Network Science
UC SANTA BARBARA

Integrative Graduate Education Research Training

From the Director

As we move into the third year of our NSF-funded graduate training program in network science, we are pleased to welcome a third group of trainees into the IGERT cohort. Counting these incoming graduate students, we can boast of 20 funded trainees hailing from six separate academic departments. This year we welcome our first trainee pursuing a PhD in Communication, as well as additional trainees in Sociology, Computer Science, Electrical and Computer Engineering, and Ecology, Evolution, and Marine Biology.

Our program continues to explore what it means to be interdisciplinary and integrative. All our current trainees have begun exploring interdisciplinary research with their mentors. We look forward to the exciting and innovative accomplishments this next year will yield.

Ambuj Singh
Chair, Computer Science

Network Science and Sociology

Alex Kulick's research project entitled, "Narrative (Counter-) Mobilizations in U.S. Same-Sex Marriage Struggle" uses a network-based approach to map the discursive field of contention that emerged through extra-institutional advocacy in the landmark USSC case *Obergefell v. Hodges.* Alex further developed this training module into a Master's thesis, and the resulting research has led multiples conference publications.

International Opportunities

Lilla Bartko traveled to Helsinki, Finland in August 2016 to attend a workshop on mathematical ecology and evolution, working with leading researchers in gene network research. Acceptance to the workshop was competitive; Lilla's participation in UCSB's Network Science IGERT program certainly bolstered her application. The topic for the 2016 workshop was "Structured Populations."

Highlight: Elizabeth Forbes

Trainee receives an NSF Graduate Student Fellowship to explore networks in nature

On the heels of her IGERT traineeship, **Elizabeth Forbes** (Department of Ecology, Evolution, and Marine Biology) has been awarded an NSF Graduate Research Fellowship for her research titled, "Small but mighty: Effects of wildlife loss on soil communities and processes." The work will take place at Mpala Research Centre in Kenya, and will involve investigating the impacts of large wildlife 'loss' (by way of their experimental exclusion from large plots of savanna) on soil processes that drive carbon dynamics in the ecosystem. Ms. Forbes will also be exploring the impacts of cattle presence/absence in the same way, to introduce the question of whether domestic cattle populations could act as alternative herbivores in a system where native herbivores are excluded.

UCSB

NETWORK SCIENCE IGERT UPDATES — FALL 2016

GLANCE AT UCSB NETWORK SCIENCE

- National Science Foundation initiative to train PhD students in interdisciplinary field of network science.

- Program spans seven academic disciplines: Communication; Computer Science; Ecology, Evolution, and Marine Biology; Electrical and Computer Engineering; Geography; Mechanical Engineering; and Sociology

- All IGERT trainees receive a two-year award providing full remission of tuition, fees, and graduate student health insurance, as well as a stipend of $30k/year.

- 20 trainees supported since 2014

New trainees in Fall 2016:

Taom Sakal	BS, Mathematics	UC Santa Barbara
Furkan Kocayusufoglu	BS Computer Science	Bilkent University
Isaac Mackey	BA, Comp Sci/Physics	University of Virginia
Rachel Redberg	BA, Applied Math	UC Berkeley
Jacob Fisher	MA, Communication	Texas Tech University
David Grimsman	MS, Computer Science	Brigham Young
Pedro Cisneros	BS, Electronic Engineering	Pontifical Catholic Univ.
Devin Cornell	BS, Electrical Engineering	Missouri University

UCSB's Network Science IGERT program is committed to promoting diversity within STEM fields. Women, under-represented minorities, and individuals from economically and socially disadvantaged backgrounds are especially encouraged to apply.