
geography

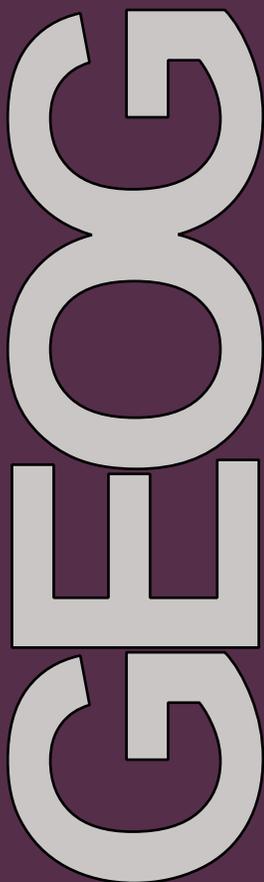
THE GRADUATE SCHOOL OF GEOGRAPHY AT CLARK UNIVERSITY



WHERE'S YOUR WORLD? | FALL 2015



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Graduate School of Geography
Jefferson Academic Center 220
Clark University | 950 Main Street
Worcester, MA 01610

Phone 508.793.7336
Fax 508.793.8881
geography@clarku.edu
Visit us Online

Jody Emel
Acting Director

Robert (Gil) Pontius
Associate Director

Christine Creelman
Department Administrator

Brenda Nikas-Hayes
Graduate Program Administrator

Rachel Levitt
Undergraduate Program Coordinator

Kayla Peterson
Office Coordinator

Jane Salerno
Director, Media Relations

Newsletter Editor: Rachel Levitt
Cover Photo: Rachel Levitt

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Faculty and student news updates provided by the Clark News Hub

NEWS HUB

GEOGRAPHY@CLARK

WELCOME

Greetings from Acting
Director Jody Emel



Dear Folks,

Welcome to the new academic year. It is my great pleasure to welcome our new colleague **Dr. Rinku Roy Chowdhury** and our visiting colleague **Dr. Prajjwal Panday**. Welcome to all the new graduate and undergraduate students as well!

After we've hugged and shaken hands, welcomed the new and the returning, and found our rhythm in the classroom (for the most part!), it is time to recognize the seriousness of what we do. With war raging in Syria and Afghanistan, refugees fleeing via dangerous routes, and climate change surging forward, what we do inside and outside the classroom takes on special meaning. It is difficult to balance optimism with the earnestness required to deal with the huge issues of the early 21st century; to impart the significance while still modeling hopefulness. But we are in for the long haul - thus humor without trivializing and wisdom without pedantry are indispensable. Solidarity provides sustenance and footing. Our work as geographers, spatial scientists, and environmental scientists (both social and biophysical) has never been more important than it is today. Welcome to a new academic year and welcome to the struggle. As Dr. Martin Luther King, Jr. so eloquently put it:

"Human progress is neither automatic nor inevitable...Every step toward the goal of justice requires sacrifice, suffering, and struggle; the tireless exertions and passionate concern of dedicated individuals....This is no time for apathy or complacency. This is a time for vigorous and positive action."

— Jody Emel, Acting Director

REMINDERS

» ATWOOD « » EMAIL LIST « » SUBMIT «

Join us on **Thursday, October 15th** for our annual Wallace W. Atwood Lecture, featuring **Dr. Eric Lambin** (Earth System Science, Stanford University; Senior Fellow, Stanford Woods Institute for the Environment). Join us to hear his talk: "Land use change in the globalization era: Challenges and opportunities" in **Tilton Hall beginning at 7pm**. This lecture will also be livestreamed for the convenience of those who cannot attend. [Check out our event website for details.](#)

If you would like to receive email updates about events and other happenings within the Graduate School of Geography, contact geography@clarku.edu and we will direct your message to the appropriate staff member who can add you to the list. Announcements are frequently sent out about upcoming events, career and internship opportunities, and other important information. Don't miss out!

Traveling somewhere for research? Working on an interesting project around Worcester? Have a collection of recent photos of places you have visited? We are always looking for **new content for future newsletter issues**, and you might have what we are looking for! If you have information to share or know someone who is doing great work that should be recognized, email RLevitt@clarku.edu to see if your content can be featured in upcoming issues!

FACULTY NEWS

Robert (Gil) Pontius

Associate Director and Professor,
Graduate School of Geography

For the second summer in a row, Professor Pontius spent a month at Hunan University of Science and Technology. He and his host, Professor Bin Quan, are doing GIS-based research concerning land change in China.

More news: **Gil Pontius** published a paper with former Ph.D. student **Marco Millones** that has been documented as the most cited paper in the International Journal of Remote Sensing during the last five years. [Click here to see the full article.](#)



Prajjwal Panday

Visiting Assistant Professor of Geography
Land surface hydrology, Remote sensing,
Biophysical modeling, Mountain environments

Please welcome our newest addition to the Geography faculty, **Professor Prajjwal Panday!** Professor Panday is teaching **GEOG 102** Weather & Climate, and **GEOG 119** Arctic System Science.

"I joined Woods Hole Research Center's Brazil team in 2013 as a Postdoctoral Fellow after receiving my Ph.D. from the **Graduate School of Geography at Clark University**. I also have a Master's Degree in Environmental Sciences from SUNY-College of Environmental Science and Forestry and a Bachelor's Degree in Environmental Studies and Chemistry from St. Lawrence University. I am a geographer with research and intellectual interests focused on using a systems approach to determine

linkages between climate variability, anthropogenic changes (land use and climate), and land-water interactions. My research has primarily focused on analyzing and modeling changes in the hydrological balance and hydroclimatic variability owing to the impacts of land cover and climate changes in the Amazonian and Himalayan River Basins, two regions at the forefront of environmental changes. My doctoral work, funded by a NASA Earth and Space Science Fellowship, focused in the Himalayan region with contributions to understanding and establishing hydrological, climatological and ecological baselines necessary to this region. My current research focuses on deforestation-related impacts to the water cycle in the Amazon and examining the impacts of extreme hydrological events on Amazon floodplain hydrology and fisheries."

FACULTY NEWS

Deborah Martin

Professor, Graduate School of Geography

“Deb Martin went to the Twin Cities of Minnesota (aka Minneapolis and St. Paul) in July to conduct field work for a new research project funded by the National Science Foundation. Titled “Collaborative Research: The Scale of Governance in the Regulation of Land: Community Land Trusts in the Twin Cities,” the project is a collaboration with co-PIs Profs. **Joseph Pierce** (Clark Ph.D., 2011), of Florida State University, and **James DeFilippis**, of Rutgers University. The Twin Cities metro area is home to five housing community land trusts (CLTs), which are private, not-for-profit organizations that own residential land in trust for a community defined by membership and geographical boundaries at varying scales, from the sub-neighborhood to the urban region. Increasingly being used to provide affordable housing, CLTs offer long-term renewable leases for the use of their land to members, who in turn own the homes built on that land. This research examines the relationships between the geographic scale of a Community Land Trust; its engagements in regional land governance (including interactions with other non-profit and government agencies); and its geographical identity, including the place and community identities produced.



The research team – including the three co-PIs and two graduate students, our own **Azi Hadizadeh**, and **Olivia Williams** of Florida State University – spent two weeks living together in a three bedroom house (it wasn’t as crowded as it sounds, thanks to a finished attic and basement) in St. Paul, right near Deb’s old stomping ground of Macalester College. While experiencing “real world: academia,” they conducted over 30 research interviews and site visits to CLT properties, and had a blast, cooking together, sampling Twin Cities restaurants, and listening to great music, when not deeply embedded in the research. (Joe, Azi, and Olivia were there for the full month of July).

(Left) Azi sampling local fare: Minnesotans take their dairy very seriously”

Thank you to Professor Martin for providing this information!
To keep up with our latest faculty news, visit us online at
clarku.edu/departments/geography/newsevents/newsfaculty.cfm

DOCTORAL STUDENT NEWS

Introducing our 2015 Ph.D. Cohort

• **Jacob Chamberlain | U.S.**

M.A. Postcolonial Culture and Global Policy, Goldsmiths College, University of London & B.A. Philosophy, University of Southern Maine

• **Janae Davis | U.S.**

M.A. Geography, University of South Carolina & B.A. Sociology (Anthropology Concentration), North Carolina State University

• **Ben Fash | U.S.**

B.A. Studio Art, Wesleyan University

• **Dylan Harris | U.S.**

M.Sc. Environment and Development, London School of Economics and Political Science & B.A. Political Science and Religion, University of Southern Mississippi

• **Guy Hydrick | U.S.**

M.Sc. Environmental Science, Policy and Management, Central European University/ University of Manchester/Lund University &

B.A. Geography and International Studies
Millersville University

• **Roopa Krithivasan | U.S.**

M.E.Sc. Environmental Science, Yale University, USA & B.A. Biology, University of Chicago

• **Rich Kruger | U.S.**

M.A. Geography, Rutgers University & B.A. Geography and Urban Studies, Temple University

• **David Lukens | U.S.**

M.S. International Studies, Central Connecticut State University & B.A. History, Illinois State University

• **Alex Moulton | Jamaica**

M.S. Geography, East Carolina University, USA & B.Sc. Geography and Geology, University of the West Indies, Jamaica

• **Leslie Gross Wyrzten | U.S.**

B.A., M.A., University of Texas at Austin

• **Su Ye | China**

M.S. Environmental Studies, Queen's University, Canada & B.A. Forestry Science, Beijing Forestry University, China

• **Kaixi Zhang | China**

M.S. Earth Observation, University of Leuven, Belgium & B.S. Geographical Information Science, Wuhan University, China

• **Yu Zhou | China**

M.S. Cartography & GIS, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China & B.E. Remote Sensing Science & Technology, Shandong University of Science and Technology, China

View all of our current doctoral students' bios and research interests at clarku.edu/departments/geography/graduate/current-students/index.cfm



(Back, L-R) Ben Fash, Guy Hydrick, David Lukens, Jacob Chamberlain, Dylan Harris. (Middle, L-R) Su Ye, Rich Kruger, Janae Davis (Front, L-R) Kaixi Zhang, Yu Zhou, Alex Moulton, Roopa Krithivasan, Leslie Gross Wyrzten

DOCTORAL STUDENT NEWS

CUGS Field Camp 2015

Over the weekend of August 21-23, Clark University Geographical Society (CUGS) students gathered in Dunstable, MA for the annual Field Camp tradition at Camp Massapoag. This year's Field Camp was organized by second year Ph.D. students **Carlos Dobler** and **Laura Sauls**. Many thanks to both of them for organizing, and to Carlos for providing us with this info!

"A new academic year began, and with it, new geographers-to-be arrived to our beloved department. But not so fast, young apprentices. There is a last step to call yourselves part of this family: field camp. Once again we embarked to the woods for a week, armed with our sleeping bags and Peet's Modern Geographical Thought.

Tradition. After all, that's what this is about.

And tradition dictates a ritual of initiation. The newcomers, one by one, perform a trust fall while swearing allegiance to their new kin. A raging bonfire is witness of the act. And those who came as kids, emerge as geographers. They are Clarkies now.

And tradition dictates swimming in the lake, no easy task given the indomitable waters. But exhausted after soccer, basketball, and Settlers of Catan tournaments, certainly a refreshing dive is needed.

And tradition dictates feasts of delectable food. Delicacies from the around the world met our grill, chopping boards and finest plastic cutlery. Everybody ate until satisfied, and acknowledged the culinary abilities of those diligent 2nd year students behind the improvised kitchen.

And tradition dictates s'mores: a cornerstone of American camping culture. Marshmallows melting/igniting over the fire while we danced to the sound of eclectic music.

New academic year. But traditions are here to stay. We, geographers at Clark, honored once more this beautiful and communal one: field camp.

For many more to come."

— **Carlos Dobler, Second Year Ph.D. Student**



Top photo: Field camp attendees on the dock of Lake Massapoag
Bottom photo (L-R): Zhiwen Zhu, Professor Gil Pontius, Patrick Mutegeki

DOCTORAL STUDENT NEWS

CUGS Field Camp 2015



Photos

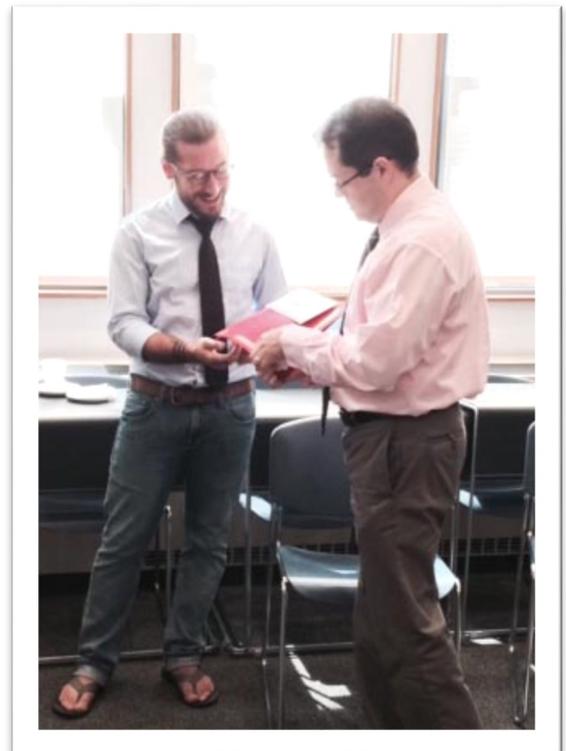
Left: Azadeh Hadizadeh Esfahini, Laura Sauls and others organizing the snacks **Middle:** New cohort bonding **Right:** Settlers of Catan tournament. Thank you to **Yifan Cai** (second year Ph.D. student) for providing us with these photos, and thank you to all who attended!

TA Award

Congratulations to Fourth Year Ph.D. Student **Nate Mietkiewicz** for receiving the **Clark University Outstanding Teaching Assistant Award** for 2014-15! This award was presented to Nate by Acting Dean of Graduate Studies, **Luis Smith**, during our GSG Fall 2015 Departmental Welcome Back Reception on September 9th.

Nate's research interests include: Applications of environmental GIS and Remote Sensing, fire behavior and fuels modeling, forest and disturbance ecology, mountain ecosystems, global environmental change.

Be sure to check out our website for more news about our doctoral students, and to view profiles on all of our current students: clarku.edu/departments/geography/graduate/current-students/index.cfm



GRADUATE STUDENT NEWS

Introducing our MS-GIS 5th Year Cohort

2015-16 Academic Year



(L-R) Erin Glennie, Hannah Rush, Suzanne Birdsell, Sarah Philbrick, Michino Hisabayashi, Moriah Day, Charlotte Mays
This year's MS-GIS 5th year group is a historic group of seven young women, a first for the program.

About the 5th Year ADP [Advanced Degree Program]

The MS degree in Geography specializing in Geographic Information Science is an option for students majoring in Geography, Global Environmental Studies, Earth System Science, Economics, International Development and Social Change, or Environmental Science and Policy. Students in these fields can apply for the MS GIS program and continue their studies, if accepted, for an additional year after receiving their Bachelors degree. See our website for full details on program eligibility and requirements.

clarku.edu/departments/geography/maprograms/index.cfm

GRADUATE STUDENT NEWS

NASA DEVELOP

Summer Research Program

Sean McCartney (MS-GISDE, '15) was selected as one of two DEVELOPers of the Term for summer 2015. Participants were selected for their strong leadership skills, and for demonstrating incredible initiative and dedication to their project. Congratulations!

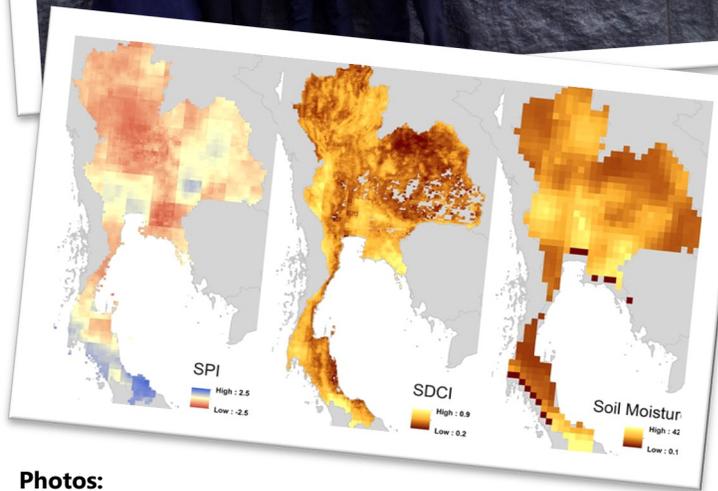
During his internship at NASA DEVELOP, Sean was the lead for a project that evaluated droughts in Thailand (detailed below, and [linked here](#)).

After his internship, Sean was offered a one year position as the Center Lead at Goddard Space Flight Center and he will be using species distribution modeling and GIS to evaluate the habitat of the northern goshawk in Montana. [Click here to view the article](#)

Monitoring Risk and Extent of Drought for Enhanced Decision Making and Resource Allocation in the Kingdom of Thailand

"Drought is a natural disaster impacting agricultural, environmental, and economic livelihoods. The Kingdom of Thailand is impacted by drought due to the variability of monsoon rains as well as other unfavorable meteorological conditions. The drought of 2015 was the worst drought to impact Thailand in over 15 years. As one of the biggest exporters of rice in the world, drought has the ability to impact the economy of Thailand in a big way. The available drought monitoring system in Thailand looked at only agricultural drought. This was insufficient for analyzing accurate risk management and decision-making. Using data from various Earth observing satellites, such as Terra Moderate Resolution Imaging Spectroradiometer (MODIS), Aqua MODIS, Tropical Rainfall Measuring Mission (TRMM) and Global Precipitation Measurement (GPM), and in situ stations, this study utilized three indices to analyze and monitor the current state of meteorological, hydrological and agricultural drought across Thailand.

The Standardized Precipitation Index was used in monitoring meteorological drought, the Stream-Flow Drought Index was used in monitoring hydrological drought, and the Drought Severity Index was used in monitoring agricultural drought. All indices were based on a monthly temporal resolution for monitoring drought. The study demonstrated how a combination of various indices can offer better understanding of drought conditions, with data derived from Earth observing satellites offering the ability to monitor drought across the entire country and in near-real time."



Photos:

Top: Sean McCartney receiving recognition from the Director of Applied Sciences, Lawrence Friedl

Middle (L-R): Clarkies at NASA DEVELOP — **Sarah Philbrick** (MS-GIS '16), **Amy Phillips** (GEOG '16), **Kayla Patel** (MS-GIS '15), and **Sean McCartney** (MS-GISDE '15).

UNDERGRADUATE NEWS

HERO Program

Human Environment Regional Observatory



Human-Environment
Regional Observatory

While most of Clark's campus falls quiet during the summer months, there remains a small group of geographers who dedicate their breaks to conducting research for the HERO program, venturing out to collect samples, measurements, interviews, and more from local and nearby residents to study coverage of the tree replanting efforts in Worcester post-ALB infestation. Students assessed the health of the tree replanting initiative conducted by **Mass DCR** and **WTI** (Worcester Tree Initiative) to replace trees the **USDA APHIS** (Animal Plant Health Inspection Service) had to removed to eradicate the beetle. As part of their study, these students went into the field conducting interviews with neighbors and other Stakeholders, as well as surveyed the health of the newly planted trees. This fall, HERO Students presented their research to the office of the USDA APHIS in Massachusetts and will soon present at Fall Fest. In the spring, they will travel to San Francisco for the American Association of Geographers Annual meeting.

HERO-MA Research Areas

NSF REU HERO engages in two main areas of research concerning the causes and consequences of the Asian longhorn beetle (ALB) infestation in central Massachusetts on urban and ex-urban forests:

Tree Planting Assessment (TPA): This research stream uses field data collection, geoinformatics-based mapping and ecosystem services modeling/forecasting techniques to examine how the extensive tree replanting program has impacted the urban environment in terms of forest diversity, cover/density/configuration, land surface temperature, and various ecosystem services, and the likely future impacts. The TPA research stream will contribute to a burgeoning body of knowledge concerning urban forest sustainability, tree planting from an environmental justice perspective, and ecosystem service modelling. TPA will also shed new light on the current and future eco-services impact of tree planting initiatives throughout the U.S.

Place-Making Assessment (PMA): This research stream uses qualitative data collection methods, such as interviews and focus groups to explore: **(1)** How the experience of tree planting programs and the associated policy interventions, affects neighborhood-level urban ecological vulnerabilities, environmental awareness and sense of place?; and **(2)** How can resource managers and policy makers implement more environmentally aware policies and build local tree and environmental stewardship? We emphasize the interactions among individual residents, policy makers at a variety of jurisdictional scales, and biophysical processes. The PMA group seeks to better understand the social and political element of tree survivorship. Examining the ongoing policy changes to the Worcester region's urban forest during the tree planting efforts provides an opportunity to observe changing urban forest management protocols, and their impacts on ways people experience their city, town or home, i.e. place-making, and how their ethic of tree and other environmental care changes based on those experiences.



UNDERGRADUATE NEWS

HERO Program

Human Environment Regional Observatory



(Above, left) **Bao Chung Truong Nguyen** wraps up this summer's HERO Stakeholder Summit presentation. (Above, right) **Isabel Miranda** talks with local resident about the condition of local replanted trees. (Right) **Eli Goldman** goes through collected data up in the HERO lab.

Through the Year

This year's group of HERO fellows is unique in that they are all Clarkies, meaning that they will work together throughout the academic year to continue their research that began over the summer. Each of these students will focus on a specific research question relating to data collected over the summer, and will ultimately turn this information into a culminating thesis, which they will be able to present at AAG as well as in front of a committee of their faculty research supervisors come the end of Spring 2016. We are all very excited to see what they come up with!

Staff Support

As of August 2015, **Rachel Levitt** (GSG Undergraduate Program Coordinator) has newly entered the role of HERO Administrative Assistant—a role formerly filled by her colleague in Geography, **Brenda Nikas-Hayes**, who served as staff support for HERO alongside her primary role as GSG Graduate Program Administrator for six years. On behalf of all of the HERO faculty, staff and students, we want to thank Brenda for all of her hard work and dedication to HERO throughout the years! Rachel is excited to learn the ropes from Brenda, and has already begun to provide staff assistance to the program. If you have any questions about HERO, please contact Rachel at RLevitt@clarku.edu.

Check out HERO online > > clarku.edu/departments/hero/index.cfm



ALUMNI NEWS

Doctoral Alumni

Stephen Young, Ph.D. '96, Prof. of Geography at Salem State University and his colleague Prof. Paul Kelly of the Biology Department at Salem State have their work *Macro or Micro? Challenging our Perceptions of Scale* featured in a special exhibit currently running this summer through September 30, 2015 at the Museum of Science Boston.

Safaa Karaki Aldwaik, MA '07, MA '10, Ph.D. '12 has received the ESRI SAG Award 2015 for her GIS work with the City of Ramallah, Palestine. Safaa received her award from ESRI's president Mr. Jack Dangermond during the ESRI User Conference 2015 in San Diego on Wednesday, July 22, 2015. She is the Director of Geographic Information Science and Information Technology Department at Ramallah Municipality, Palestine.

Aldwaik is the Director of Geographic Information Science and Information Technology Department at Ramallah Municipality, Palestine. She has established the first GIS Municipal System in Palestine and is using cutting-edge GIS concepts to implement the first addressing system in Ramallah City and to convert the entire municipal services to e-services.

At Clark, Aldwaik earned two master's degrees ('07 and '10) and a Ph.D. ('12) in geography with a concentration in GIS, Land Change and Remote Sensing.

"The knowledge and experience I gained in my time at Clark was

priceless and enabled me to change the Palestine GIS interface. GIS now is part of Ramallah City's daily works," Aldwaik said. "No words are enough to express my gratitude for Clark faculty, and for my remarkable adviser [**Robert Gilmore Pontius Jr.**, professor and associate director of the Graduate School of Geography]."

Aldwaik also designed a Ramallah Smart City project that turns the entire city into a wireless access zone providing free, 24-hour access to municipal services. She is co-president of the Smart Cities Committee established during UCLG-MEWA Executive Bureau and Council Joint meeting in Adana, Turkey in December 2014 to improve the knowledge of local authorities and citizens of Middle East and West Asia region in the field of new technologies.



(Above) Esri President Jack Dangermond presented Clark University alumna **Safaa Karaki Aldwaik** (M.A. '07, M.A. '10, Ph.D. '12) with the SAG Award at the Esri User Conference in San Diego, July 22. Pictured are Aldwaik, her daughter Samia, Dangermond, and Eng. Alaa Abu Ein, Deputy Mayor of Ramallah.

"As you see, being a mother of five children has not prevented me from being a role model for women participating in science, technology, and public services," Aldwaik noted in a message to Prof. Pontius. The Esri company develops geographic information systems that "function as an integral component in nearly every type of organization. Esri inspires and enables people to positively impact the future through a deeper, geographic understanding of the changing world around them." [Click here for the full News Hub article.](#)

Careers of Recent Alumni

(Posts taken by graduates, ABDs or alums in 2015, Geography appointment if not otherwise stated)

Katherine Foo (Doctoral Program) — Department of Geography, PSU, Post-Doc

Emily Gallagher (Doctoral Program) — CGRAS, Clark University, Assistant Professor

Michelle Andrews (MS-GIS, '15) — Computer Literacy Educator, Americorp-CTEP for Emerge Community Dev.

Sean Cunningham (MS-GIS, '15) — Doctoral Program, UBC

Anastassios Dardas (MS-GIS, '15) — Doctoral Program

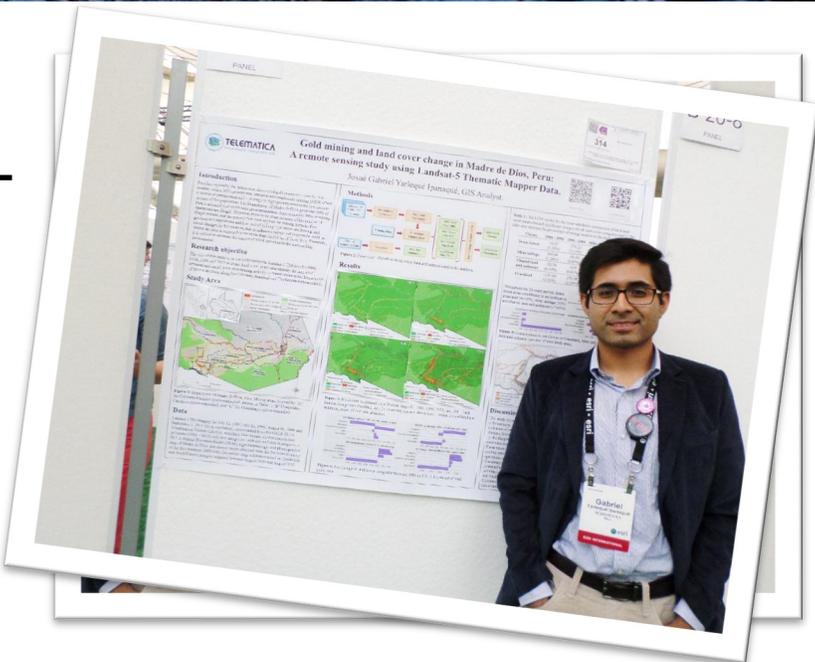
Cody Litchfield (MS-GIS, '15) — GIS Analyst, E&J Gallo Winery

CAREERS IN GEOGRAPHY

Gabriel Yarleque

BA '13, Earth System Science

Gabriel Yarleque graduated from Clark as an Earth System Science major in 2013. During his time as an undergraduate student, Gabriel completed an Honors thesis under the supervision of **Professor John Rogan**, which was recently featured in 2015 by Jack Dangermond, President of ESRI, during his opening speech at the 2015 ESRI User Conference Plenary Session. Gabriel also presented a poster about his project during the ESRI Map Gallery. We are very proud of Gabriel's achievements, and are grateful that he was able to share his experience with us.



(Above) Gabriel presenting his research at the ESRI Map Gallery

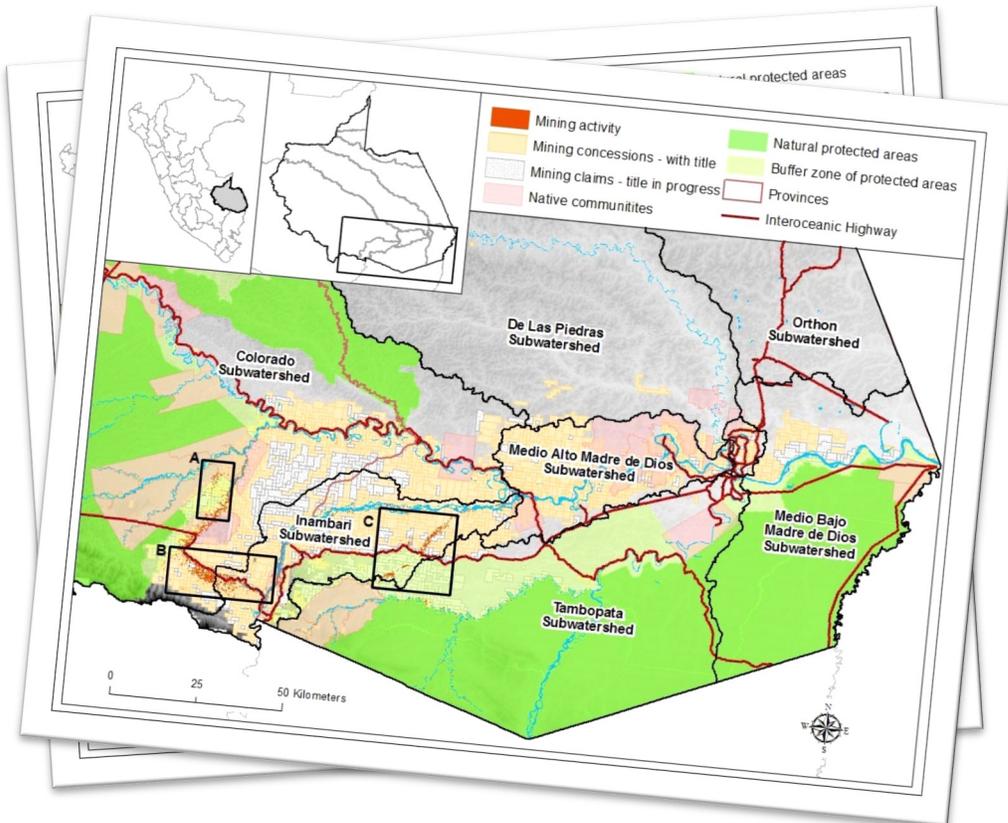
"I am currently in Lima, working at TELEMATICA S.A, Esri's International Distributor in Peru. As a GIS Analyst I work with the Project Development and Support Team. I help public and private institutions maximize the use of the ArcGIS Platform. I also provide smart solutions to optimize their projects and decision making processes in areas such as urban planning, conservation and resources management, social programs, transportation, emergency management, etc. Occasionally I lead hands-on trainings and technical workshops on the uses and applications of ArcGIS for different institutions.

Before coming to Clark I was uncertain about my career path. **When I was at Clark everything changed.** I was part of a strong community that taught me to see the world from different perspectives. I had the opportunity to explore different fields of study, learn new skills and find my passion, Environmental Science and GIS. **I was inspired to become a global citizen and a future leader.** I wasn't taught GIS just by following instructions. I was taught to understand, question and challenge the way things are.

[continued on next page]

"When I graduated I asked myself how I can be extraordinary enough to change the world. Then I thought about my time at Clark. All those experiences shaped the person and the professional I am today. I was inspired to use my skills, my thinking and best values to impact and change the world around me, by applying geography everywhere"

CAREERS IN GEOGRAPHY



Gabriel Yarleque

[continued from previous page]

"I value the opportunity I had working with my peers and faculty, addressing **real world issues and finding solutions**. This is what I do now. I use Geographic Information Systems to help organizations develop smart and efficient geographic solutions to improve decision making processes in different areas in Peru.

When I graduated I asked myself how I can be extraordinary enough to change the world. Then I thought about my time at Clark. All those experiences shaped the person and the professional I am today. **I was inspired to use my skills, my thinking and best values to impact and change the world around me, by applying geography everywhere"**

A month before the Esri User Conference an email was sent out to all the participants requesting examples of our work. Especially maps that helped make a decision, maps that helped with collaboration, maps that helped communicate, high-quality cartographic displays, 3D visualizations – built environment, nature landscapes –, maps that illustrate spatial analysis, modeling and science, as well as interactive web maps. The selected maps were featured during "GIS around the world", the opening section at the Plenary Session. Here Jack Dangermond began to showcase remarkable work in GIS around the world, to illustrate and provide an inspiring overview of the current state of geospatial technology. The study area map I created for my Honors thesis - "**Gold mining and land cover change in Madre de Dios, Peru: A remote sensing study using LandSat-5 Thematic Mapper Data**" - was featured in the Natural Resources Management group. This group also included work related to precision agriculture, crop rotation, marine planning, as well as agriculture and forecasting activities. My map shows natural protected areas, native communities and small-scale mining activity in the Madre de Dios. The purpose is to monitor and help reduce deforestation due to gold mining activities. Jack also highlighted work being done in environmental monitoring and assessment, developing energy resources, management of land information, urban and regional planning, transportation, utilities and telecommunications, business analysis and management, public safety and security, etc. Additionally I also presented my research at the Map Gallery, a large exhibit that showcases significant GIS work around the globe."

Gabriel's thesis can be found on display in the Graduate School of Geography in the Jefferson Academic Center. Thank you to Gabriel for providing us with this information!

STUDENT TRAVEL

Scott Odell

Second Year Ph.D. Student

Second-year Ph.D. student **Scott Odell** collaborated with the International Potato Center's in-situ conservation initiative, *Chirapaq Nan*, this summer on a project in Peru and Bolivia. The research team interviewed farmers in 11 communities about the role of factors such as climate change, gender, and culture on the conservation of native potato varieties in their place of origin—the Andean Highlands. They also presented their research project on a local radio station in Peru and at two formal community meetings in Bolivia.

Top Photo

Odell and fellow researcher Gaia Luziatelli of the International Potato Center discussing their research project on the local radio station in Haqaira, Peru.

Bottom Photo

Odell at a potato field in Peru at an elevation of more than 14,000 feet above sea level.



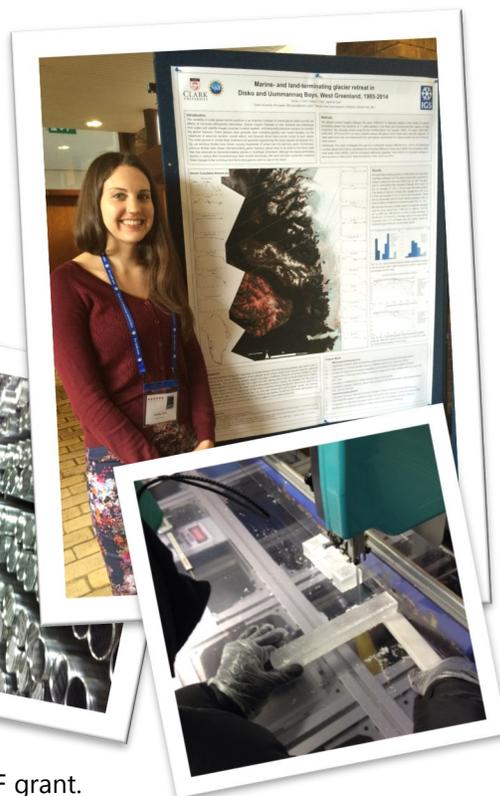
Ashley York

Third Year Ph.D. Student

Third-year Ph.D. student, **Ashley York**, attended the International Glaciological Society: International Symposium on Contemporary Ice Sheet Dynamics at the University of Cambridge, Cambridge, UK, to present her work using Landsat imagery to investigate marine- and land-terminating glacier retreat in Disko and Ummannaq Bays, West Greenland, 1985-2014 (**middle photo**).

Ashley also visited the -36°C National Ice Core Lab, Golden, CO, where she and recent Ph.D. graduate **Luke Trusel** sampled ice cores collected in Greenland in May 2015 as part of **Karen Frey's NSF grant** "Investigating the Influence of Sea-surface Variability on Ice Sheet Mass Balance and Outlet Glacier Behavior using Records from Disko Bugt, West Greenland (**left photo**).

(**Bottom right photo**) Ashley cuts Greenland ice core samples at the -24°C National Ice Core Lab. The ice cores were collected in Greenland in May 2015 as part of Karen Frey's NSF grant.



STUDY ABROAD SPOTLIGHT

Alexandra Cohen

GEOG, '16 — Studied in Queensland, Australia, Spring 2015

"Studying abroad was such an incredible experience! I know it sounds cliché, but going away and leaving Clark made me appreciate myself, my school, and other places I explored so much more. I was living in the Australian rainforest, doing conservation research there. As a human geographer, I had very little science background and was really learning as I went. However, I never felt uncomfortable and the only times I was outside my comfort zone were when I put myself there. As part of the SFS study abroad program, each student spends the last third of the semester doing a Directed Research Project. My project entailed surveying residents and trying to understand their environmental values and their sense of place attachment. I looked at this project through a gendered lens, namely, I wanted to see if either male or female residents had a higher place attachment. This would be important because if people care about their geography, they will be more likely to protect it if they are in political positions. Women tended to show a higher place attachment, but do not hold as many political seats as their male counterparts, which has political implications. This project made me realize how much I loved research and how fun it can be to get your hands dirty and live in a new and different place!" — **Alex Cohen, GEOG '16**

Thank you to Alex for providing us with this info!

Photos: (Top) Alex's research team comparing survey answers on Mission Beach, QLD. Photo credit to Carina Easley-Appleyard. (Middle) Alex and two other SFS students collecting data on trees and forests in a project to understand the Yellow Bellied Glider's habitat. Photo credit to Justin Clarke. (Bottom) The entire SFS Australia group. Photo credit to Drew Sorrenson.



SFS Presents Distinguished Student Researcher Awards

Congratulations to Alex for being one of six students to receive this award from SFS (School of Field Studies)!

"Each year, The School for Field Studies honors its most exceptional students with Distinguished Student Researcher Awards for their important contributions in environmental research. Students are nominated by SFS faculty based on their demonstrated sophistication in research design, fieldwork, reporting, and contribution to the Center's research plan. The SFS award also recognizes the student's leadership exhibited while working with a team of student and faculty researchers in the field.

"Alexandra Cohen, Clark University and SFS Center for Rainforest Studies, Australia

Cohen's research project, *Examining gender variations in values in the Wet Tropics of Queensland, Australia*, was an analysis of difference by gender on conservation goals and environmentalism among respondents. Her findings suggest that women in the Wet Tropics may have an increased sense of place and thus have placed increased importance on conservation education."

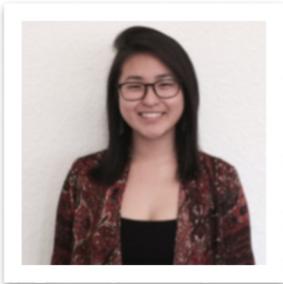
[Click here to view the full article](#)



GEOGRAPHY OFFICE STUDENTS

Meet our 2015-16 Geography Office Assistants!

Yuka Fuchino Office Assistant



Yuka is a senior who has been working in the Geography office for the past three years. She is majoring in Geography with a concentration in GIS, which she hopes to apply to natural hazards and disasters. In the past summer she has been a part of the HERO program at Clark University and continues her research into the school year to be able to present at the AAG in the spring semester.

Office Assistant Ruby Pendergast

Ruby is a senior from Boston. She is a sociology major with a concentration in health. She has enjoyed working in the Geography Department for the past three years, and is excited to return after a semester abroad in England. Ruby works in our office as a student in the International Studies Stream program, which is administered through the School of Geography.



Amy Phillips GIS Support Assistant



Amy is a senior majoring in Geography with a focus in Geographic Information Science. She is interested remote sensing as a tool for environmental monitoring and sustainable practices. Amy participated in the HERO fellowship during the summer of 2014 and spent the past summer in Hampton, Virginia participating in the NASA DEVELOP national program. Amy has been on the e-board of the Clark Undergraduate Geography Association for the past year, and will continue this role in 2015-16. Amy will be staffing our GIS Help Desk—a resource designed for students seeking assistance with labs, projects, or general GIS inquiries during her hours in the main office (posted on page 20).

Office Assistant Ilanah Taves

Ilanah is senior working in the Geography Department. She is a Geography Major with an Urban Development and Social Change concentration. As a student here at Clark, Ilanah is interested in wildlife and the environment while currently using that as a reference for her future endeavors. Outside of school, Ilanah is very passionate about animals and wishes to also include that in her work after graduating from Clark.



CUGA CORNER

clark • undergraduate • geography • association
meet the reps



Kim Johnson: Co-President

Kim Johnson is a senior Geography major from Cumberland, Maine. She is co-president of CUGA with Hannah Rosenblum. Kim is eager to start planning some fun CUGA events and cannot wait for new members to join. In her spare time, Kim enjoys drinking iced tea and playing Carmen Sandiego.

Hannah Rosenblum: Co-President

Hannah is a senior majoring in Geography and Cultural Studies & Communication. She is co-President of CUGA with Kim Johnson, and has been involved with the club for 3 years. Within Geography, she is most interested in the application of GIS and remote sensing to issues of urban ecology. Last semester she studied abroad in Jordan, and this past summer she was a HERO fellow.



Amy Phillips: Treasurer

Amy is a senior majoring in Geography with a focus in Geographic Information Science. She is interested remote sensing as a tool for environmental monitoring and sustainable practices. Amy participated in the Human Environment Regional Observatory (HERO) fellowship during the summer of 2014 and spent the past summer in Hampton, Virginia participating in the NASA DEVELOP national program. Amy has been on the e-board of the Clark Undergraduate Geography Association for the past year, and always looks forward to Trivia Night!

Will Heikes: Historian

Will is a geography and economics double major with an Urban Development and Social Change concentration from Castle Rock, Colorado. He is currently studying abroad in Maastricht, Netherlands. Within geography, Will is interested in economic and urban development and has had internships with contractors, developers and city entities. In his free time Will enjoys listening to country music, watching TV and eating pie.



CUGA is a place for students interested in making a positive impact and for all undergraduate Geography, Global Environmental Studies (GES) and Earth Systems Science (ESS) students. CUGA members are the voice of these students, with representation on the undergraduate studies committee and in departmental meetings and events. Representatives are able to vote and express their ideas and opinions on various topics that concern undergraduate majors.

Join CUGA today > > Contact ClarkCUGA@gmail.com

UPDATES & EVENTS

Dates to Remember

October 12-13th
Fall Break [no classes]

October 14th
Undergraduate Majors Fair

October 15th*
Wallace W. Atwood Lecture:
Dr. Eric Lambin
Stanford University
University of Louvain, Belgium

October 29th
Colloquium: Priscilla
McCutcheon
University of Louisville

November 12th
Colloquium: Pablo Bose
University of Vermont

November 19th
Colloquium: Bruce Braun
University of Minnesota

Be sure to check our [Events website](#) for details, updates and announcements of events throughout the academic year!

All colloquium talks will be held in Jefferson 218 from **12:00-1:15PM** unless otherwise noted. ***The October 15th Atwood Lecture** will take place as a separate event at **7pm in Tilton Hall.**

GIS Help Desk

Having trouble with GIS? Can't make it to visit your professor or TA for office hours? Stop by our GIS Help Desk in the Geography Main Office (Jefferson 220)! Fall 2015 Hours are as follows:

MONDAYS
THURSDAYS
FRIDAYS

9:00 AM - 12:00 PM
12:00 PM - 2:00 PM
9:00 AM - 2:00 PM



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MONDAYS 9:00 AM - 12:00 PM
THURSDAYS 12:00 PM - 2:00 PM
FRIDAYS 9:00 AM - 2:00 PM

Meet our 2015-16 GIS Support Assistant, Amy Phillips! Amy is a senior majoring in Geography with a focus in Geographic Information Science. She is interested in remote sensing as a tool for environmental monitoring and sustainable practices. Amy participated in the Human Environment Regional Observatory (HERO) fellowship during the summer of 2014 and spent the past summer in Hampton, Virginia participating in the NASA DEVELOP national program. Amy has been on the e-board of the Clark Undergraduate Geography Association for the past year, and will continue this role in 2015-16 while also staffing our GIS Help Desk!

*Help Desk hours follow a University schedule. If the University is closed (or if the Geography office is closed), the GIS Help Desk will be unavailable. Hours may be limited or extended during midterms/final exams. Any changes will be announced or posted on the Clark University Geography Facebook page. Appointments operate on a first-come, first-serve drop-in basis unless otherwise scheduled.

508.793.7336 | GEOGWORKSTUDY@CLARKU.EDU



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UPDATES & EVENTS

End Of Summer Kick-Off

On **Wednesday, September 9th**, students, faculty, and staff gathered outside on the Green on a 91 degree afternoon to celebrate the end of summer and the beginning of a new semester. Aside from the heat, it was a perfect afternoon for students to take a break, play badminton and Kan-Jam, and get to know one another over delicious food and drinks. Thank you to our CUGA E-Board Kim Johnson, Hannah Rosenblum (Co-Presidents), and Amy Phillips (Treasurer) for helping and co-sponsoring this event!

Photo: (below) Friendly Kan-Jam competition between **Renee Tapp** (Doctoral student) and **Yuka Fuchino** (GEOG, '16) versus **Alex Hayes** (THEA & GEOG '16) and **Professor Mark Davidson** (Geography)



The School Of Geography Invites You To Our

END OF SUMMER KICK-OFF

Join geography, global environmental studies, and earth system science students for a fun in the sun party on the green to celebrate the end of summer and the start of a new year.
Current and prospective students are welcome!

WEDNESDAY, SEPT 9TH
2-4 PM CAMPUS GREEN

Come meet students, faculty and staff in your department!

SNACKS • MUSIC • KAN JAM

Contact Rachel Levitt (Undergraduate Program Coordinator)
RLevitt@clarku.edu if you have any questions! Sponsored by CUGA

[undergraduate] Majors Fair

October 14th, Tilton Hall, 1:30-2:30 PM

Interested in helping to represent your major on a University level? Consider volunteering at our next Majors Fair, coming up on Wednesday, October 14th! As a department, we will have table space to represent **Geography, Global Environmental Studies, Earth System Science (track), and Urban Development Social Change**. If you'd like to share your knowledge and experiences with fellow undergraduate students, we are welcoming volunteers to help represent these four areas. Contact Rachel Levitt if you are interested in helping out: **RLevitt@clarku.edu**. Thank you!

PROGRAM UPDATES

Our Undergraduate Programs

Geography

GEOG

Geography majors use the lenses of space and place to examine issues as diverse as famine on the African continent, poverty in urban areas in the United States, the effects of climate change on Arctic sea ices, and how fires alter forest landscapes. There are 4 areas of specialization within the Geography major/minor: Human Environment, Urban Economic, Geographic Information Science (GIS), and Earth System Science (ESS).

Global Environmental Studies

GES

Global Environmental Studies focuses on the relationships among people, and between people and other living beings, the earth, technologies, cultures, and economies. It is oriented toward practice and applied work. The type of practice might range from environmental law with a major NGO or environmental art in a science center, to organizing climate justice campaigns, engaged research on pollution or designing alternative technologies. GES encourages critically informed practical work with social, ecological and political intent.

Earth System Science (Track)

ESS

Earth System Science examines the physical and biological processes that shape environments across the planet, and explores how global environmental changes are altering natural resources and the sustainability of our planet. The ESS track is one of three tracks of the Environmental Science major, but administered through the Geography department.

Urban Development Social Change (Concentration)

UDSC

Urban Development Social Change is an interdisciplinary concentration that can be paired with any major at Clark University. UDSC is designed for students who have urban interests, and helps them to understand the historical, social, economic, and political factors that have shaped U.S. cities and how cities have, in turn, affected the lives of their inhabitants. This concentration is currently administered through the Geography department.

Interested?



Interested in one of our programs? Contact our **Undergraduate Program Coordinator, Rachel Levitt**, to see if one of these majors/concentrations is right for you! We also offer Minors in Geography, Global Environmental Studies, and Earth System Science.

Visit us online, or email RLevitt@clarku.edu to set up an appointment to learn more. You can also stop by the **Geography Main Office** for brochures and more information; just visit us in Jefferson 220!

clarku.edu/departments/geography/undergraduate/index.cfm

CLARK UNIVERSITY



Graduate School of Geography | Clark University
Jefferson Academic Center Room 220
950 Main Street | Worcester, MA 01610-1477
geography@clarku.edu
p: 508.793.7336 | fax: 508.793.8881

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Questions / Comments / Suggestions?
Contact Rachel Levitt at RLevitt@clarku.edu

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