TABLE OF CONTENTS

Letter from the Director ..................................... 1
ELISS Approach ................................................... 2
ELISS at-a-glance .............................................. 3
2016 ELISS Fellows ............................................ 4
Partner Campuses ............................................... 5
Learning Goals for Fellows ................................. 6
Program Design Elements ................................. 7
Building Graduate Student Capacity .............. 8
Idea Lab 2016: Drinking Water ......................... 9
Community Outreach ........................................ 10
Understanding the System .............................. 11
Creating Value for Others: Local Forums ...... 12
Connecting the Dots: National Forum .......... 13
Outcomes for Fellows ...................................... 15
Career Development & Exploration ........... 18
What’s Next for ELISS ................................. 19
The ELISS Network .................................... 20
Financial Report ........................................... 26
LETTER FROM THE DIRECTOR

Dear Friends,

It’s hard to believe that we’ve already come to the end of the three year pilot period for ELISS at the American Association for the Advancement of Science. As I reflect upon the past three classes, and the planning period before that, I think about the scores of people who have rolled up their sleeves, shared their time, and opened their checkbooks to make ELISS a reality. I have been touched by the generosity of many, the passion for making this world better, and a broad recognition that we need to learn to work together better to truly effect change.

The biggest asset of ELISS is this “community of the willing” that shares a commitment to improved connections between knowledge and action, universities and communities, and graduate education practices with needs of the 21st century. This community was built from the ground up by graduate students themselves, who convinced senior administrators to support the program and recruited applicants and advisors.

A great big thanks to the students who made this happen, and those of you who have supported them! Special thanks to AAAS for hosting us and to our sponsors for taking the risk to invest in on a new program.

ELISS has been a transformative experience, not only for the fellows but for me and others who have poured ourselves into the task of advancing the ELISS mission and goals. Thanks to honest feedback of fellows and committed staff and advisors, the ELISS experience has improved steadily every year. Program Director, Renske Erion, and I are pleased to share the story of the 2016 fellows’ journey in this annual report.

Although we are taking a break from recruiting this year, we will continue to advance our mission in a number of ways. ELISS graduates are committed to advancing the ELISS mission, too. On the last day of their time together, the 2016 fellows developed recommendations about how to help even more graduate students build the capacities they will need to meaningfully contribute in a range of careers. Look for ELISS graduates sharing what they learned at the upcoming AAAS meeting and other conferences, too.

Additionally, I have the privilege of serving on the National Academy of Sciences Committee on Revitalizing Graduate STEM Education for the 21st Century, where I look forward to putting my head together with many talented, committed folks who have the power to collectively change the system. I will be reaching out to the ELISS network for input throughout this process.

Keep your eye on our Facebook page and website for updates on the program review and news on whether ELISS might reemerge as a 2.0 or integrated into a program that could serve even more students. My vision is that graduate education of the future will focus not just on producing new knowledge; it will also build the capacity to transform knowledge for the benefit of others. If you have ideas about how we might work together to do this, please contact me at mroberts@elissfellows.org.

With gratitude,

Melanie Roberts
Founder and Director
Emerging Leaders in Science & Society
www.elissfellows.org
THE ELISS APPROACH

If science is going to fully serve its societal mission in the future, we need to both encourage and equip the next generation of scientists to effectively engage with the broader society in which we work and live.

-Alan Leshner, former CEO of the American Association for the Advancement of Science

The Issue

As the world grows more complex and interconnected, addressing societal challenges will require a workforce with the depth of knowledge, breadth of understanding, and ability to integrate and apply information in different contexts.

However, many graduate students and employers feel that graduate education is too narrowly focused to adequately prepare students for the range of careers and complex challenges they will face in the 21st century.

To address this need, we developed a service learning program that prepares the next generation of leaders to link knowledge and action.

Our Mission

Prepare graduate students to collaborate across boundaries on complex challenges through a service learning project that helps communities address a current challenge.

Recruit graduate student fellows from all disciplines, STEM and beyond, who are committed to meaningful work.

Disciplines

Biology  Health  Chemistry  Math  Engineering  Law

Empower fellows to be agents of change by helping them develop key competencies needed to address complex societal challenges.

Provide fellows with an opportunity to inform solutions to a societal challenge through engagement with a range of practitioners and scholars.

KNOWLEDGE → ACTION

Change Elements

Systems Understanding  Leadership  Collaboration
ELISS in 2016

at-a-glance

- 18 fellows
- 5 campuses
- 18 months in fellowship
- 83 advisors
- 3 all-cohort gatherings
- 12 fellow-led activities

Project Topic:
Safe, Sustainable, and Affordable Drinking Water

- 300+ stakeholders engaged
- 12,000 hours volunteered

- 1,084 Facebook followers
- 272 Twitter followers
- 152,953 total impressions
- 2,602 user engagements

2016 SPONSORS

Thank you for making all of this possible!

The Argosy Foundation
National Science Foundation
Partner Campuses
Gilbert Omenn and Martha Darling
and generous individual donors
Our goal is to create a network that will be able to move the needle on big challenges. To do this, our network needs:

- A common commitment to collaboration for the common good
- Diverse expertise, experience, and demographics
- Capacity to understand complex systems and move knowledge to action

**ELIGIBILITY**

- Graduate and professional students from ELISS partner campuses
- Students from all disciplines, including non-STEM fields
- Commit to ~5-10 hours per week and 3 multi-day workshops

**SELECTION CRITERIA**

- Leadership Potential
- Commitment to Collaborative & Interdisciplinary Approaches
- Commitment to Fellowship Objectives & Opportunities
- Commitment to Service
- Adaptability & Openness
- Scholarly & Professional Success
- Ability to Contribute

**Disciplines**

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sciences</td>
<td>11.11%</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>27.78%</td>
</tr>
<tr>
<td>Engineering</td>
<td>11.11%</td>
</tr>
<tr>
<td>Earth &amp; Environment</td>
<td>16.67%</td>
</tr>
<tr>
<td>Math / Physical Sciences</td>
<td>11.11%</td>
</tr>
<tr>
<td>Other Interdisciplinary</td>
<td>22.22%</td>
</tr>
</tbody>
</table>

2016 fellows and staff on Bainbridge Island, WA in January 2016

**2016 ELISS FELLOWS**

- 18 fellows
- 61% women
- 7 countries of origin
- 23-40 age range

White: 61%
Black: 11%
Asian/Pacific Islander: 22%
Hispanic: 5%
PARTNER CAMPUSES

Duke University
Andrew George
Brian Langloss
Joyell Arscott
Justin Lana
Biology
Chemistry
Nursing
Environmental Science and Policy

University of North Carolina at Chapel Hill
John Wachen
Nick Battista
Shaili Jha
Kasia Grzebyk
Education Policy
Mathematics
Neurobiology
Environmental Science and Engineering

Purdue University
Kim Saviers
MaryAm Ghadiri
Mysha Clarke
Mechanical Engineering
Forestry and Natural Resources
Forestry and Natural Resources

University of California, Irvine
Amber Habowski
Amy Dixit
Nikki DeVille
Molecular Biology
Epidemiology and Public Health
Public Health

University of Washington
Gaurav Maukherjee
Kaitlyn Casimo
Robby Franceschini
Mechanical Engineering
Neurobiology
Law and Public Health
LEARNING GOALS FOR FELLOWS

Building the "top of the T"

Graduate students develop deep disciplinary expertise in graduate school; however most do not have the opportunity to learn how their problem solving lens can be applied in a broader context.

ELISS cultivates T-shaped professionals. These individuals possess both depth of expertise in one area (stem of the T) and broad skills (top of the T) that are needed to move knowledge into action: personal leadership, collaboration with others, and systems thinking.

BOUNDARY CROSSING COMPETENCIES

DEPTH OF EXPERTISE

ELISS

Graduate School

LEADERSHIP

Fellows develop leadership mindsets and capacities necessary for creating positive change for themselves and others.

COLLABORATION

Fellows use collaborative methods to advance common goals across disciplines, sectors, and geographies.

SYSTEMS THINKING

Fellows employ systems thinking to understand interactions between concepts and actors involved in complex problems.

Strategies to meet learning goal

1) Focus on helping fellows understand their personal leadership style and strengths.
2) Recruit leadership advisors with a range of expertise to support fellows.
3) Have fellows be leads for specific goals/deliverables.

1) The ELISS Idea Lab project requires interdependent goals and matrixed work teams.
2) Pay attention to both process and content.
3) Focus on improving interpersonal communication and other competencies for effective teamwork.

1) Take time to understand elements of a complex issue and opportunities for change.
2) Interview scholars, practitioners, and other stakeholders who have different expertise and experience with the problem.
3) Examine how local, state, and federal actions impact a system.
Experiential learning is more effective than classroom learning for changing mindsets, knowledge retention, and engagement. ELISS provides a safe, supportive environment to practice new skills, fail, learn, and grow.

Fellows engage a range of scholars, practitioners and other stakeholders to better understand how scholarship informs practice.

PhD dissertations are highly individual pursuits. Yet most careers, whether leading a laboratory, working in industry, or informing policy require creating value for others. The focus of the ELISS project is to create value for their communities.

Engaging in real-world problem solving requires fellows to integrate diverse expertise and enhances intrinsic motivation to learn. The ELISS Idea Lab focuses on an issue that would benefit from increased collaboration across boundaries.

These programmatic elements are integrated into the ELISS IDEA LAB, a service learning project designed to advance learning goals for fellows while addressing community needs. Fellows serve as 'honest brokers' who examine a community challenge that requires multiple types of expertise and perspectives and to manage trade-offs among multiple stakeholders. Through the Idea Lab, fellows meet with a diverse array of stakeholders, observe challenges on-the-ground, and design multi-stakeholder convenings to stimulate new collaborations, and ideally to effect change.

"ELISS has made me realize that even though I am only a graduate student and in training I have skills that I can use to truly make a difference outside of lab and in our society; I feel empowered!" - 2016 Fellow Amber Habowski
BUILDING GRADUATE STUDENT CAPACITY

Throughout the 18 month experience, ELISS staff and mentors introduced concepts, mindsets, and tools that fellows would practice in the Idea Lab and find useful throughout their careers. In the fall, local leaders and advisors met weekly with fellows on each campus to discuss T-shaped concepts and approaches.

In January, fellows from all campuses came together for a 4.5-day Collaborative Leadership Development Workshop that built trust and the “ELISS mindset,” introduced new skills, and kicked off planning for the Idea Lab project. Fellows continued to build these capacities at meetings with advisors and at other gatherings in the middle and end of year.

The concepts, mindsets, and tools below advanced the three overarching ELISS learning goals for fellows: personal leadership, collaboration, and systems thinking.
IDEA LAB 2016: DRINKING WATER

IDEA LAB CHARGE:
How can we ensure a safe, sustainable, equitable, and affordable drinking water future?

ROADMAP

1 Chose Topic
A group of ELISS advisors and federal officials working at the intersection of health and the environment chose “Safe & Sustainable Drinking Water” as the Idea Lab topic for 2016 because it was a timely, interdisciplinary issue.

2 Collaborative Leadership Workshop
Fellows met for 5 days to learn T-shaped skills and plan for the year.

3 Recruit Topic Advisors
Fellows recruited a diverse group of advisors who work on, study, and/or are affected by drinking water on both a local and national level.

4 Map Local System
Fellows conducted dozens of stakeholder interviews to understand the current state of drinking water, trends impacting the system, and current or emerging challenges.

5 Identify Areas for Impact
A planning meeting with fellows and advisors identified opportunities for the ELISS national forum series to help create shared value.

6 National Forum Series
Fellows designed and delivered forums in each of their local communities and a capstone forum in Washington, D.C. that identified opportunities for systems-level innovation.

7 Forum Reports
Fellows presented a systems level analysis of opportunities, challenges, trends, information needs, case studies, and proposals for action.
COMMUNITY OUTREACH

2016 ELISS fellows went above and beyond the requirements of their fellowship to engage with their communities.

Fellows toured their local water utilities to learn about the drinking water system.

From left to right: Purdue fellows at Lafayette Water Works; UNC Fellows at Orange Water and Sewer treatment plant; UC Irvine Fellows at the Orange County Water District's Groundwater Replenishment Facility; Duke Fellows at Durham's Brown Water Treatment Plant.

Fellows gave back to their communities through educational outreach events.

Fellows participated or held events geared towards expanding knowledge related to water issues.

UW fellows organized a panel on Seattle’s drinking water system entitled “How secure is your tap?” Panelists discussed whether the local infrastructure was outdated, whether everyone has equal access to water, and other issues related to water quality.

Duke and UNC fellows engaged North Carolina water stakeholders at the Water Resources Research Institute’s annual conference. They created a booth with which they increased awareness for their project and asked relevant stakeholders to give input on the project.
As part of their Idea Lab project, ELISS fellows connected campuses and communities to discuss the sustainability and affordability of drinking water in regions surrounding our campus partners.

Between February - May of 2016, fellows met with over 100 stakeholders involved in studying, managing, or protecting drinking water to understand community needs.

In June, fellows met at AAAS headquarters in Washington D.C. to design a national forum series on drinking water that would convene key stakeholders across the country to discuss how to address the needs they identified.

People working on drinking water issues in Washington D.C. joined fellows for a planning session that utilized human-centered design (HCD) to develop ideas for their national forum series. Participants included representatives from the Environmental Protection Agency, American Water Works Association, National Resources Defense Council, among others.

Fellows subsequently returned to their campuses to plan their local forums.

Selection of Organizations engaged:
- Santa Margarita Water District
- Nanovated
- Orange County Public Works
- UCI Water
- Orange County Water District
- Eurofins Eaton Analytical
- Post Carbon Institute
- Irvine Ranch Water District
- University of Washington, Evans School of Public Health
- Circle of Blue
- Climate Resiliency Group, Seattle Public Utilities
- Human Right to Water, Unitarian Universalist Service
- Washington Labor & Industries
- City of Seattle
- Birck Nanotechnology Center, Purdue University
- Wabash River Enhancement Corp
- Energy and Utilities, Purdue University
- Indiana State Department of Health
- Urban Health, Indiana University
- Indiana Advisory Commission
- Gillings School of Global Public Health UNC
- Water Treatment Plant Operations, OWASA
- UNC Water Institute
- Cape Fear River Assembly
- Interfaith Council
- Center for Watershed Science & Management
- Chapel Hill Stormwater Management
- NC Department of Environmental Quality
- Clean Jordan Lake
- Clean Water for North Carolina
In the United States, people take for granted that sufficient, clean, affordable water is readily available. ELISS fellows examined the quality, sustainability, availability, and affordability of drinking water by consulting stakeholders and experts in their communities with knowledge of the environmental, health, social and economic challenges facing their local drinking water systems.

Fellows found both unique and common challenges in each region. Out West, changes in precipitation and population growth in both southern California and Seattle have tested the resiliency of their water systems, while both Indiana and North Carolina support many individuals on small independent water systems, such as private wells, that are unregulated and at risk for contamination.

In the fall, fellows convened a diverse array of local stakeholders and experts to discuss areas ripe for the development of new technologies, research, or policies that could be instrumental to solving these challenges.

Click on the university for more information about their local forum!
Groundwater and private well management emerged as a common challenge across all regions and an opportunity for organizations to work across sectors and geographies to ensure safe drinking water for all.

Fellows at each campus recruited a regional representative to present a local groundwater or private well challenge to an audience from various federal agencies and national organizations.

Forum participants worked together to draw out opportunities for impact and to brainstorm creative solutions to local challenges.
Fellows identified eight needs related to groundwater and private wells:

- Streamlined Tools and Initiatives for Effective Private Well Water Management
- Effective Communication Between Local/State Agencies and Private Well Owners
- Improved Small Water Systems
- Improved Drinking Water Quality
- Improved Data Collection and Management
- Better and Standardized Private Well Water Regulations
- Safe Water Reuse and Groundwater Recharge
- Allocation of funding to water research and hiring staff

READ THE FELLOWS' FULL FORUM REPORT HERE

“The ELISS forum connected me to new ideas and people that I will access in the future.”
- DC Forum Participant

“I’m taking away a new enthusiasm to do what I can as an individual with access to government resources to address these challenges.”
- DC Forum Participant

“I will use what I learned at the ELISS forum to inform further development of our outreach programs.”
- DC Forum Participant

“Getting to know people from different industries and national organizations/agencies is tremendously helpful in putting much of what I work on in perspective.”
- DC Forum Participant

ELISS in the news!
READ THE STORY HERE
OUTCOMES FOR FELLOWS

While fellows develop deep expertise in graduate school, ELISS helps them learn and practice using the broad skills they need to move knowledge into action: personal leadership, collaboration with others, and an understanding of how pieces fit within a larger system.

Below are some of the ways that we advanced our learning goals for fellows...

SYSTEMS THINKING

81% increased their understanding of how academic expertise informs practice.

81% referred to water practitioners as a key ‘go to’ source for their project.

Amanda Murphy, ELISS advisor and training specialist for the William D. Ruckelshaus Center, taught fellows how to conduct a situation assessment at our leadership workshop.

Other commonly used sources included academic experts, reports by water organizations and websites about water.

In their own words, fellows learned...

- How to learn from people instead of books, papers, or other static written materials.
- How to do a stakeholder map and find ways to connect with local stakeholders about issues affecting them.
- How to design an event that brings people with different backgrounds to the table.
- To have the confidence to reach out to people even when you don’t know anything about the topic.
- More about the “politics” of policy making. What is important in Washington compared to other communities.
In their own words, fellows learned...

- How to compromise, whether by vote or discussion, on ideas and then promptly work together to make it better, shape and evolve it going forward.

- How to collaborate across sectoral and geographic boundaries and what it takes to make these types of collaborations successful.

- How to better engage with scholars and community members across a range of disciplines and interests.

- Working closely over a long period helped me to learn how to work with my opposites. I’ve incorporated some stricter habits into my otherwise loose work style.

Establishing a culture of trust and openness:

"It is amazing to see a group of graduate students from such diverse backgrounds and expertise can come together for a five day orientation and leave as a cohesive and collaborative group to tackle complex problems." - 2016 Fellow

"Seeing how you can bring different ideas on a table without the fear of being judged. It helped us to go beyond our expertise and trust in collaboration. I am learning a lot from my cohort and respect them a lot as my friends, as an intellectual people and as members in my community." - 2016 Fellow

"Spending lots of time with the cohort and having personal conversations make it a very comfortable atmosphere, which allows us to be vulnerable and let our guard down so we aren’t afraid to ask questions or for clarification, or offer a different point of view, etc. I think scientists generally struggle in this area." - 2016 Fellow
LEADERSHIP

The biggest lessons fellows learned about themselves:

- Confidence to talk to experts in a field that you may know little about and manage to keep an informed discussion going.
- I can make community connections.
- Great things can come from stepping outside of your comfort zone.
- Put yourself out there!
- Thinking of myself as a professional in the greater scientific community.
- I shouldn’t feel guilty when asking others for help.
- Comfort with ambiguity of content is easier for me than ambiguity of process.
- I was able to visualize my passion.
- I don’t always have to be in charge to lead, or for the project to be successful.

Fellows found the following most helpful in their personal development:

- Learning different leadership styles, what my current leadership style is, where my strengths and weaknesses lie, and setting leadership goals for where I want to be.
- Developing self-reflection, self-awareness and being motivated to believe that I can effect sustainable change in my community.
- Networking - meeting new people that are different from myself both personally and in their career. It is helping to get me out of my comfort zone and out of lab.
- Being able to develop better communication as well as leadership skills.
- Access and introduction to a host of personal/leadership development material and professionals.

Chris Ernst - ELISS advisor, Global Head for Learning, Leadership & Organization Development at the Bill and Melinda Gates Foundation, and author of Boundary Spanning Leadership - imparted to fellows his top 3 leadership lessons (above) at our leadership workshop.

100% said that they gained an increased understanding of their personal style/strengths, 100% gained a deeper appreciation for their own leadership potential, 88% are more aware of their own lenses and biases, with 67% saying it “really opened their mind and helped them see things in a new way.”
CAREER DEVELOPMENT AND EXPLORATION

35
Median number of people added to fellows’ network

88%
of fellows reported that ELISS had an impact on their career goals

with 56% reporting a “large” or “profound” impact.

“I left orientation feeling confident that the network ELISS is creating - as well as the networking skills we obtained - won’t just be valuable throughout this fellowship year, but throughout our careers as leaders and advocates for change.”
- Justin Lana

“ELISS really has opened a lot of doors in my head! Now I’m thinking about big picture issues, I’m thinking about science policy, I’m thinking about the system of graduate education. Most surprisingly, I’m more involved and interested in keeping up with policies and issues at the local level. I feel like a better informed student and citizen overall, and I’ve gotten to work with AMAZING people.”
- Shaili Jha

“ELISS has really driven home how to communicate across boundaries and how to pull back a bit from the technical and detail oriented approach of science to effectively communicate with a wider group of people. It also has had us look at issues from a much broader perspective. Identifying problems and solutions is much different when you are looking at how to address societal challenges rather than the nitty gritty of a research problem.”
- Brian Langloss

In their own words, fellows gained...
- Larger network of other graduate students interested in policy and using science for social change.
- Meeting new people that are different from myself both personally and in their career. It is helping to get me out of my comfort zone and out of lab.
- I’ve never much engaged with campus resources either in undergrad or in grad school. Actually coming face to face with a lot of different organizations, personal development groups, and various resources to help students create organizations and opportunities was pretty eye opening in terms of what is actually there and how effective they can be.
WHAT'S NEXT FOR ELISS

Program Review

Each year ELISS has evolved and improved based on feedback from fellows, advisors, and staff. With three years now under our belt, we have gained a lot of knowledge and experience, which we hope to share with others seeking to create similar experiential learning programs and professional development opportunities for graduate students. During 2017, we will review ELISS to extract lessons that could inform other efforts to reach graduate students at AAAS and beyond.

Graduate Education Reform

ELISS fellows participated in a design session to creatively imagine new programs that would help graduate students to collaborate across boundaries on complex societal challenges. Fellows pitched their ideas to a panel of judges from AAAS, MIT, and NSF who are all thinking about how to engage graduate students.

ELISS Founder and Director, Melanie Roberts, was recently appointed to serve on the National Academies Committee to Revitalize Graduate STEM Education for the 21st Century. Through this avenue and others we will continue to advocate for building T-shaped competencies in graduate students and to share the lessons of ELISS to benefit students across the country.

Catalyzing State/Local Science Policy Efforts

ELISS Director Melanie Roberts and Duke fellow Andrew George were both recently awarded a planning grant from the California Council on Science and Technology (CCST) funded by the Gordon and Betty Moore Foundation and the Simons Foundation, to explore the creation of a science and technology policy fellowship program for the Washington and North Carolina state legislatures respectively. Such programs would provide state legislators and policymakers with impartial advice and help deciphering increasingly complex science and technology related matters.

“[Without ELISS] I would have never had the confidence or skills necessary to apply for this grant. I have learned so much through ELISS and it wasn't until I was leveraging my network and working on this proposal that I realized just how much.” -Andrew George

AAAS Annual Meeting: Serving Society through Science Policy

The AAAS 2017 Annual Meeting asks how can we effectively provide the best available scientific evidence to inform policy and thereby increase the value of science to society.

Purdue fellow Kim Saviers will be presenting a poster on ELISS: Development of boundary-crossing competencies in Ph.D. students. Other fellows, Kasia Grzebyk and Andrew George, will also be attending the meeting.
“Our content mentors taught us an insane amount about water. I also thought it was particularly helpful to have leadership advisors that were not tied to the topic because they were immensely helpful in getting us started with networking and leveraging local resource and provided feedback throughout the course of the project.”

“...and lots of help from countless volunteers!”
WATER MENTORS

Fellows recruited a diverse group of mentors who work on, study, and/or are affected by drinking water issues at a local and national level. Mentors provided feedback on fellows’ presentations and written documents and helped the fellows to design useful forums.

Justin McCusker
Chris Warren
Jian Peng
Shannon Roback
Diego Rosso
Jason Dadakis
Andy Eaton
David Feldman
Debbie Cook
Fiona Sanchez
James Jin Woo Yoo
Manrique Brenes
Tim Miller
Zhao Ma
Sara Peel
Al Gilewicz
Ernest R Blatchley

Jill Stewart
Monica Dodson
Kelsey Pieper
Tom Hoban
Michael Reinke
Greg Characklis
Mary Tiger
Howard Weinberg
Julie McClintock
John Morris
Francis DiGiano
Ruth Rouse
Hope Taylor
Andrew Pappas
Gabriel Fillipini
Jamie L. Palmer
Joseph Cook

Brent Walton
Paul Fleming
Kristie Ebi
Patricia Jones
Nalani Yoko
Rebecca Levine
Wylie Harper
Scott Meschke
Alan Roberson
Lisa Ragain
Margaret Murphy
Bill Cooper
Jim Taft
Raj Pandya
Sacoby Wilson
Theresa Harris
Nicole Van Abel
ELISS staff and campus liaisons recruited experienced advisors to reinforce the work ELISS is doing and to help guide fellows through this experience both in terms of their personal growth as leaders as well as with their Idea Lab project.

LEADERSHIP ADVISORS

CAMPUS LEADS

Kelly Edwards – Associate Dean of the Graduate School UW
Colleen Gabauer – Director of Interdisciplinary Graduate Programs, Purdue
Jacob Levin – Assistant Vice Chancellor, UC Irvine
Nita Farahany – Director of Duke Science & Society
Heidi Harkins – Director of Professional Science Master’s Programs, UNC Chapel Hill

Triangle - Duke University & UNC at Chapel Hill

John Hardin – Executive Director, North Carolina Board of Science, Technology & Innovation
Rebekah Layton – Director, Training Initiatives in Biomedical & Biological Sciences
Joanne Pierce – Deputy Public Health Director
Bono Sen – Training and Capacity Building Expert, NIEHS-WHO Collaborating Center
Ken Tindall – Senior Vice President, Science and Business Development, North Carolina Biotechnology Center
Erika Weinthal – Associate Dean for International Programs, Professor of Environmental Policy, Duke University

Purdue University

Candiss Vibbert – Assistant VP for Engagement
Sara Peel – Director, Wabash Watershed Projects
Robert Sorensen – Community Leader

University of Washington

Hien DeYoung – Executive Coach
Jennifer Davison – Program Manager, Urban@UW
Ruby Love – Chief Impact Officer, Venturescale SPC
John Spady – Civic Entrepreneur for public engagement
Michael Kern, Darren Nichols and Amanda Murphy – William D. Ruckelshaus Center

University of California, Irvine

John Hardin – Executive Director, North Carolina Board of Science, Technology & Innovation
Rebekah Layton – Director, Training Initiatives in Biomedical & Biological Sciences
Joanne Pierce – Deputy Public Health Director
Bono Sen – Training and Capacity Building Expert, NIEHS-WHO Collaborating Center
Ken Tindall – Senior Vice President, Science and Business Development, North Carolina Biotechnology Center
Erika Weinthal – Associate Dean for International Programs, Professor of Environmental Policy, Duke University
Ellen Platts, Organizer Extraordinaire

Ellen Platts is a recent graduate of the University of Chicago where she earned a BA in Anthropology, with a concentration in Archaeology, and a minor in Human Rights. She has spent the past year assisting the AAAS Scientific Responsibility, Human Rights and Law program while helping keep ELISS organized!

Melanie Roberts, ELISS Mom

Melanie Roberts is the founder and director of ELISS and a strategic consultant specializing in engagement of scientists and engineers in policy; design of interdisciplinary and translational programs; professional development for scientists and engineers; and cross-sector partnerships. Based in part on transformative experiences in graduate school and as a AAAS Science & Technology policy fellow, Melanie started ELISS to help graduate students realize their potential as change makers.

Renske Erion, Fellow Wrangler

Renske Erion is the program director of ELISS. She was originally drawn to the ELISS mission as a graduate student at the University of Pennsylvania wanting to make a greater impact outside of the lab. Renske is passionate about working on complex challenges including how can we better prepare graduate students to be change makers in the 21st century.

Mark Frankel, AAAS Cheerleader

Mark Frankel has advanced scientific integrity, science and the law, and human rights at the American Association for the Advancement of Science for over 30 years. He has also inspired countless young scientists to think more deeply about their responsibilities as scientists and citizens.

Ellen Platts, Organizer Extraordinaire

Ellen Platts is a recent graduate of the University of Chicago where she earned a BA in Anthropology, with a concentration in Archaeology, and a minor in Human Rights. She has spent the past year assisting the AAAS Scientific Responsibility, Human Rights and Law program while helping keep ELISS organized!
John Abele, Benefactor & Role Model

John Abele first recognized the power and challenges of collaboration when he was building Boston Scientific, a biomedical device company that depended on getting engineers, physicians, and business people to change the way medicine is practiced. Now a philanthropist, board member, and thought leader, John is committed to helping people work together better to address important societal problems. His family foundation has supported ELISS for the past three years, and John’s commitment to a common mission, infectious enthusiasm and thought-provoking questions have inspired ELISS staff and fellows alike.

Gary Olson, Collaboration Guru

For nearly thirty years, Professor Gary Olson has been studying the elements that make collaboration successful (or not), particularly across distances. He was prescient in his choice of research topics, since collaboration is becoming even more of a necessity in the 21st century workforce. Gary has been studying collaboration of ELISS teams for the duration of the 3-year pilot project, and provide tips for improvement along the way.

Margaret Krebs, Fellow Whisperer

Margaret Krebs designs educational programs to help people move knowledge to action. She currently runs the Leopold Leadership Program at Stanford, which provides academic faculty with the skills, approaches, and theoretical frameworks for translating their knowledge to action and for catalyzing change to address the world’s most pressing sustainability challenges. Margaret worked with ELISS staff to redesign our initial leadership development workshop end-of-year reflection.

Victor Udoewa, Jack of All Trades

Victor Udoewa is an educator, engineer, designer, and many other things (dancer and community volunteer among them). Victor worked at Google and 18F, part of the Government Services Administration, to help people tackle messy problems in education, international development, and government projects. Victor facilitated the ELISS mid-year meeting, where he introduced ELISS fellows to human centered design as a method for creating value for others.

We couldn't have done it without you! Thank you for making 2016 a success!
THANK YOU, THANK YOU!

We would be nothing without the support and help of a large network of amazing individuals. Thank you for all you have done to support ELISS!

Valerie Bockstette
Chris Ernst
Aaron Goldner
David Goldston
Melvin Greer
Margaret Krebs

Neal Lane
Bree Mitchell
Gary Olson
Raj Pandya
Patrick Rose
Cynthia Robinson

Tobin Smith
Linda Staheli
Kate Stoll
Victor Udoeua
Samantha White

Application Reviewers

Rose Filley
Jennifer Groh
Gary Burinishe
Jon Story
Patrice Buzzanell
Linda Lee
Melinda Moree
Mark Lim
Kathleen Farrell
Jessica Chubak
Paula Nurius
Carrie Lee

Cyan James
Cheryl Moy
Heidi Harkins
Patrick Brandt
Gretchen Gehrke
Russ Campbell
Jason Cross
Michael Waitzkin
Dina Rousset
Richard Watkins
Brett Brenton
Geoff Coltrane

Chris Spitzer
Emma Flores
Simon Cole
Amanda Babson
Ryan Bixenmann
Jeanne Braha
Ben Chrisinger
Pat Clemins
Kristin Cockley
Gabriel Harp
Erin Heath
Cyan James

Janis Johnson
Kate Knuth
Ryan Meyer
Mary Nicholas
Raj Pandya
Ed Ramos
Ursula Rick
Tom Robey
Phil Rosenfield
Andrea Stith
Kate Stoll
Melissa Summers

Senior Fellows

Priyanka Brunese
Kendra Brown

Bonnie Schmittberger
Aaron Towers
Ross Beattie
JoEllen McBride
Brandon Linz

Ellen Wann
Erin Delman
Jonathan Kershaw
Marc Evenst In Jacques
Samantha Roberts

Campus Liaisons

Francis Eanes
Samina Fatemi
Samuel Guffey
Trenton Jackson

Nastaran Karimi
Nyssa Lidovich
Mahsa Modiri-Gharehveran
Brianna Osinski

Joseph Revuelta
Austin Scheetz
Taisha Venort
Jacob Widner

Student Volunteers
We are grateful to the many people and organizations who have contributed time and money and to the fellows for using their student budgeting skills and tapping university resources to keep our programming costs low.

**OUR SPONSORS**

Many thanks to

**The Argosy Foundation**

**National Science Foundation**

**Partner Campuses**

Gilbert Omenn and Martha Darling

and generous individual donors

**Last but not least, THANK YOU** to our host organization, AAAS!

Special thank you to all of the AAAS-based ELISS team: Mark Frankel and Ellen Platts as well as Ed Derrick, Juli Staiano, Cynthia Robinson, and Erin Heath.

**For more information contact:** Melanie Roberts
ELISS Founder and Director
elissfellows@gmail.com

**FINANCIAL REPORT**

<table>
<thead>
<tr>
<th>Expenditures*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary and Benefits</td>
<td>$170,000</td>
</tr>
<tr>
<td>Programming</td>
<td>$80,000</td>
</tr>
<tr>
<td>Operations</td>
<td>$36,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$286,000</strong></td>
</tr>
</tbody>
</table>

*Estimated expenditures, to be updated after all receipts are processed.*