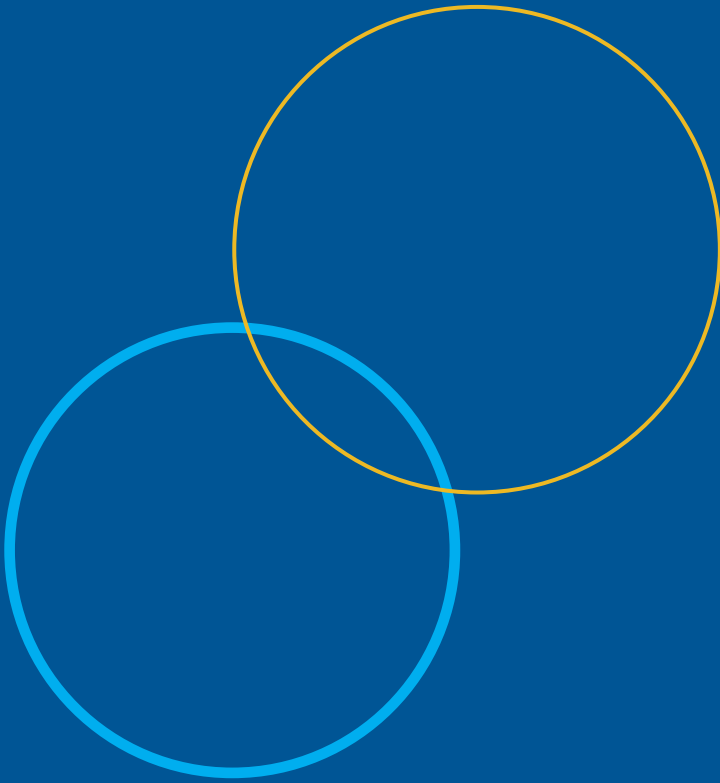




15 YEARS OF POGIL

Impact and Innovation



Mission

THE MISSION OF THE POGIL PROJECT IS TO CONNECT AND SUPPORT EDUCATORS FROM ALL DISCIPLINES INTERESTED IN IMPLEMENTING, IMPROVING, AND STUDYING STUDENT-CENTERED PEDAGOGIES AND LEARNING ENVIRONMENTS.

Vision

WE ENVISION AN EDUCATIONAL SYSTEM IN WHICH EFFECTIVE STUDENT-CENTERED INSTRUCTION IS THE NORM.

In 1994, Rick Moog, John Farrell, and Jim Spencer started using what is now POGIL® at Franklin & Marshall College, which resulted in the preliminary volume of *Chemistry: A Guided Inquiry* for college students, published by John Wiley & Sons. Between 1994 and 2002, Moog, Farrell, and Spencer, along with Frank Creegan of Washington College, and David Hanson of Stony Brook University, continued to study and present on this innovative new active learning approach to teaching chemistry. Andrei Straumanis joined the team in 1998 while doing post-doctoral work at Washington College. In 2002, the POGIL acronym was created for the first National Science Foundation (NSF) grant proposal. Awarded in 2003, the grant helped expand POGIL to educators and institutions around the country. Fifteen years later, as a 501(c)(3) nonprofit organization, The POGIL Project continues to drive educational change for thousands of teachers and students every year.



Getting Students in the Game

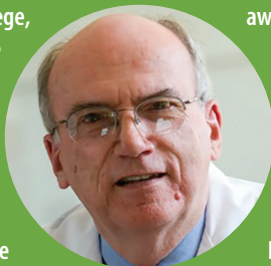
When it comes to chemistry education, Frank Creegan has seen it all.

Creegan, the W. Alton Jones Emeritus Professor of Chemistry at Washington College, was a pioneering member of the Middle Atlantic Discovery Chemistry Project, an association of chemistry educators interested in innovating lab and classroom curricula.

This allowed him to partner with other educators, like POGIL's Executive Director Rick Moog, to explore philosophies of student-centered learning long before POGIL was founded.

"I was keenly interested in what Rick was doing," says Creegan. "Although I did have a lot of student engagement in my classes, I could see that there were

still people around the edges who didn't want to be called on."



Then, in 2002, the National Science Foundation awarded Creegan — as well as colleagues at four other institutions, including Franklin & Marshall College — a grant to establish The POGIL Project.

Now retired, Creegan is excited to see how much the organization has grown since he co-authored that first POGIL grant. From POGIL's adoption in high school science curricula to disciplines outside of chemistry, the method is more widely used than ever.

"My surprise and joy is that it has been adopted—and adapted—in so many different environments," says Creegan.



15 YEARS OF POGIL DIRECTOR'S MESSAGE TO THE COMMUNITY

Dear Friends,

This year, we invite you to help us celebrate 15 years of The POGIL Project and our dedicated POGIL community. What started with five chemistry professors who wanted better outcomes for students has grown into a community of thousands of POGIL practitioners and supporters transforming education, both within and beyond the classroom.

Established as an independent 501(c)(3) nonprofit organization in 2011, The POGIL Project now provides workshops for more than 2000 teachers each year. We have expanded beyond chemistry to embrace many other fields, and offer POGIL classroom activities for high school and college students, with middle school on the horizon.

In June, we rolled out the first National Conference for Advanced POGIL Practitioners (NCAPP), where, in true POGIL fashion, 85 experienced teachers shared responsibility for facilitating NCAPP sessions—our largest POGIL professional development gathering to date.

As we make considerable progress on the ambitious goals in our strategic plan, we also recognize that we have much more to do to realize our vision of “an educational system where effective student-centered instruction is the norm.” We’re continuing to focus on diversity and inclusion, partnerships with underserved school districts, assessing and improving the POGIL pedagogy and practice, and increasing our impact on educational systems and policy.

This year, as our strategic plan reaches the five-year mark, our community will continue to review and refine our goals, mission, and vision to position us for the future. What has changed in education since we started? What has changed in our society? How can we have a greater impact?

Many, many thanks to our POGIL community of practitioners, friends, donors, and funders. What we have accomplished together in this first 15 years has far exceeded my expectations. I am grateful to each of you for your passion, commitment, generosity, and everything you do to support the work of The POGIL Project. I have no doubt that we’re going to have another amazing 15 years!



Rick Moog



Strategic Plan Year 5: Guiding Us Toward Our Vision

Nearing the end of our first five-year strategic plan, the POGIL community has made remarkable progress on significant longer-term initiatives during the past year. *Read on for highlights!*

Strategic Plan Goals

- 1** Increase the number of POGIL practitioners and support practitioner professional development, with a particular emphasis on those in STEM disciplines.
- 2** Increase availability of high quality POGIL activities, with a particular emphasis on those designed for use in STEM disciplines.
- 3** Increase the diversity of the POGIL community and the students it serves.
- 4** Collect data to provide comprehensive assessment of student learning and development in a variety of POGIL learning environments.
- 5** Develop human and financial resources to accomplish the work of The Project and implement the strategic plan.



NCAPP: Expand, Engage, Empower

“This is the conference I’ve been waiting for,” said one of 85 experienced POGIL educators participating in The POGIL Project’s first National Conference for Advanced POGIL Practitioners (NCAPP), held at Muhlenberg College in Allentown, PA, on June 26-28, 2017.

A new model for POGIL professional development events, NCAPP created a robust space for experienced POGIL practitioners to gather together and share ideas, challenges and struggles regarding the use of POGIL in their classrooms.

The format included a variety of participant-centered sessions such as fishbowls, author coaching, present-a-models, roundtables, forums, birds-of-a-feather, and posters. Additionally, NCAPP presented four thought-provoking plenary speakers to add to the inspiration: **José Mestre, Mark McDaniel, Laura Trout, and Rick Moog.**

A huge thank-you to the hardworking NCAPP planning group: **Julie Boldizar, Marcy Dubroff, Joyce Easter, Steve Gravelle, Tim Herzog, An-Phong Le, Ashley Mahoney, Beff Mancini, Britton Miller, Marty Perry, Wayne Pearson, and Kristin Plessel (Chair).** Thanks also to our Scholarship Partners: **Flinn Scientific, PASCO Scientific, and Wiley,** who each sponsored two teachers to attend NCAPP. Thank you to all who attended and made the conference such a rewarding experience for everyone involved. See you at the next NCAPP in two years!



“I left the meeting energized. Providing opportunities for faculty development for experienced POGILites was excellent. This was the right mix of formal and informal instruction. Participation by everyone was a perfect way to remove the barriers of expert and novice. We are all experts in some area.” –NCAPP PARTICIPANT



2003
First POGIL National Meeting (PNM)

2003
First multi-day POGIL workshop at Duke University

LAURA TROUT

Championing High School POGIL

Until Laura Trout encountered the POGIL method at a conference in 2000, no one had thought seriously about adapting POGIL activities for high school chemistry students.

“That first year, I wrote five activities,” recalls Trout, who currently serves as Dean of Curriculum for Lancaster Country Day School in Lancaster, PA. Because she taught on a block schedule, she could try out the POGIL activity with her class, then rewrite it during her prep period.

Since then, Trout has become a significant leader in The POGIL Project, spearheading a working group at POGIL for high school educators. As editor-in-chief of the High School POGIL Initiative, or HSPI, Trout helped produce the majority of POGIL’s activities for high school biology and chemistry, including an AP track.



“It’s super helpful to have people to bounce ideas off of because that’s where the synergy actually happens,” says Trout of HSPI. She speaks highly of the other members of HSPI, whom she values as reviewers and teachers.

Trout now serves on POGIL’s Steering Committee, where she hopes to help POGIL further embrace its high school practitioners and streamline their workshops.

“We’re going to look closely at how we teach process skills and build process skills through all the workshops we do,” says Trout, who thinks carefully about how new practitioners encounter the POGIL method, as well as how she can encourage women to stay in the field of chemistry education.

“It’s been important work for me, in terms of keeping me fresh and in the classroom,” says Trout of her work with The POGIL Project.

SINCE 2012

250

Workshops held for teachers

7,200+

Teachers trained

150,000

Students impacted

POGIL
BY THE
NUMBERS

Inclusive Excellence in the POGIL Classroom

Rolled out at the 2017 POGIL National Meeting, this 90-minute workshop explores ways to recognize and address implicit bias in a POGIL classroom. Developed and facilitated by **Gail Webster** of Guilford College, and **Michael Bruno** of the North Carolina School of Science and Mathematics, this important new workshop was also presented at the 2017 Northeast and Southern Regional Workshops, and at the National Conference for Advanced POGIL Practitioners (NCAPP). Three additional *Inclusive Excellence* facilitators were trained this summer: **Kristin Plessel**, University of Wisconsin-Rock County; **Chris Mayfield**, James Madison University; and **Joyce Easter**, Virginia Wesleyan University. Next steps will be to continue to expand the cohort of trained *Inclusive Excellence* facilitators to broaden its reach.

POGIL Activity Clearinghouse

Currently in the development and testing phase, the POGIL Activity Clearinghouse will provide a central electronic space to facilitate collaboration among POGIL users and authors for feedback, formal review, testing, and use of POGIL activities. Led by **Sally Hunnicutt** of Virginia Commonwealth University, and **Alex Grushow** of Rider University, the Activity Clearinghouse will be similar to an open-source electronic journal. There is also a POGIL Activity Pathway process document available at www.pogil.org to clarify how activities will move through the Activity Clearinghouse and provide guidance for authors on developing and submitting POGIL activities.

Demographics Data Project

This project provides the basis for identifying strategies to study and increase diversity of POGIL practitioners and their students by gathering and analyzing diversity data about the makeup of current and new POGIL practitioners and their institutions. During the past year, the working group, made up of **Megan Daschbach** of Washington University in St. Louis, **Megan Hoffman** of Berea College, and **R. Daniel Libby**, Professor Emeritus, Moravian College, have created an extensive database for baseline information, and performed initial analyses on those data. The team will continue to track and analyze data to measure progress and inform the action plan.

“It’s not just about getting the question right, but understanding why that’s the right answer.”

—MATT LANE, SENIOR, LANCASTER COUNTRY DAY SCHOOL



2003

Organic Chemistry: A Guided Inquiry (Straumanis) expanded POGIL from its origins in general and physical chemistry

2005

High School POGIL Initiative (HSPI) Toyota Foundation grant awarded

SALLY HUNNICUTT

Teaching is Building Trust

In early 2000, Sally Hunnicutt, who is now a professor of chemistry at Virginia Commonwealth University, encountered POGIL during its first series of NSF-funded workshops. At the same time, Hunnicutt's class size ballooned, and she started teaching 200 students each semester.

"I had about one of the worst teaching experiences I've ever had," Hunnicutt recalls. "It was not pretty."

So Hunnicutt set out to make changes that could improve student learning, and started using POGIL with 60 or 70 students at a time. Now, some 15 years later, Hunnicutt is recognized as one of the leading POGIL practitioners in the country, and she's particularly focused on reaching educators who teach in large-lecture formats.

"In larger classes, it's actually more important to use



POGIL," Hunnicutt says, though this may seem counterintuitive. "It's very easy for students to hide in a large class, and it's very easy for faculty to be fooled that their students are understanding or engaged."

"In a large class, there also isn't a good sense of community or trust," Hunnicutt adds. She's come to learn that students need to believe their instructor "is leading them somewhere that matters."

A POGIL classroom allows Hunnicutt to build community—and for students to trust one another, too. But it's also a method that gives Hunnicutt results. In 2012, Hunnicutt received VCU's prestigious College of Humanities & Sciences Teaching Award.

"One of the things I've learned," says Hunnicutt, "is that if I'm doing all the talking, students aren't doing any learning."



New Classroom Observation Protocol (POGIL-OPTIC)

The Classroom Observation working group has been developing a classroom observation tool for use in a POGIL classroom. OPTIC codes have been chosen to capture typical behavior of instructor and student behaviors in a POGIL classroom. The observation tool also focuses on the amount and type of interaction students have with each other and with the instructor. The team is also developing a visual timeline that gives the instructor a snapshot view of the entire class session and is an intuitive way of reflecting on one's teaching, along with pre-and post-observation questions. The Classroom Observation working group is led by **Gina Frey** of Washington University in St. Louis, and includes **Andrew Bressette, Urik Halliday, Matt Horn, Melinda Kalainoff, and Kris Lantzky**.

ELIPSS Project Workshop: Enhancing Learning by Assessing Process Skills in Student Work

Rolled out at the 2017 PNM, this workshop focuses on evaluating student work for evidence of process skills to provide a means to incorporate skills assessment into regular classroom practice, and give direct feedback to students on their process skill development. When assessment and feedback are provided on the development of students' professional skills (such as teamwork, communication, and critical thinking) these skills can be enhanced. Next steps: The workshop will be expanded to cover the assessment of critical thinking in student work following the components on the assessment of information processing. ELIPSS is an NSF-funded collaborative research project, "Eliciting and Assessing Process Skills in STEM," co-led by **Juliette Lantz** of Drew University, **Suzanne M. Ruder** of Virginia Commonwealth University, and **Renée S. Cole** of the University of Iowa.

What's next for the Strategic Plan?

In the coming year, the POGIL community, Board of Directors, Steering Committee, and National Office Staff, will be providing input into the current Strategic Plan to refine our goals for the next five years. Look for more info in 2018!



2008

Process-Oriented Guided Inquiry Learning published by the ACS (eds. Moog & Spencer)

2011

The POGIL Project launched as 501(c)(3) nonprofit organization

Career Launch Pad

Amanda Zullo manages science curriculum and standards for New York State, and she is hard at work developing an implementation plan. Over the 2017-2018 school year, New York will roll out new science standards across all of its districts, from small, rural towns to New York City.

Throughout the process, Zullo says, she'll have POGIL in the back of her mind.

"It's a great way to introduce some of the core content ideas in the new standards into a classroom," says Zullo, who is a New York State Master Teacher and winner of the Presidential Award for Excellence in Mathematics and Science Teaching. "The fact that there are different ways you can do a POGIL activity and lots of ways you can set up your classroom makes it easier. It leaves a lot of teacher choice."

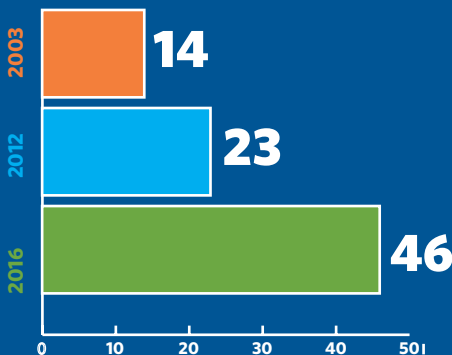


"Now the research has been very evident that inquiry-based learning is good for student learning," she adds, which will only make POGIL more compelling for high school educators.

An early adopter of POGIL for high school, Zullo also participated in the 2007 High School POGIL Initiative. In addition to changing how she taught chemistry, the HSPI Project helped Zullo meet colleagues who prepared her to step into her new role at the New York State Department of Education. "They served as mentors and role models," says Zullo.

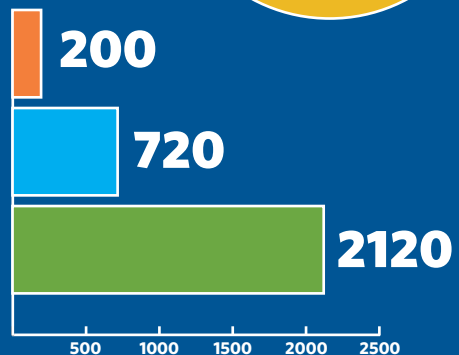
"I also came in contact with people who were National Board-Certified, and I could see how those teachers were able to translate and communicate the impact of guided inquiry on student learning so well," she continues. "I wanted to be like that."

POGIL WORKSHOPS



WORKSHOPS

POGIL BY THE NUMBERS



TEACHERS TRAINED

New POGIL Publications in the Works

► POGIL Activities for Physical Science

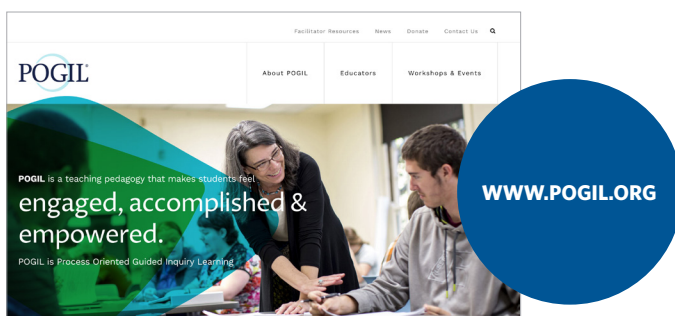
Introduction to Physics, by **Laura Trout**, Lancaster Country Day School, and **Andrei Straumanis**, Consulting Scientist and Executive Editor for The POGIL Project. The collection will include 30–40 activities covering Forces and Motion, Energy, Waves, and Electrical Circuits. Classroom testing is projected for the 2017–18 school year with an anticipated release by early 2019.

► Algebra for Calculus Activities

Algebra for Calculus: A Guided Inquiry is a collection of POGIL activities in development by the Math Team, made up of **Catherine Beneteau** of the University of South Florida, **Zdenka Guadarrama** of Rockhurst University, **Jill Guerra** of the University of Arkansas-Fort Smith, **Laurie Lenz** of Marymount University, and **Andrei Straumanis**, Consulting Scientist and Executive Editor for The POGIL Project. More information coming soon!

► EasyRead High School Biology Activities Project

This project began in response to a need for a subset of the *POGIL Activities for High School Biology* (Flinn, 2012) that are accessible to English language learners and students with language processing learning disabilities. Since last year, the project's working group, led by **Mare Sullivan** of Seattle Pacific University School of Education, has revised 30 activities to be more accessible to ELL students and students who need additional scaffolding. A timeline is in development for next steps and an anticipated release date.



New Look for the POGIL Website

We're excited to announce a fresh new look and event platform for The POGIL Project's website. After seven years, a website refresh was long overdue. We've added new photos of POGIL in action, improved navigation, an interactive calendar, and a more powerful and flexible interface for events management and user profiles. A work in progress, we welcome your comments and suggestions. Please check out the new website at www.pogil.org.



SHEILA QURESHI

A Western Pedagogy in an Eastern Context

Far from POGIL's headquarters in Lancaster, PA, Sheila Qureshi uses guided inquiry in her undergraduate courses at Weill Cornell Medicine-Qatar.

"I'm completely transferring a Western pedagogy to an Eastern context," explains Qureshi.

"I noticed that this type of learning was perfect for the Eastern environment," she adds. "My students love to help each other. You have to be collaborative and cooperative to learn in this way. They're very passionate about not letting anybody fall behind."

Part of this has to do with the social values of what Qureshi calls high-context cultures, including long introductory periods with new people and taking the time for small talk before you get down to business.

"In high-context cultures, you get to know people,"

Qureshi explains, pointing to her students' sense of social etiquette. "Because this is the culture in Qatar, this Western pedagogy fits in beautifully."

Recently, Qureshi teamed up with colleagues in Australia to work on a cross-cultural POGIL study, supported through a grant from the Qatar Foundation. The study tracks cultural attitudes toward guided inquiry science learning in Qatar, as well as students' perceived learning gains. To track student outcomes, Qureshi and her team piloted POGIL workshops in four Qatari high schools, two all-male schools and two all-female. They've also launched training and mentorship programs for science faculty within the pilot schools.

"The teachers are so happy to have that role now," she adds, "And the students love it."



2016 SPUR+ Grant Awards



The new POGIL SPUR+ grant program provides small seed grants of up to \$2500 to spur collaboration between POGIL community members and promote new ideas that further our strategic plan.

Congratulations to **Ashley Mahoney**, Professor of Chemistry at Bethel College, and **Rob Whitnell**, Professor of Chemistry at Guilford College, on receiving The POGIL Project's 2016 SPUR+ Grant for their project proposal, "SPIRAL: Strengthening the use of Process, Inquiry, Reflection and Application in the Laboratory." In addition to Ashley and Rob, the SPIRAL project team included **Ehren Bucholtz**, **Michael Garoutte**, **Marty Perry**, **Tim Herzog**, **Stacey Fiddler**, **Craig Teague**, and **Gail Webster**. The project team has begun work on more than 15 experiments for introductory chemistry courses, including general chemistry, preparatory chemistry, and GOB (general, organic, and biochemistry). Next steps are to continue development and testing with a long-term goal of producing an endorsed set of POGIL experiments that can be used throughout the target courses.

Thank you to everyone on the SPIRAL team for the great work!

2017 POGIL PEACH Awards

Congratulations to our 2017 POGIL PEACH honorees! The POGIL PEACH recognizes significant and enthusiastic contributions of new secondary and post-secondary practitioners to The POGIL Project.



Urik Halliday is a high school science educator at Von Steuben Metropolitan Science Center, Chicago, IL.

"As an urban public high school teacher, the struggles are plentiful and the recognition of our efforts are often fleeting. Being awarded the POGIL PEACH award is a prodigious honor.... Collaborative learning environments where students construct knowledge are not easy to cultivate—The POGIL Project and its dedicated members make that endeavor much more attainable."



Patrick Brown is Associate Professor of Health Sciences at East Tennessee State University.

"Receiving the PEACH award is very special because the winners aren't chosen by our students or our peers, but by our mentors. It is a wonderful feeling to have the acclaim of the people who taught me not just about POGIL, but about how to be a transformative educator."



2012

First POGIL high school activities books published by Flinn Scientific (ed. L. Trout), product of the HSPI project

2014

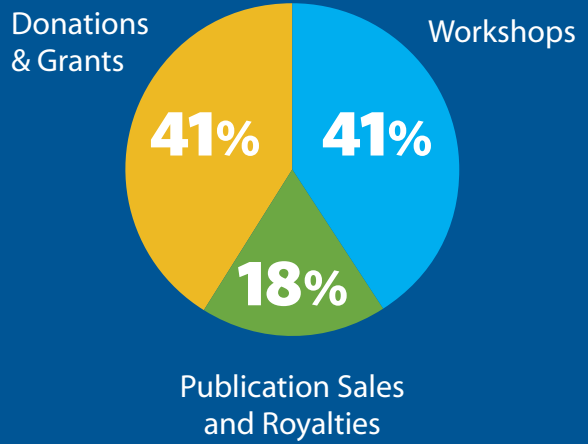
Chemistry: A Guided Inquiry, 6th edition published by Wiley

REVENUE SOURCES

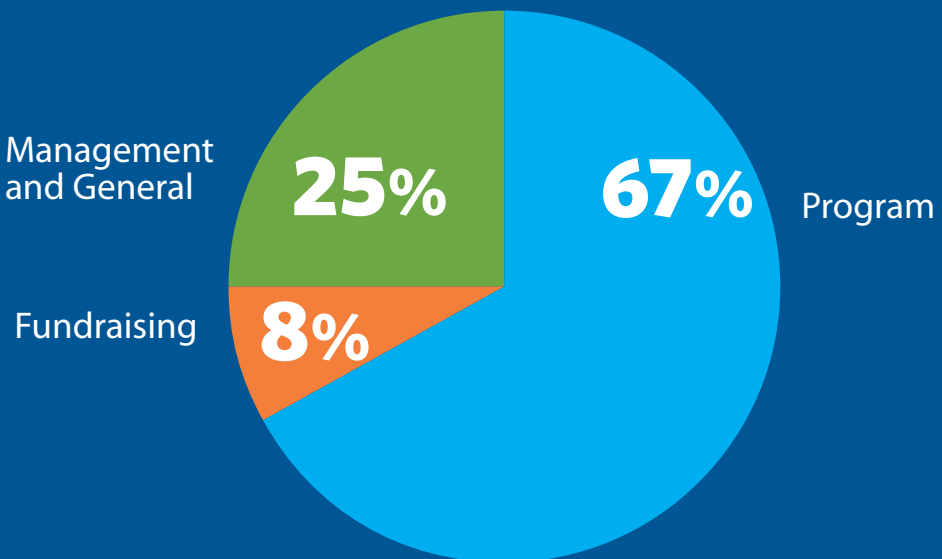
2003



2016



EXPENSES % OF BUDGET (2016):



Fundraising

Thank you to our 2016-17 donors! Your support helps bring POGIL to thousands of teachers and students each year!

Julie K. Abrahamson*	Gary Edverson*	Robert Kuhn
Karen Anderson	Michael Everest	Clif Kussmaul*
Susan Arenberg*	John Farrell*	Juliette Lantz and John Carroll*
Audrey S. Armoudlian	Valerie Felger	An-Phong Le
Rodney Austin*	Ruth and Jon Ferguson*	Harlan Cristy Lehman
Karl Bailey	Caryl Fish*	Alan Levine
Sheila Barbach	Ronald Frederick*	R. Daniel and Carol Baker Libby*
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Joyce and Loran Easter	Daniel King	
Mark Ediger*	Pamela Kochel	
	Sandhya Kode	
	Eileen Kowalski*	



2014

Intro to Materials Science & Engineering: A Guided Inquiry (Douglas) expanded POGIL beyond Chemistry at the college level

2015

The POGIL Project recognized as a Community of Transformation



"I feel that my contributions are going to a very important use. I want to make sure more teachers learn about POGIL through workshops, and more students experience it in the classroom. We are trying to change the way content is taught in the classroom, and POGIL is a leader."

— MARY VAN OPSTAL, WILLIAM RAINEY HARPER COLLEGE

WAYS TO GIVE

Your support, no matter the amount, is vital so that we can continue to have an impact on thousands of teachers and students every year. *Thank you!*

Online at www.pogil.org/donate:

- ▶ One-time gift
- ▶ Monthly gift: Become a POGIL Sustaining Partner by joining our monthly giving program

By Mail:

- ▶ Please send your check to: The POGIL Project, P.O. Box 3003, Lancaster, PA, 17604-3003

Matching Gifts:

- ▶ If your company or organization participates in matching gifts and you would like to make a contribution, please call us at 717-358-4702.

Publicly Traded Securities:

- ▶ Please call our Development Office at 717-358-4702 for more information.

The official registration and financial information of The POGIL Project may be obtained from the Pennsylvania Department of State by calling toll free, within Pennsylvania, 1-800-732-0999. Registration does not imply endorsement. The POGIL Project is a 501(c)(3) nonprofit organization.

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**A special thank you to our Sustaining Partners, who have been donors for three or more years or are part of our monthly giving program. We are so grateful for your ongoing support!*

Thanks to your support, The POGIL Project was able to provide:

- ▶ Teacher scholarships to POGIL workshops:
65 Educators/\$42,746
- ▶ Funding for new POGIL activities development: **\$2,942**
- ▶ SPUR+ grant: **\$2,500**
- ▶ Workshop subsidies to schools: 8 workshops/\$10,500



2016

Rick Moog received the ACS Pimentel Award in Chemical Education (to recognize outstanding contributions to chemical education)

2016

Jim Spencer recognized as an ACS Fellow

CLIF KUSSMAUL

Programming with POGIL

Clif Kussmaul, an associate professor of computer science at Muhlenberg College, remembers his first POGIL workshop with crystal clarity.

He'd been searching for a way to engage students in his large introductory courses, and a colleague from the chemistry department suggested he give POGIL a try.

"For me, the a-ha moment was when I started to think about questions I could ask my students to help them understand concepts they struggle with," says Kussmaul, who teaches introductory computer science and software engineering.

From then on, he was hooked. The POGIL method gave Kussmaul a pedagogical framework for a teaching style he'd started to develop on his own — and opportunities to help teachers halfway across the world impact their students.



In 2009, Kussmaul won a Fulbright Grant to India, where he delivered POGIL workshops to newly minted computer science graduate students. He still returns regularly to present his work and train India's growing population of educators.

Together with a colleague who won a grant from the Indian government, Kussmaul used POGIL to train these new teachers in both pedagogy and the content they'd need on the job. In addition to being a POGIL ambassador abroad, he also spearheads a National Science Foundation grant designed to help students learn open-source software design using POGIL.

"Our hope is that by getting students involved in these projects, they'll understand computer science concepts better, and they'll also develop collaboration skills," he says — all the real-world skills a computer science major needs to find a good job.



POGIL Workshops around the Globe!

POGIL in Canada

Mare Sullivan of Seattle Pacific University, worked with Canadian teachers in August of 2016 when she facilitated *Basic POGIL Strategies for STEM Teachers: Supporting the BC Know-Do-Understand Curriculum Model*, at St. Michaels University School in British Columbia.



POGIL in Ghana

In June 2017, **Clif Kussmaul** of Muhlenberg College, led a series of POGIL workshops at Ashesi University, a private liberal arts institution in Ghana. Ashesi's curriculum already emphasized critical thinking, communication, teamwork, and related skills, and Ashesi faculty across disciplines were excited to learn how POGIL could be applied in their courses.

POGIL in India

Clif Kussmaul also traveled to India for several weeks in November and December 2016. He led workshops at St. Thomas' College, Thrissur; the University of Kerala; and the Indian Institute of Technology-Bombay. Clif, along with Sandhya Kode of the Indian Institute of Technology-Hyderabad, led workshops at VNR-VJTIET; NIT Warangal; and the College of Engineering at Osmania University. The Osmania workshop was so well-received that the Vice-Chancellor of the university persuaded them to return a few days later for a 1-day workshop for Arts & Science faculty.

POGIL in South Korea

Tammy Pirmann, from the School District of Springfield Township, PA, was invited to present at the 2016 Global Software Education Forum in Seoul, South Korea, where she provided professional development for secondary computing teachers in *Using Standards and Active Learning in the Secondary Classroom* and the *Fundamentals of POGIL*. "The presentation and activities were translated into Korean for the workshop and I had an amazing interpreter," said Pirmann.

Laura Lavine, of Washington State University, was in Daejeon, South Korea, to conduct the *Introduction to POGIL Workshop* at the SolBridge International School of Business. Lavine shared that "the training was hosted by their new dean, Jerman Rose, who is a strong proponent and user of collaborative learning." The faculty at SolBridge is 30% South Korean and 70% non-South Korean, and come from the U.S., New Zealand, Great Britain, India, Kenya, Uzbekistan, Colombia, Taiwan, and China.

POGIL in Switzerland

In April of 2017, **Clif Kussmaul** took *Introduction to POGIL* on the road again to Lausanne, Switzerland, at *École polytechnique fédérale de Lausanne*. POGIL is a great fit for EPFL, where they encourage faculty to "focus on learning rather than on teaching."



2017

First National Conference for Advanced POGIL Practitioners

2017

Celebrating 15 years of impact and innovation!

The awards keep coming for POGIL practitioners. Congratulations, everyone!

POGIL COMMUNITY
ACCOLADES

Sean Garrett-Roe, *Assistant Professor of Chemistry, University of Pittsburgh*

- ▶ Received the Chancellor's Distinguished Teaching Award for Teaching Excellence

Clif Kussmaul, *Associate Professor of Computer Science, Muhlenburg College*

- ▶ Recognized by Red Hat, Inc., for continuing efforts to incorporate open source philosophies, methods, and tools into academic work

Kris Lantzky-Eaton, *Hilbert College*

- ▶ Named Provost and Vice President of Academic Affairs at Hilbert College

Jenny Loertscher, *Professor of Chemistry, Seattle University*

- ▶ Received the 2017 Provost's Faculty Award for Excellence in Teaching

Susan Shadle, *Chemistry Professor and Director of the Center for Teaching and Learning, Boise State University*

- ▶ Named Boise State Distinguished Professor



“When you leave college, there will be times when you’re going to be taking the lead, and times when other people need to be involved, and you’re going to take a step back. Everyone benefits.”

— ASTRID PEREZ, SENIOR, FRANKLIN & MARSHALL COLLEGE

Many, many thanks to our POGIL community of practitioners, friends, donors, and funders.

What we have accomplished together in this first 15 years has far exceeded my expectations. I am grateful to each of you for your passion, commitment, generosity, and everything you do to support the work of The POGIL Project. I have no doubt that we’re going to have another amazing 15 years!

— RICK MOOG, EXECUTIVE DIRECTOR OF THE POGIL PROJECT

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REFLECTIONS ON 15 YEARS OF POGIL



“The fact that there are different ways you can do a POGIL and lots of ways you can set up your classroom makes it easier. It leaves a lot of teacher choice.”

—AMANDA ZULLO



“I noticed that this type of learning was perfect for the Eastern environment,” she adds. “My students love to help each other. You have to be collaborative and cooperative to learn in this way. They’re very passionate about not letting anybody fall behind.”

—SHEILA QURESHI



“My surprise and joy is that POGIL has been adopted — and adapted — in so many different environments.”

—FRANK CREEGAN