

GES

GEOGRAPHY & ENVIRONMENTAL SCIENCES

2019–2020 NEWSLETTER



Department of Geography
& Environmental Sciences

COLLEGE OF LIBERAL ARTS AND SCIENCES

UNIVERSITY OF COLORADO **DENVER**



CHAIR'S NOTES



Dear Students, Colleagues, and Friends:

Greetings to GES alumni, supporters, and friends! Despite the challenges that have come with the COVID-19 pandemic, the department has had an incredibly eventful and productive year. We have experienced enormous transition and growth as we have welcomed four new permanent faculty over the last year and a half. We are excited about the teaching and research our new colleagues bring to GES.

We are delighted to welcome **Dr. Alicia Cowart** as the new director of the newly minted **Geospatial Analysis and Mapping Laboratory (GAMLab)**. Alicia earned her PhD from Berkeley and joins us from Boulder, where she worked as a Geospatial Data Services Postdoctoral Fellow. We are excited about the possibilities enabled by Dr. Cowart's leadership of the GAMLab, which will support student and faculty research that use geospatial technologies. In addition to her role as the director of the lab, Alicia will also teach some geospatial courses in the department, starting with Cartography and Computer Mapping.

Dr. Ben Crawford joined the department in Fall 2019. Following completion of his PhD at the University of British Columbia in Vancouver, Canada, Ben served in postdoctoral positions both at the University of Reading (UK) and the Massachusetts Institute of Technology (MIT). Dr. Crawford's research focusses on examining atmospheric processes around urban centers. His work has also taken him into schools, where he has worked with schoolchildren to construct affordable tools for monitoring air pollution.

Dr. Kathy Kelsey joined us in Fall 2019 from a post-doctoral research position at the University of Alaska in Anchorage, following the completion of her PhD at CU Boulder in 2015. Dr. Kelsey's research focusses on vegetation ecology and terrestrial biogeochemistry with emphases around questions on the dynamic processes between local ecosystems and climate change. Much of her previous research examined ecosystem dynamics in Alaska and Colorado. Kathy is also active in efforts to make science more inclusive through effective communication.

Drs. Crawford and Kelsey will jointly supervise a new research space, the **Landscape, Ecology, and Atmospheric Process Lab (LEAP)** in the department to support their work. The mission of the lab is to advance understanding of biosphere-atmosphere interactions in both urban and pristine environments.

Dr. Lisa Kelley joined us as an Assistant Professor starting in the Fall of 2020. Dr. Kelley earned her PhD from the Department of Environmental Science, Policy, and Management at Berkeley in 2017, and then continued to University of Hawai'i, Mānoa for two years before coming to Denver.

Her work assumes critical perspectives from physical geography, agrarian studies, and political ecology to examine dynamics in livelihoods and landscapes. Dr. Kelley is currently supervising multiple funded projects to examine labor migration, industrial land use concessions, and land change in Indonesia, and to explore the connections between coastal development and sea level rise in Hawai'i.

I would also like to mention some important promotions within the department this year. **Dr. Christy Briles** achieved tenure with a promotion to Associate Professor, **Dr. Matt Cross** was promoted to Association Professor Clinical Track (CT), and **Dr. Tom Duster** joined the clinical track as Assistant Professor CT. These promotions represent a very substantial amount of work and perseverance and I hope you will join me in congratulating them!

This year we also formalized our partnership with the College of Architecture and Planning (CAP) in a new **PhD program in Geography, Planning and Design**, which offers research emphases in community planning, human-environment interactions, sustainability and social justice, and technology, engagement, and design. Our collaboration in this program will enable the department to further strengthen our ties to the city of Denver and our colleagues across the street at CAP.

Both our undergraduate and graduate programs continue to thrive. In Fall of 2020, there were 144 declared majors for the **Geography BA**, 45 in the **Master of Science in Environmental Science**, and another 33 students in the **Applied Geography and Geospatial Science MA** program. GES now has the largest graduate program in the College of Liberal Arts and Sciences. We have also continued to support certificates in **Geographic Information Science** (the largest certificate in the college), **Environmental Science Education**, **Free and Open Source Software for Geospatial Applications (FOSS4G)**, and **Sustainable Urban Agriculture**.

Gregory Simon continues to serve as Director of Graduate Programs, **Fred Chambers** continues as Director of Undergraduate Studies, and **Tom Duster** began an appointment as Associate Director of Graduate Studies this year. I would like to sincerely acknowledge GES faculty and staff, past and present, who have brought the department to where we are now. Ultimately, every member of our department makes an enormous effort to build a successful program and I always feel privileged to serve as a member of our team.

Few among us have witnessed an event with as comprehensive and widespread impacts on our daily lives as the COVID-19 pandemic that began at the end of 2019. Seldom has the salience of a broadly cast approach to research on geography and the environment has been as clear as it is now, and the pandemic leaves us both with challenges and some opportunities. We look forward to continuing our work to develop and improve our teaching mission, strengthen our ties to the community, and make progress on the critical research topics we explore.

Peter Anthamatten

Associate Professor, Department Chair

AWARDS & HONORS

Peter Anthamatten received two awards: the 2019 Journal of Geography Award for Best Research Article on Elementary Education, and the CU Denver Award for Excellence in Leadership and Service.

Anne Chin was selected as an AAG Fellow by the American Association of Geographers. This prestigious AAG Fellowship recognizes scholars who have made significant contributions to advancing geography. The award reads: "Chin has left her mark on the discipline... she has done much to advance geography as a researcher, project initiator, coalition-builder, and role model." Dr. Chin was also proud that *Anthropocene*, the journal that she created, and for which she serves as Editor-in-Chief, registered a first Impact Factor of 4.278—placing it amongst the leaders in the field. The international journal launched in 2013 to meet grand challenges of a rapidly changing planet driven by intense and accelerating human interactions.

Gregory Simon was awarded a grant through the Sustainable Energy Transition Initiative for Collaborative Research on Energy. (Project Title: Researching Refills: Resources and Relationships required for Sustaining LPG Access in Rural India. Dr. Simon was also awarded a Visiting Scholar position at ETH Zurich that was funded by the Swiss National Science Foundation. (Project title: Rethinking the interplay between vulnerability and affluence for disaster resilience.)

Bryan Wee is a 2019 Meeks award winner for his digital story, *Not Enough*. It is published on *Aquifer*, a peer-reviewed journal at the University of Central Florida that is an outlet for creative research activities. Meek award winners represent outstanding poetry, prose and graphic narratives deemed by a panel of reviewers to be "personally moving and aware of the wider world."

Additionally, Bryan was selected as co-editor for the journal, *Children's Geographies*, starting 2020. He is excited to be involved in shaping the direction of his field.

Kathy Kelsey and **Ben Crawford** received a \$20,000 grant from CU Denver Office of Research Services.

Martin Lockley (Prof Emeritus, Geology) has been awarded the Korean Government's 2020 "Presidential Award" for his scientific work with the Korean National Research Institute of Cultural Heritage (NRICH). He is the first paleontologist to win this award. Lockley's work on fossil footprints in Korea began in the late 1980s when he took three UCD students there as field assistants, and began a collaboration with Korean paleontologists that continues to this day, with Korean colleagues, on occasion, also working and funding UCD projects in Colorado and Utah. Lockley won the Award of Excellence from the Paleontological Society of Korea in 2012 and during the 2010s decade has been instrumental in helping create six Korean National Monuments around fossil footprint sites, four of which have also developed onsite museums and educational institutes. Korea is the world's most prolific nation in revealing fossil footprints of all types from the Cretaceous Period (145-65 Million years ago). Twenty track types are new to science, and with the monuments and museums are the basis for applications for World Heritage status. Lockley likes to say that "fossil footprints represent glimpses of ancient landscapes that we transform into today's cultural, scientific and educational landscapes." An example from the field work in Korea is on display in the first floor of the North Classroom building.

IN THE FIELD



Fred Chambers and Matt Cross took 3 graduate and 2 undergraduate students to the Northern Patagonia Icefield (NPI) (Chile) in January 2020 to continue work started in 2016. This field season was concentrated in the Valle Soler (Soler Valley) where a 1989 glacial lake outburst flood or "GLOF" occurred. This event was the basis for current Geography, Planning and Design Ph.D. student, Jonathan Burton's, Master's thesis suggesting this was one of the largest, if not the largest, moraine





breaching GLOFs in history releasing over 140 million cubic meters of water over a 2-3 day time span. Further, estimated peak discharge for the event was over 20,000 cubic feet per second.

The work mapped the flood route in detail using two Mavic 2Pro UAVs (drones) to further analyze the region down-valley from where Jonathan's Master's research concluded. Johnathan's paper on this work, entitled Analysis of Glacial Lake Outburst Flood Terrain and Sedimentary Deposits in Valle Soler, Northern Patagonia Icefield, was accepted for publication in the journal Physical Geography.

Student experience video by Sarah Zimmer, BA:
<http://y2u.be/nYYRowlwZuM>



Brian Page and Bryan Wee concluded a week-long visit to Singapore in January 2020. They received a travel grant from the Office of Global Education to plan a Winterim study abroad program focused on urban sustainability and globalization. They are seen here at the Conservatory Cloud Forest in Singapore.

Kris Christensen attended the Society of American City and Regional Planning Historians conference in October 2019 in Washington, D.C.

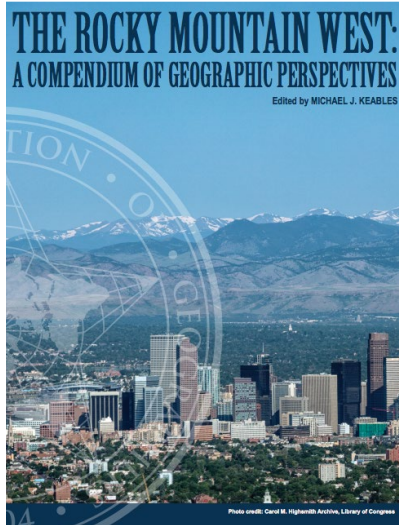
"The Society for American City and Regional Planning History (SACRPH) is an interdisciplinary organization dedicated to promoting scholarship on the planning of cities and metropolitan regions over time, and to bridging the gap between the scholarly study of cities and the practice of urban planning. The organization's members come from a range of professions and areas of interest, and include historians, architects, planners, environmentalists, landscape designers, public policy makers, preservationists, community organizers, and students and scholars from across the country and around the world." -sacrph.org



Gregory Simon and four graduate students conducted fieldwork in Andhra Pradesh, India. Caroline Hildebrand, Jessica Manko, and Peter Zerbe assisted Dr. Simon to organize logistics for research exploring household access to Liquefied Petroleum Gas for cooking and heating.



PUBLICATIONS



The American Association of Geographers reintroduced their annual regional anthology of scholarly essays. The book is entitled “The Rocky Mountain West: A Compendium of Geographic Perspectives.” GES Faculty **Peter Anthamatten** (“A Cartographic Examination of the Geographies of Obesity in Denver”) and **Rudi Hartmann** (“From Mining to Tourism: Socio-Economic Changes in the Colorado High Country”) contributed chapters to the work.

The book was released as a free e-book, available at:
www.aag.org/galleries/conference-files/The_Rocky_Mountain_West.pdf.

GES Faculty Publications

Anderson, R.S., Jimenez-Moreno, G., Belanger, M. & **Briles, C.E.** (2020) Fire history of the unique high-elevation Snowmastodon Site during MIS 6 – 4, with comparisons of TII to TI in the southern Colorado Rockies. *Quaternary Science Reviews*, 232, 106-213.

Anthamatten, P. (2020) A Cartographic Examination of the Geographies of Obesity in Denver. In *The Rocky Mountain West: A Compendium of Geographic Perspectives*, ed. M. Keables, 181-189. Washington DC: American Association of Geographers.

Anthamatten, P., D. Thomas, D. Williford, J. Barrow, K. Bol, A. Davidson, S. Deakyn-Davis, E. McCormick, D. Tabano & M. Daley (2020) Geospatial Monitoring of Body Mass Index: Use of Electronic Health Record Data Across Health Care Systems. *Public Health Reports*, 135, 9.

Beard, K. H., **K. C. Kelsey**, A. J. Leffler & J. M. Welker (2019) The Missing Angle: Ecosystem Consequences of Phenological Mismatch. *Trends in Ecology & Evolution*, 34, 885-888.

***Birdshire, K., Carper, A. & Briles, C.E.** (2020) Bee community response to local and landscape factors along an urban-rural gradient. *Urban Ecosystems*, 23, 689-702.

Briles, C.E., *Serenchenko, O., Stevens, L., White, A.J. & Huong, Mai (2019) Late Holocene climate and human impacts on a tropical ecosystem in northern Vietnam. *Frontiers in Ecology and Evolution*, 7(121), 1-11.

Chin, A., X. F. Cui, L. Gillson, D. Nelson, M. P. Taylor, V. Vanacker & E. Wang (2020) Anthropocene in an age of pandemics. *Anthropocene*, 30, 2.

Chin, A., G. L. Simon, P. Anthamatten, K. C. Kelsey, B. R. Crawford & A. J. Weaver (2020) Pandemics and the future of human-landscape interactions. *Anthropocene*, 31, 100256.

Chin, A., A. P. Solverson, A. P. O'Dowd, J. L. Florsheim, A. M. Kinoshita, S. Nourbakhshbeidokhti, S. M. Sellers, L. Tyner & R. Gidley (2019) Interacting geomorphic and ecological response of step-pool streams after wildfire. *Geological Society of America Bulletin*, 131, 1480-1500.

Choi, R. T., K. H. Beard, A. J. Leffler, K. C. Kelsey, J. A. Schmutz & J. M. Welker (2019) Phenological mismatch between season advancement and migration timing alters Arctic plant traits. *Journal of Ecology*, 107, 2503-2518.

Eriksen, C., G. L. Simon, F. Roth, S. J. Lakhina, B. Wisner, C. Adler, F. Thomalla, A. Scolobig, K. Brady, M. Brundl, F. Neisser, M. Grenfell, L. Maduz & T. Prior (2020) Rethinking the interplay between affluence and vulnerability to aid climate change adaptive capacity. *Climatic Change*, 162, 25-39.

Hartmann, R. (2020) From Mining to Tourism: Socio-Economic Changes in the Colorado High Country. In *The Rocky Mountain West: A Compendium of Geographic Perspectives*, ed. M. Keables, 52-57. Washington DC: American Association of Geographers.

Hazen, H. & P. Anthamatten. (2019) *An Introduction to the Geography of Health*. Routledge / Taylor & Francis.

Leffler, A. J., K. H. Beard, K. C. Kelsey, R. T. Choi, J. A. Schmutz & J. M. Welker (2019) Cloud cover and delayed herbivory relative to timing of spring onset interact to dampen climate change impacts on net ecosystem exchange in a coastal Alaskan wetland. *Environmental Research Letters*, 14, 10.

Martz, C. J., R. L. Powell & B. S. C. Wee (2020) Engaging children to voice their sense of place through location-based story making with photo-story maps. *Children's Geographies*, 18, 148-161.

Moreno-Sanchez, R., D. P. Carver, J. M. Torres-Rojo & P. Anthamatten (2020) Assessment of the classification accuracy of the Globeland30 Forest class for the temperate and tropical forests of Mexico. *Applied Geomatics*, 17.

Nigg, C. & P. Anthamatten (2019) Schulhof Re-Design: Lehren aus dem IPLAY-Projekt: Bewegung als umweltbedingtes Gesundheitsproblem. *Playground@Landscape*. (<https://playground-landscape.com/de/article/2287-schulhof-re-design-lehren-aus-dem-iplay-projekt>)

Nourbakhshbeidokhti, S., A. M. Kinoshita, A. Chin & J. L. Florsheim (2019) A Workflow to Estimate Topographic and Volumetric Changes and Errors in Channel Sedimentation after Disturbance. *Remote Sensing*, 11, 18.

Simon, G. L. & C. Peterson (2019) Disingenuous forests: A historical political ecology of fuelwood collection in South India. *Journal of Historical Geography*, 63, 34-47.

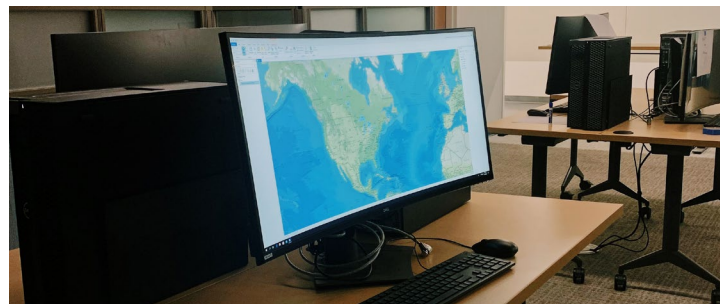
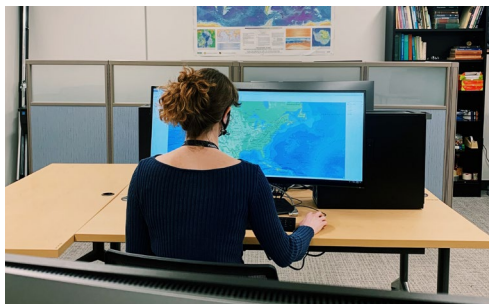
Simon, G. L., C. Peterson, E. Anderson, B. Berve, M. Caturia & I. Rivera (2020) Multiple Temporalities of Household Labour: The Challenge of Assessing Women's Empowerment. *Development and Change*, 27.

*Subotic, S, *Boddicker, A.M., *Nguyen, V.M., *Rivers, J., Briles, C.E. & Mosier, A. (2019) Honeybee microbiome associated with different hive and sample types over a honey production season. *PLoS ONE* 14(11): e0223834.

* CU Denver Students

NEWS & EVENTS

The new Geospatial Analysis and Mapping Laboratory (GAMLab) is up and running this year with a number of faculty and graduate students making use of its cutting-edge resources. Research includes projects ranging from exploring spatial patterns of asthma in Denver to use of remote sensing to assess historical structures in Lushan, China. The GAMLab is CU Denver's premier geospatial research lab, established to facilitate research among GES faculty and students, as well as to connect members of academic, governmental, private, and community sectors working with geographic information science & technologies. Expect to hear more about research projects, workshops, and other events happening in the GAMLab in the coming years!



GES also hired a director for the lab, Dr. Alicia Cowart, who brings comprehensive experience working with students and researchers on geospatial projects, as well as experience developing and delivering training and instruction on geospatial tools and methods. She earned a PhD in Geography from the University of California, Berkeley and worked as the Staff Cartographer and Cartography Lecturer in the Geography Department at Berkeley for four years. She is very excited to be working with GES students and faculty and looks forward to facilitating collaborations between GES and the wider GIS community.



GES Faculty welcomed four new members in 2019 & 2020



Ben Crawford, Ph.D.
Assistant Professor

Specialties: Urban Weather and Climate,
Air Quality, Sensor Networks



Sarah McCall, Ph.D.
Instructor/ Lecturer

Specialties: Political Economy, Human-
Environment Interactions, International
Development



Lisa Kelley, Ph.D.
Assistant Professor

Specialties: Human-Environment Geography,
Agrarian and Forest Change, Land Use, Political
Ecology, Remote Sensing



Kathy Kelsey, Ph.D.
Assistant Professor

Specialties: Climate Change, Carbon Cycling,
Biogeochemistry, Human-Environment
Interaction, Arctic

Learn more about GES Faculty and Staff:
clas.ucdenver.edu/ges/people

Dr. Richard DeGrandchamp, GES lecturer, testified as an expert toxicology witness in several PCB cases filed against Monsanto Company for their PCB legacy contamination of some of the largest rivers in the U.S. Those cases recently were settled for about \$700 million, which will be used for PCB remediation of some of the largest and most polluted rivers in California, Washington State, and Washington, D.C. This adds to Dr. DeGrandchamp's toxicology expert witness testimony in more than 5 toxic tort cases in which he proved PCBs caused Non-Hodgkin Lymphoma in 3 patients suffering NHL in which Monsanto was ordered to pay about \$50 million. Following this case, Monsanto was forced to settle with hundreds of other NHL patients for hundreds of million dollars.

Learn more: baronandbudd.com/news/baron-budd-leads-743-million-pcb-claims-monsanto/

2019-2020 Speaker Series Presentations

September 13th, 2019: Pesticides and Other Job Concerns in the Corporate Cannabis Landscape

Marty Otañez | Associate Professor, CU Denver Anthropology

Kati Scheibeler | Health and Environmental Safety Consultant

What workers' health and safety concerns have been the most prominent in Colorado's cannabis industry? What options are available to ensure that companies are compliant and do not harm public health through pesticides, for example, in the search for cannabis profits? The presentation provided details on occupational hazards such as pesticides and mold, including activities of companies to control regulatory environments designed to create safer workplaces.

October 11th, 2019: Interacting Geomorphic and Ecological Response of Step-pool Streams Following the 2012 Waldo Canyon Fire

Anne Chin | Professor, GES

The presentation focused on the biogeomorphic response of step-pool mountain streams to storms following the Waldo Canyon Fire that occurred in Pike National Forest near Colorado Springs. A field campaign from 2012-2014 showed how wildfire increased the susceptibility of the mountain channels to de-stabilize, with post-fire ecological conditions changing in conjunction with morphological alterations in the fluvial system. Findings offer insights for the post-fire management of step-pool streams that characterize frequently burned mountain areas, which becomes increasingly important to anticipate future changes and mitigate potential floods and hazards.



November 15th, 2019: Beetopia

Christy Briles / Associate Professor, GES

Interest in supporting local food production through pollination and reversing global bee declines has resulted in an explosion of urban backyard beekeeping along the Colorado Front Range (and in many cities globally). So, where is the perfect place to keep bees? Do we have enough bees in the city to support local food production? How can we increase pollinator habitat in the urban center? With Colorado's semi-arid climate, erratic weather, and short growing season, these are questions on the minds of many bee enthusiasts and gardeners and what drives our research.



April 10th, 2020: Virtual Colloquium: Perspectives on COVID-19, Part I

-Geographic Risk Factors for Resurging and Emerging Infectious Disease (EIDs) (Peter Anthamatten)

-Breathing space: How does physical distancing affect air quality? (Ben Crawford)

May 1st, 2020: Virtual Colloquium: Perspectives on COVID-19, Part II

-You Can't Stop It, If You Can't See It: The Politics of Uncertainty During the COVID-19 Pandemic (Gregory Simon)

-Surplus and Scarcity: food distribution during COVID-19 (Amanda Weaver)

-COVID-19: Why is it an "Anthropocene" problem and what does it mean for ecological sustainability? (Anne Chin & Kathy Kelsey)

CU Succeed

GES thanks the members of the CU Succeed ENVS 1044/1045 Steering Committee for their assistance with developing resources for all our CU Succeed Faculty, including a digital lab book which was made available to the CU Succeed program and on-campus faculty in fall 2019.

The steering committee members are:

- -David Hoffmaster, *Longmont High School*
- -Kathleen Dorman, *Ponderosa High School*
- -Eliza Rayner, *Broomfield High School*
- -Suzanne Carmody, *Widfield High School*•
- -Thomas Duster, *Senior Instructor, Geography and Environmental Sciences*
- -Kirsten (Kris) Christensen, *Instructor and CU Succeed Liaison, Geography and Environmental Sciences*

Current CU Succeed Faculty and Schools:

Banks, Sara: Academy of Early Learning | Denver
Boblitt, Caitlin: Martin Luther King Early College | Denver
Carmody, Suzanne: Widfield High School | Colorado Springs
Dorman, Kathy: Ponderosa High School | Parker
Francis, Adam: Frederick High School | Frederick
Fishman, Schuyler: College View High School | Denver
Gordon, Eric: Early College Arvada | Arvada
Hoffmaster, David: Longmont High School | Longmont
Knauer, Tyler: East High School | Denver
Mathiasen, Kristine Beth: Jacob High School | Denver
Plaza Gonzalez Enrique: West Leadership Academy | Denver
Rayner, Eliza: Broomfield High School | Broomfield
Sauter, Kathryn: South High School | Denver
Ventola, Joe: Arvada High School | Arvada
Walls, Jaimie McClain Community High School | Lakewood
CU Succeed Faculty and Schools

Learn more about CU Succeed:

clas.ucdenver.edu/cusucceed



August 16, 2019: New Graduate Student Orientation



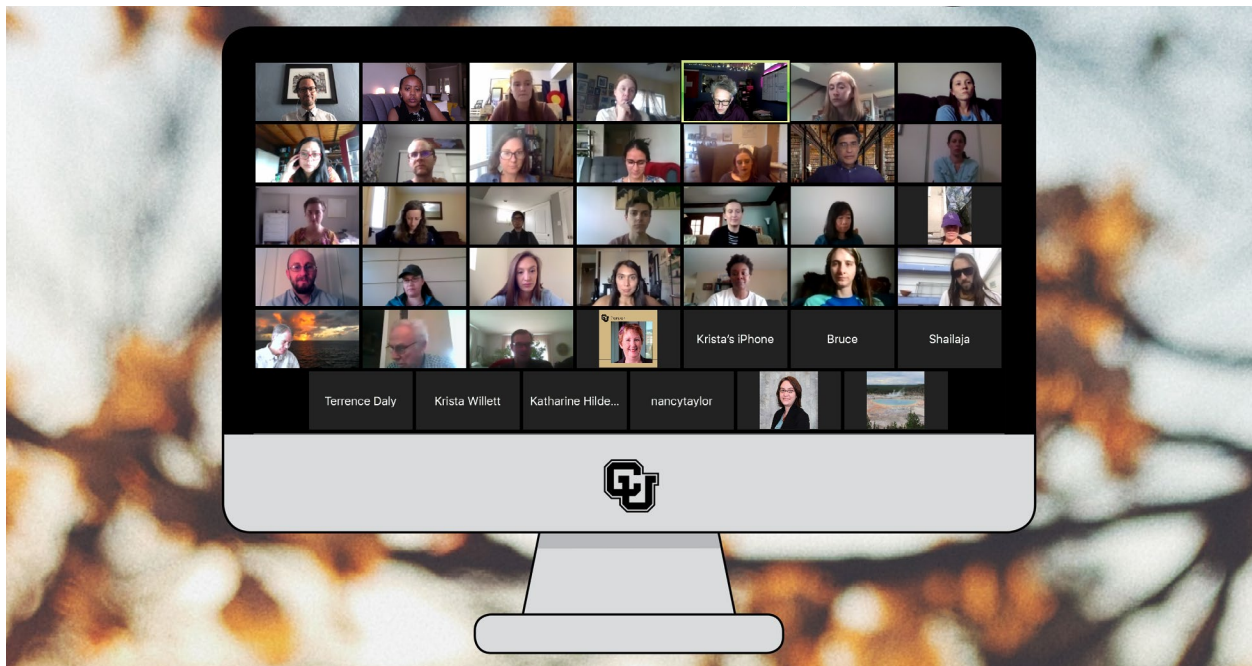
September 7, 2019: Annual Potluck Picnic



November 16, 2019: First Annual Graduate Alumni Gathering



December 12, 2019: Winter Social



May 15, 2020: Virtual Spring Celebration

STUDENT ACHIEVEMENTS

Five graduate students served on the 2019-2020
Graduate Executive Committee



Alix Bakke, MA



Elizabeth DeRycke, MA



Vance Harris, MS



Mandy Rees, MA



Stephanie
Valencia-Gaeta, MS

Rodgers Undergraduate Scholarship Recipients

General Scholarship (Fall):

Hillary Hillam
Shannon Hourigain
Mikhail Kaminer
Anjelique Mornie
Kristen Olson
Kelly Rutkowski

Research Scholarship (Spring):

Melissa Allen
Hillary Hillam

2019-2020 Graduates

UNDERGRADUATE

Michaela Butler	Briley Manzanares
Ramon Dunlap	Kendal Morrow
Maxwell Desmond	Gregory Munson
Duncan Edgington	Kristin Olson
Marissa Frost	Caitlyn Severy
Anthony Gambino	Lauren Tidemann
Douglas Greer	Macario Torrez
Noah Hammer	Van Truong
Annie Harshberger	Nan Zhang
Stephen Jefferson	Sarah Zimmer
Megan Johnston	Santia Gomez
Mathea Kamin	Nicole Boudreaux
Elizabeth Kelly	Kelly Rutkowski
Bryan Knisely	Andrew Rich

GRADUATE

Lena Alali	Seong Wook Hwang
Shailaja Aryal	David Krohn
Matthew Berns	Jojo La
William Blust	Robert Lavie
Morgan Carter	Jess Manko
Justin Culman	Jeremy McClung
Lindsey Degering	Kelly McCoy
Anya Dillahunt	Erin McKay
Mitchell Dorsk	Scott Nearman
Rosemary Downing	Ruby Nunez
Eli Duber	Charlie Obermeyer
Chad Ellertson	Mandy Rees
Shanna Gilligan	Brett Shartzter
Gabriela Gonzales Sanchez	Andrew Steger
Vance Harris	Honor Stoner
Ian Heckman	Alex Trout
Caroline Hildebrand	

Geographic Information Science (GIS) Certificate

Fall 2019

Matthew Burns
Jonathan Burton
Matthew Davis
Aimee DeMendoza
Alfonso Espino
Rebecca Friend
Kelley Griego
Maria MacDougald
Anthony Martin
Jonathan Miller
Brandyn Reynolds
Danielle Sellers
Victoria Waits
Ariel Winters

Spring 2020

Jennifer Ambrose
Nicole Boudreaux
Lorena Cannon
Keith Carson
Brenna Challis
Justin Culman
Duncan Edgington
Shanna Gilligan
Santia Gomez
Vance Harris
Ian Heckman
Caroline Hildebrand
Brooke Lafferty
Rob Lavie

Jessica Manko
Briley Manzanares
Gregory Munson
Scott Nearman
Amanda Rees
Kelly Rutkowski
Caitlyn Severy
Honor Stoner
Lauren Tidemann
Macario Torrez
Alexander Trout
Van Truong
Sarah Zimmer

Sustainable Urban Agriculture Certificate

Nicole Boudreaux Santia Gomez Shannon Hourigan Anjel Morine

Environmental Science Education Certificate

Lena Alali

Andrew Steger

Gamma Theta Upsilon (Gtu) Inductees

Jordan Truitt
Mikhail Kaminer
Desiree Paz

Sarah Zimmer
Michaela Butler
Anthony Gambino

Marley Harwood
Rebecca Dennis

Contact Us: 303-315-7525 | GES@ucdenver.edu

Give to GES: clas.ucdenver.edu/ges/about-us/give-geography

Designed by Meron Ayele, Administrative Assistant
Edited by Kris Christensen, Instructor,
& Gregory Simon, Associate Professor



Department of Geography
& Environmental Sciences
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