

GES

GEOGRAPHY & ENVIRONMENTAL SCIENCES

2018-2019 NEWSLETTER

EDITOR:

Ivan J. Ramírez, Instructor

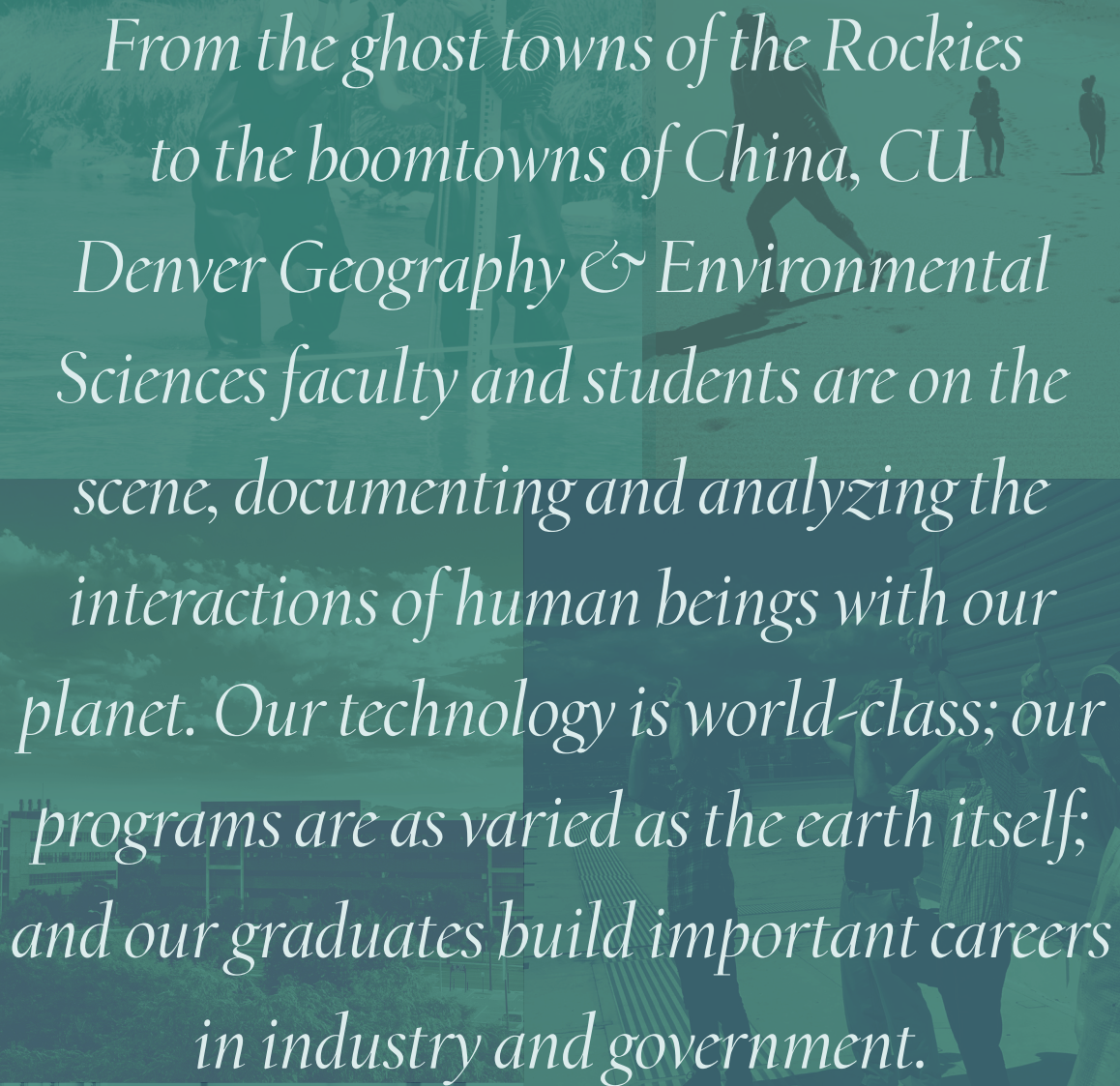
DESIGNER & CO-EDITOR:

Meron Ayele, Administrative Assistant



Department of Geography
& Environmental Sciences

COLLEGE OF LIBERAL ARTS AND SCIENCES
UNIVERSITY OF COLORADO DENVER



*From the ghost towns of the Rockies
to the boomtowns of China, CU
Denver Geography & Environmental
Sciences faculty and students are on the
scene, documenting and analyzing the
interactions of human beings with our
planet. Our technology is world-class; our
programs are as varied as the earth itself;
and our graduates build important careers
in industry and government.*

CHAIR'S NOTES



Greeting to GES alumni, supporters, and friends! The 2018-2019 academic year brought many changes for the GES community. Longtime faculty member John Wyckoff retired at the end of the summer, though as an Emeritus Professor, he still graces our hallways. Our department chair, Dr. Deborah Thomas, left CU Denver in the summer to take a department chair position at the University of North Carolina Charlotte. After 17 year with GES, we thank her for her important contributions and wish her and her family all the best. After many conversations with the faculty, I agreed to step in as department chair for one year beginning August 1, 2018. Dr. Peter Anthamatten will begin a 3-year term as chair on August 1, 2019. Other changes in our leadership team in the fall semester 2018 include Dr. Gregory Simon beginning a 3-year term as Director of Graduate Programs, and Dr. Fred Chambers beginning a 3-year term as Undergraduate Coordinator. There were additions to our faculty as well. Dr. Thomas Duster was appointed to the position of Senior Instructor, and Kirsten Christensen was appointed as an Instructor. We welcome both back to the faculty in their new roles, and know that they will each make tremendous contributions moving forward. Dr. Ivan Ramirez also joined our faculty in a one-year Visiting Instructor position, and has already made a number of significant contributions.

The fall semester was busy and productive, despite the fact that our faculty numbers were a bit depleted; Dr. Amanda Weaver was on leave for the fall semester, while both Dr. Anne Chin and Dr. Rafael Moreno had sabbaticals. We had a record number of entering graduate students: 17 in the MA in Applied Geography and Geospatial Science, and 23 in the MS in Environmental Science. One important initiative, pursued by me and Dr. Bryan Wee, was to connect these two groups of grad students together via joint sessions of each program's introductory seminars. Another graduate initiative, developed by Dr. Simon and Dr. Wee, was to revamp the graduate comprehensive exams, and we were very pleased with the initial results. Our undergraduate program continues to grow, showing enrollment increases in both Fall 2018 and Spring 2019. Our GIS Certificate program also continues to thrive under the direction of Dr. Matt Cross. In October, I visited the CU Denver International College Beijing program in China, where Yi-Chia Chen, our Senior Instructor on the ground there, has developed a Geography minor for ICB students.

As we look to the future, we are now in the process of building out our new Geospatial Analysis and Mapping Research Laboratory, which we hope to open officially during the 2019-2020 academic year. We are also in the process of hiring two new tenure track faculty – more news on that soon!

Best wishes for a happy and productive 2019-2020 academic year to you all,

Dr. Brian Page
Associate Professor | Department Chair, 2018–2019

FACULTY RESEARCH

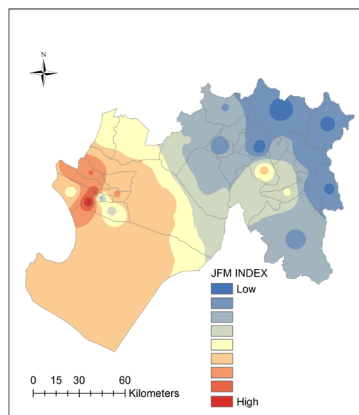
Dr. Rudi Hartmann, Professor C/T in GIS, and Shelley Broadway, a graduate of the Master of Engineering program, published an article “Vail: explaining growth dynamics of a Colorado Ski Resort Town” in the *International Journal of Tourism Sciences* this past December. Broadway, now an expert in geospatial analysis at Colorado Department of Transportation, reconstructed in a longitudinal GIS study the land use changes in the Town of Vail



Visualization of Vail Valley via drone, thanks to photographer Jesse Kuroiwa (College of Architecture and Planning, CU Denver)

from the 1960s to 2010, while Hartmann employed three explanatory approaches in tourism geography for the growth dynamics in Vail Valley. In previous journal articles Hartmann focused on the impacts of three mega sports events on Vail/Vail Valley and on explaining the evolution of Vail (“Vail’s story retold: Applications of John Steinbeck’s realistic prose to reconstructing growth and change of a Colorado high mountain town” in *Journalism and Mass Communication*, 7/9, 481 – 496).

Dr. Ivan J. Ramírez, a new Instructor, is part of a USAID-funded project on El Niño-Southern Oscillation disaster ‘readiness’ led by the Consortium for Capacity Building at CU Boulder. He contributes to new approaches to mapping teleconnections and impacts, as well as disaster improvisation, in Latin America and the Caribbean. Relatedly, Ivan is investigating population vulnerability and multi-disease risk in the context of climate-sensitive epidemics and chronic conditions. From this work, several articles were published in 2018 in journals such as the *International Journal of Environmental Research and Public Health*, *International Journal of Disaster Risk Science*, and *Atmosphere*.



Ecosyndrome index of multi-infectious disease risk in Piura, Peru in early 1998 during an extreme El Niño event.
Source: doi.org/10.3390/ijerph15122639

Dr. Gregory Simon, Associate Professor and Graduate Program Director, has been busy investigating sustainable development projects in India with support from two grants from NSF and the Sustainable Energy Transition Initiative (SETI) Collaborative Research on Energy Program.

He recently published two articles (e.g., *Journal of Historical Geography and Environment and Planning E*) which question the history and accuracy of mainstream development narratives linking domestic fuelwood collection to local deforestation. Furthermore, these papers introduce the concept of 'disingenuous nature' as a way



Dr. Simon and GES MA students in India, January 2017

of characterizing popularized explanations of landscape change that do not align with actual historical and contemporary evidence. Dr. Simon also published a book chapter focused on a critical view of wildfire vulnerability in the American West in the “Handbook on Critical Physical Geography” (Palgrave Macmillan). More publications are forthcoming, including works co-authored with students!

BEE FORAGING ALONG AN URBAN-RURAL GRADIENT USING POLLEN

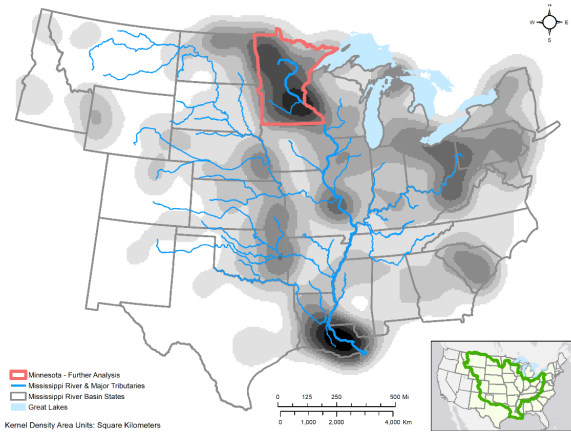
Dr. Christy Briles | Assistant Professor

This study identifies pollen abundances and concentrations coming into hives from urban and suburban/rural fringe environments to determine foraging patterns as they relate to human land use in the Denver metro area. The project estimates the availability and abundance of pollen as forage for honey bees in a semi-arid, high desert environment. The results will inform debates in the academic and beekeeping community regarding pollen availability for honey bees in large cities of the interior US.



*Learn more about the CU Denver Urban Bee Project:
cuurbanbee.businesscatalyst.com/projects.html*

Marcelle Caturia (M.A., 2018) and Dr. Peter Anthamatten, Associate Professor, co-authored a chapter "Mapping Places of Power: Cartographic Examination of French Toponymic Spatial Patterns in the Mississippi River Basin" in the upcoming reference work "Handbook of the Changing World Language Map". Based on Caturia's M.A. thesis, the chapter examines how mapping the spatial distribution of toponyms (place-names) across landscapes can reveal otherwise hidden cultural patterns. The research approach combines spatial statistical



methods to visualize general spatial patterns of French place-names in the Mississippi River Basin, along with a qualitative historical and cultural analysis of socio-political patterns at the more local scale of Minnesota. The resulting maps enable us to better understand how and why French toponymic power changed over time, and provide useful insights to the region's geography and history. Caturia now works as a Geographer in the GeoNames unit at the USGS National Geospatial Technical Operations Center (NGTOC) in Lakewood, Colorado.

PUBLICATIONS & CREATIVE WORKS

Anthamatten, P., L. Bryant, B. Ferrucci, S. Jennings, and R. Theobald. 2018. Giant maps as pedagogical tools for teaching geography and mathematics. *Journal of Geography* 117. doi: 10.1080/00221341.2017.1413413.

Mastin, J., **P. Anthamatten**, and L. Bruederle. 2018. Climatic niche modeling reveals divergence between cytotypes in *Eutrema edwardsii* (Brassicaceae). *Botany* 96: 813-823.

Gregory K.J., and **Chin A.** 2018. Evaluation of the imprint of urban channel adjustment and management. *Geographical Journal* 184: 269-282.

Hartmann, R., and S. Broadway. 2018. Vail: explaining growth dynamics of a Colorado Ski Resort Town. *International Journal of Tourism Sciences* 18:279-294.

Ramírez, I.J., J. Lee, and S. Grady. 2018. Mapping multi-disease risk during El Niño: an ecosyndemic approach. *International Journal of Environmental Research and Public Health* 15:2639.

Simon, G. 2018. The rise of disingenuous nature and neoliberal stealth unknown-knowns" In Reflecting on Neoliberal Natures: An Exchange (P. Bigger and J. Dempsey) *Environment and Planning E: Nature and Space* 1:1-2 pp. 71-75.

Simon, G., and C. Peterson. 2018. In Press. Disingenuous Nature: A Historical Political Ecology of Fuelwood Collection and Forest Cover Change in South India. *Journal of Historical Geography*.

Simon, G. 2018. How the West was spun: the de-politicization of fire in the American West. In *Handbook on Critical Physical Geography*, eds. R. Lave, C. Biermann, S. Lane, 153-178. New York: Palgrave Macmillan.

Nigg, C., E. Kutchman, K. Amato, C. Adele-Chard, G. Zhang, M. Anwar, **P. Anthamatten**, R. Browning, L. Brink, and J. Hill. 2019. Recess environment and curriculum intervention on children's physical activity: IPLAY. *Translational Behavioral Medicine* 9: 202-216. doi: 10.1093/tbm/iby015.

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

Nourbakhshbeidokhti, S., A.M. Kinoshita, **A. Chin**, and J.L. Florsheim. 2019. A workflow to estimate topographic and volumetric changes and errors in channel sedimentation after disturbance. *Remote Sensing* 11:586, doi:10.3390.

Ramírez, I.J., A. Baptista, J. Lee, A. Traverso-Krejcarek, and A. Santos. 2019. Fighting for Urban Environmental Health Justice in Southside (Los Sures) Williamsburg, Brooklyn: A Community-Engaged Pilot Study. In *Handbook of Global Urban Health*, I.Vojnovic, A. Pearson, A. Gershim, A. Allen, and G. DeVerteuil. New York: Routledge.

Ramírez, I.J. 2019. Exploring Tropical Variability and Extremes Impacts on Population Vulnerability in Piura, Peru: The Case of the 1997-98 El Niño. In *Tropical Extremes: Natural Variability and Trends (Observations, Modelling and Theoretical Expectations)*, V. Vuruputur, J. Sukhatme, R. Murtugudde, and R. Roca (Eds.). New York: Elsevier.

Wee, B. (in press) *The nature of childhood in childhoodnature*. In A. Cutter-Mackenzie, K. Malone, E. Barratt Hacking (Eds.), *International Research Handbook on ChildhoodNature*. Springer.

Dr. Rudi Hartmann published Chapter 12 *Virtualities in the new tourism landscape – The case of the Anne Frank House Virtual Tour and of the visualizations of the Berlin Wall in the Cold War context* in the innovative volume *Tourism Fictions, Simulacra and Virtualities* edited by Maria Gravari-Barbas, Nelson Graburn and Jean-Francois Staszak for Routledge in their *Contemporary Geographies of Leisure, Tourism and Mobility* series. The chapter covers the increasing importance of elaborate websites with multi-media presentations, virtual tours and visualizations in present-day tourism. An example for a carefully crafted imagined place for visitation is the reconstruction of the Berlin Wall situation during the Cold War period. Artist Yadegar Asisi's "The Berlin wall: See it here" attraction



near Checkpoint Charlie depicts a Berlin-Kreuzberg neighborhood scene next to the Wall in a fictitious autumn day in the mid-1980s. 800,000 Berlin visitors (2012 – 2017) have seen the re-created place from a bleacher platform overlooking the panorama while listening to famous (and infamous) words like John F. Kennedy's "Ich bin ein Berliner" speech. Of course, Berlin visitors can also see the 'real thing' (short sections of the Wall once dividing the city) at three sites in town.

CONFERENCES, WORKSHOPS, & FIELD NOTES

On October 12, Dr. Bryan Wee, Associate Professor, along with several graduate students and faculty from GES and SEHD, gave a joint presentation titled "Counter Narratives in Environmental Education" at the Geography Colloquium, University of Montana, Missoula. It was well received. A few days prior, they gave individual research presentations at the 2018 North American Association for Environmental Education



Christina Guevara, Joshua Eastes, Bryan Wee, Hillary Mason, and 'The Griz'

(NAAEE) conference in Spokane, WA. The colloquium and conference represent efforts to promote/disseminate environmental education research and to provide unique learning experiences in different settings.

For more information or if you have questions, please contact Dr. Wee:
bryan.wee@ucdenver.edu

In 2018, Dr. Gregory Simon participated in a multi-day workshop in Zurich, Switzerland to examine acute vulnerabilities in affluent contexts. Dr. Simon has given several radio interviews and presentations in communities seeking to curb urban sprawl, protect green space, and reduce social vulnerability to wildfire. These have been extremely rewarding experiences and have directly influenced planning conversations at the wildland-urban interface.

SEMESTER ON SABBATICAL

During his Fall 2018 sabbatical semester, Dr. Rafael Moreno worked on several projects with partners in Mexico and the U.S., involving CU Denver faculty and students:

1. Effect of capacity building in alleviating poverty and improving conservation in communal forests in Mexico. Preparing revised resubmission to World Development.
2. Characteristics and Limitations of Land Use/Cover Digital Data Sets for Monitoring the Extent and Changes in the Monarch Butterflies' Migratory Habitat Across the United States and Mexico. Funded by the USGS with the participation of the National Autonomous University of Mexico. This work will be submitted this month to a peer-reviewed journal. This work has been accepted for presentation at the U.S. International Association for Landscape Ecology in April 2019.
3. Assessment of the accuracy of the GlobeLand30 Forest class in the forests of Mexico. This work has been accepted for presentation at the U.S. International Association for Landscape Ecology in April 2019. Working on preparation of manuscript for submission to peer-reviewed journal.
4. Continued work on the NSF grant to operate the CU Denver Certificate in Environmental Stewardship of Indigenous Lands (ESIL).

He was scheduled to participate in the International Conference of FOSS4G 2018 (Free and Open Source Software for Geospatial Applications) in Dar Es Salaam, Tanzania, but a health issue prevented him from attending. After 5 weeks, once he was able to travel, he spent 2 weeks visiting national parks and family in northern Tanzania and thinking about the possibility of developing an international travel course in this part of the country.



Dr. Rafael Moreno, James Raines (MA, 2018), Dr. Jay Diffendorfer (USGS), & Nell Conti (NPS) at the National Museum of Anthropology in Mexico City, Mexico

For Dr. Anne Chin, sabbatical leave during Fall 2018 was a time for completing long-standing research projects and exploring and developing new ones. The semester coincided with the completion of a major paper reporting her multi-year research on the effects of the 2012 Waldo Canyon Fire on stream ecosystems. With an interdisciplinary team of nine authors—comprising geomorphologists, ecologists, and civil engineers—five of whom are former students—the article documents how the severity of burn and rainfall intensity together influenced the interacting geomorphic and ecological responses in burned watersheds. The article is now in press at the Geological Society of America Bulletin.

Turning to new work, Dr. Chin’s activities centered around opportunities to spend five weeks in Lyon, France, over two trips—first as an invited speaker for the international workshop on “Challenges in Managing Fluvial Systems in the Anthropocene,” and second as an invited guest and first Scientific Fellow of the Lyon School of Urban Anthropocene Studies (École Urbaine de Lyon;



*Dr. Chin's interview at École Urbaine de Lyon; EUL
Source: bit.ly/2DUGnET*

EUL). These visits facilitated intellectual exchange focused on the topic of the “Anthropocene,” a term and concept denoting increasing human interactions with Earth systems. Highlights included three presentations about Dr. Chin’s “Anthropocene” research at Lumière Lyon 2 University, at École Normale Supérieure de Lyon, and as a Keynote Speaker at the “Dans quel monde vivons-nous?” (Which world do we live in?) event at the Musée des Confluences, which was attended broadly by students, colleagues, local practitioners in environmental management, as well as the media. These activities stimulated much discussion and produced ideas for possible collaborative research projects, as well as materials for new courses.

Watch a video created in collaboration with EUL about Dr. Chin’s perspectives on the “Anthropocene,” with the Musée des Confluences as backdrop:

bit.ly/2DUGnET

CHINA TRAVEL STUDY: SUSTAINABILITY ALONG THE YANGTZE

Twelve undergraduate and graduate students travelled to China with Dr. Brian Page, where they met with co-instructor Dr. Yi-Chia Chen of International College Beijing. There, the group traversed through a wide range of cities and landscapes, studying human-environmental interaction, cultural geography, and other social and environmental issues along the way.

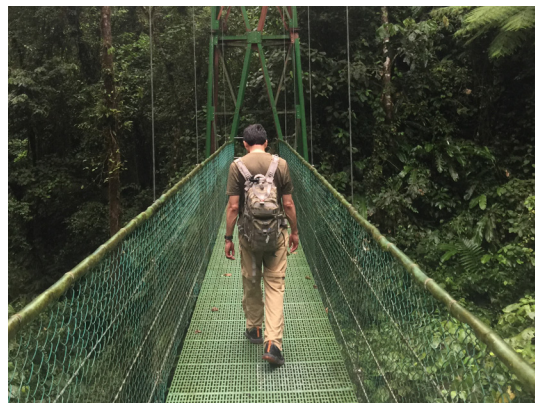


Photos by Anya Dillahunt, MSES

Learn more about Sustainability along the Yangtze:
bit.ly/2kVC3hL

COSTA RICA TRAVEL STUDY: SUSTAINABLE DEVELOPMENT & ADAPTIVE RESOURCE MANAGEMENT

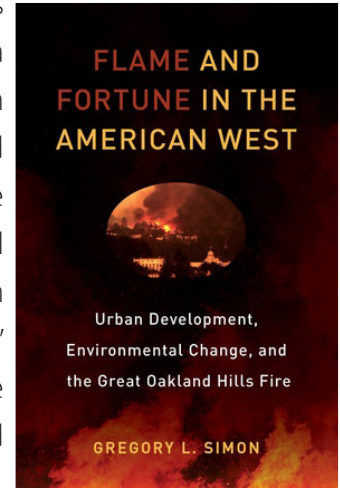
Dr. Rafael Moreno's Maymester course led students through Costa Rica's vast tropical landscapes. The course focused on various topics including rainforest biodiversity, environmental justice and development, socio-cultural influences from Mesoamerica and South America, and sustainable management of natural resources.



Learn more about Sustainable Development & Adaptive Resource Management in Costa Rica:
bit.ly/2lYx3sY

FACULTY GRANTS, FELLOWSHIPS, AWARDS, & HONORS

Dr. Gregory Simon received a grant (CoPI) to examine challenges and opportunities associated with the Pradhan Mantri Ujjwala Yojana program in India, which aims to deliver Liquid Petroleum connections to millions of homes around India. The grant was issued by the Sustainable Energy Transition Initiative (SETI) Collaborative Research on Energy Program. In addition, the Cultural and Political Ecology (CAPE) Specialty Group of the Association of American Geographers recently awarded Dr. Simon with 'Honorable Mention' for the 2018 James M. Blaut Award in recognition of innovative scholarship in cultural and political ecology for the book "Flame and Fortune in the American West."



Dr. Ivan J. Ramírez was awarded a grant (CoPI) to investigate how social determinants of health spatially overlap with inequality in housing affordability and mental health-related issues in Colorado. The project, led by Dr. Jieun Lee at University of Northern Colorado, is funded by the University of Denver's Colorado Evaluation and Action Lab as part of their 2018-19 Quick-Turnaround, Actionable Research Projects.

FACULTY PROFILES



Kirsten (Kris) Christensen, a new instructor in GES, began teaching in 2004 in the College of Architecture and Planning on the Boulder and Denver campuses, and moved to the Department of Geography and Environmental Sciences in 2010. Kris' background is in urban studies and planning, political science and cultural studies including historic preservation, human and environment interactions, and cultural landscapes. Prior to teaching she worked in preservation planning, project management, and grant writing. Kris has a M.S.S. in social sciences with emphasis in urban history, political science and historic preservation and a terminal M.U.R.P. degree with an emphasis in urban and rural planning and research, all from CU Denver. She is a native Coloradan from Golden who loves teaching, helping students reach their potential and realize their goals, no matter what their field of interest is in. Her hobbies include gardening, reading, and most of all baseball: Go Colorado Rockies!

Ivan J. Ramírez is a new instructor whose teaching and research focuses on the intersections of global urban health, climate change and community engagement. His scholarship strives to elucidate how the many facets of climate impact health and the social vulnerability of populations, as well as how communities respond to and cope with disasters and epidemics. In addition, he has experience with and is committed to promoting inclusion and diversity in higher education. Ivan is also a research associate with the Consortium for Capacity Building/INSTAAR at University of Colorado Boulder since 2009, where he advances education and research on El Niño-Southern Oscillation. Prior to CU Denver, he taught at Colorado State University, Eugene Lang College, The New School, and New College of Florida. Ivan holds a PhD in Geography from Michigan State University and an MA in Climate and Society from Columbia University. He is originally from Quito, Ecuador, grew up in New York City, and relocated to Colorado in summer of 2017. Ivan lives in Greeley and enjoys spending time with his family.



NEWS & EVENTS

CU SUCCEED NEWS

Mark Little, retired GES and Biology lecturer at Broomfield High School, received the CU Succeed Service Reward for 2018 for his long and dedicated service to his students and both departments. Mark is a lifelong learner, taking courses and attending lectures and conferences to keep his material current and relevant in his classes and to share with his colleagues at Broomfield High and in CU Succeed. Mark continues to serve the program by providing mentorship to existing and new CU Succeed faculty and participating in curriculum development. Both departments congratulate him on his success and wish him well in his retirement.



Mark Little
Source: National Association of Biology Teachers

The department 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 that will be available to the CU Succeed program and on-campus faculty for fall 2019. The steering committee members are:

- David Hoffmaster, Longmont High School, St. Vrain Valley School District
- Kathleen Dorman, Ponderosa High School, Douglas County School District

- Eliza Rayner, Broomfield High School, Boulder Valley School District
- Suzanne Carmody, Widefield High School, Widefield School District and on campus
- Thomas Duster, Senior Instructor, Geography and Environmental Sciences
- Kirsten (Kris) Christensen, Instructor and CU Succeed Liaison, Geography and Environmental Sciences

Suzanne Carmody, Widefield High School, is a contributing author to the third edition of *Strive for a 5: Preparing for the AP Environmental Science Exam* published by W.H. Freeman.

CU SUCCEED FACULTY AND SCHOOLS

Banks, Sara	Academy of Early Learning Denver
Boblitt, Caitlin	Martin Luther King Early College Denver
Carmody, Suzanne	Widefield 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

Learn more about CU Succeed:
clas.ucdenver.edu/cusucceed

DOCUMENTING GES HISTORY PROJECT

Lead investigator Rudi Hartmann, and designer Meron Ayele, GES Administrative Assistant, constructed a 22 page volume documenting the history of the Department of Geography and Environmental Sciences (GES). The work spans from the hiring of first geographer Richard ‘Dick’ Stevens in 1963 (when CU Denver was the Denver Extension Center with totally 22 faculty members) to building two master programs with a 15 member rostered faculty



Dr. Mel Albaum, Ila Warner, and students of the Population Dynamics Program

by July 2018. The History marks the major steps of our campus to a separate and independent unit within the University of Colorado system, comprises a detailed time line of the Department, features five early faculty members, illustrates important departmental events including the retirement parties of Jack Weihaupt, Martin Lockley and John Wyckoff as well as gives a portrait of the Five Fridges Farm, our Urban Farm Field Research Station.

View the full GES History Project:
clas.ucdenver.edu/ges/sites/default/files/attached-files/ges_history_2019_updates.pdf

FIVE STUDENTS AWARDED FALL 2018 RODGERS UNDERGRADUATE GEOGRAPHY SCHOLARSHIP

In honor of her late husband and his passion for geography, Mrs. Rodgers established the William M. Rodgers Fund at CU Denver. The fund supports scholarships for undergraduates studying Geography, a subject for which Mrs. Rodgers shares her husband's enthusiasm.

Fall 2018 Recipients:

Ryan Brady
Duncan Edgington
Rebecca Friend
Mathea Kamin
Sarah Zimmerman



Wendell Rodgers and William (Bill) Rodgers

In Spring 2019, Matthew Davis received the Rodgers Undergraduate Research Scholarship for his research proposal, *A Five-thousand-year Forest and Fire Reconstruction from the Eastern San Juan Mountains of Southern Colorado*

Congratulations to all the recipients!

Learn more about the Rodgers Scholarship:
clas.ucdenver.edu/ges/student-resources/scholarships

FOUR GRADUATE STUDENTS NAMED GES GRADUATE STUDENT EXECUTIVE COMMITTEE



Hannah Gnoza
MS



Vance Harris
MS



Amanda Rees
MA



David Smith
MA

The Student Executive Committee is made up of students who represent each group in the graduate program: 1st and 2nd year MA, and 1st and 2nd year MS. The committee acts as a liaison between the student body and the GES department. They relay concerns, interests, and suggestions of the graduate students, while also planning community activities, events, and social gatherings with the department.

In Fall 2019, graduate students will have the chance to nominate four new students to serve in this committee.

2018-2019 SPEAKER SERIES PRESENTATIONS

Fighting for Urban environmental Health Justice in Southside Williamsburg, Brooklyn: A Community Engaged Pilot Study
Friday, October 12 | **Dr. Ivan J. Ramírez, GES**

The aim of this presentation is to discuss preliminary results from a pilot study that examined concentrations of urban traffic-related air pollutants in recreation spaces in Southside (Los Sures) Williamsburg, Brooklyn in New York City. The study conducted through a partnership between the Tishman Environment and Design Center (The New School University) and El Puente, a human rights organization, builds on previous initiatives that addressed asthma disparities and built community health capacities, primarily among a Latino subpopulation. Using a community engaged approach, students along with social justice practitioners collected data of fine particulate matter in four neighborhood parks situated along the Brooklyn-Queens Expressway. Preliminary results suggest that several parks exceeded air quality standards and were higher when compared to the local New York State air quality monitor. Preliminary findings provide some evidence to support advocacy for new and improved quality recreation spaces and the right to clean air.



The Emerald Edge: Mapping and modeling carbon on the remote north Pacific coast
Friday, November 9 | **Dr. Brian Buma, Department of Integrative Biology**

The largest storehouse of biomass and soil carbon in U.S. forests is in Alaska, and the forests of southeast Alaska - a vast landscape the size of the entire southern Rockies - contain about as much C as the 8% of the lower 48 forests combined. But they've never been quantified or mapped at fine scales. In addition, the role of disturbance processes in maintaining that carbon balance is unknown. This presentation will highlight the results of a multi-year carbon mapping and modeling effort, which utilized remote sensing,



GIS, and machine learning to arrive at the final product. It will also highlight perhaps the first study of its kind to highlight the spatial role of disturbance regimes in maintaining productive forests - not reducing net carbon, but actually increasing stocks over long (multi-millennia) time periods.



Dr. Brian Buma

Counter Narratives in Environmental Education

Friday, February 8 | **Bryan Wee, Hilary Mason, Christina Guevara, & Josh Eastes**

Individually, the presenters described how their research encourages dialogue and competing perspectives (counter narratives) in environmental education. Collectively, they drew attention to underlying assumptions and dominant discourses in their field and in society. This presentation provided added insight into environmental education research, its applications, opportunities and challenges.

Working on Geospatial Information Infrastructure at the National Park Service

Friday, March 8 | **Morgan Cameron, Caroline Hildebrand, & David Smith**

The National Park Service has a Washington detached national-level geospatial office in Denver. After a year working in the internships agreement between GES/ CU-Denver and the NPS national office of the Resource Information Services Division (RISD), the current student interns, their supervisors at the NPS, and the agreement coordinator Dr. Rafael Moreno reflected on their work and accomplishments.



Morgan Cameron, Caroline Hildebrand, David Smith

The Future of Pot and Pints in Denver

Friday, April 12 | **Kristi Kelly, Robert Runco**

The GES department's Graduate Student Executive Committee hosted the final colloquium of the semester. This colloquium was centered around the historic and emerging trends in Denver's Brewing and Marijuana industries. The committee moderated a panel in which our guest experts responded to a set of predetermined questions.

Kristi Kelly
Executive Director,
Colorado Marijuana
Industry Group



Robert Runco
General Counsel,
Colorado Craft
Brewer's Guild

NEW GRADUATE STUDENT ORIENTATION



The GES graduate program welcomed over 40 new graduate students into the MA and MS programs in fall 2018!

New Graduate Student Orientation, August 17th

Get to know our graduate students on the GES website:
clas.ucdenver.edu/ges/meet-our-graduate-students

FALL PICNIC



Jeremy McClung, Erin McKay, Hannah Gnoza, Lindsey DeGering, Morgan Cameron, & David Smith



On September 8th, GES hosted the annual fall potluck picnic with faculty, graduate students, staff, and friends and family at Ruby Hill Park. Guests welcomed the new academic year by sharing homemade meals, enjoying the sunny day, and getting to know new students and members of the department.

FIRST ANNUAL SPIRE SOCIAL



Downtown Denver



MSES Students John Steelman, Rosemary Downing, Erin McKay, Kristen Birdshire, Jeremy McClung, & Audrey Dignan

The very first annual GES Spire Social took place on December 7th at The Spire, in the heart of downtown Denver. Faculty, staff, graduate students, and friends gathered to celebrate the end of the semester together.

SPRING CELEBRATION



GES Graduate Students & Friends

On May 11th, the first annual Spring Celebration marked the end of a terrific academic year. The department recognized graduating students, other student accomplishments, and the very first Faculty of the Year (FOTY) award, an award created by graduate students.

MAY 18TH COMMENCEMENT CEREMONY

Our undergraduate and graduate students were among a record 2,144 graduates at CU Denver's Spring 2019 commencement ceremony.

Congratulations to all the graduates!



CU Denver graduates at the Spring 2019 Commencement Ceremony



Anne Chin, Matthew Cross, Fred Chambers, Amanda Weaver, Peter Anthamatten





Geography & Environmental Sciences

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