Chandrajit Bajaj – *University of Texas at Austin*

Egon Balas – *Carnegie Mellon University*

Gang Bao – *Zhejiang University*

Dwight Barkley – *University of Warwick*

John J. Benedetto – *University of Maryland*

Gregory Beylkin – *University of Colorado Boulder*

Paul C. Bressloff – *University of Utah*

Xiao-Chuan Cai – *University of Colorado Boulder*

Thomas F. Coleman – *University of Waterloo*

Clint N. Dawson – *University of Texas at Austin*

Maria J. Esteban – *Centre national de la recherche scientifique*

Michael Hintermüller – *Humboldt-Universität zu Berlin*

Michael Holst – *University of California, San Diego*

Bo Kågström – *Umeå University*

Andrew Knyazev – *Mitsubishi Electric Research Labs*

SIAM Fellows: Class of 2016

Alan J. Laub – *University of California, Los Angeles*

Xiaoye Sherry Li – *Lawrence Berkeley National Lab*

William McEneaney – *University of California, San Diego*

James G. Nagy – *Emory University*

Helena J. Nussenzweig Lopes – *Universidade Federal do Rio de Janeiro*

Cynthia A. Phillips – *Sandia National Laboratories*

Michael C. Reed – *Duke University*

Arnd Scheel – *University of Minnesota*

Christoph Schwab – *ETH Zürich*

Endre Süli – *University of Oxford*

Françoise Tisseur – *University of Manchester*

Sabine Van Huffel – *KU Leuven*

David P. Williamson – *Cornell University*

Xunyu Zhou – *Columbia University & University of Oxford*

CONGRATULATIONS!
TO OUR NEWEST CLASS
OF SIAM FELLOWS

Please join us for a
reception to honor the new
SIAM Fellows