

UW Tacoma Office of Research Roundup



Winter 2019

The Office of Research welcomes you back to campus and wishes you a smooth start to the spring 2019 quarter! UW Tacoma faculty had a productive winter 2019 quarter, as evidenced by the diverse contributions highlighted in our below quarterly [Office of Research Roundup](#), which also provides an update on Office of Research news and events that support faculty scholarship in the upcoming spring 2019 quarter.

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Please do not hesitate to [let us know](#) if you have suggestions about how to make the Roundup most useful!

Recent publications*

UW Tacoma faculty and staff published an impressive body of work during the winter 2019 quarter. Congratulations to the following authors:

Peer-reviewed articles

- Julia Aguirre** (SOE), with co-authors: "A study of early career teachers' practices related to language and language diversity during mathematics instruction" in *Mathematical Thinking and Learning*
- Ji-Hyun Ahn** (SIAS/CAC), with co-author: "The politics of apology: The 'Tzuyu Scandal' and transnational dynamics of K-pop" in *International Communication Gazette*
- Uba Backonja** (NHL), with co-authors: "Evaluating visual analytics for health informatics applications" in *Journal of the American Medical Informatics Association*
- Ellen Bayer** (SIAS/CAC): "The ecocritical implications of downing's influence on Poe's landscape aesthetic" in *The Edgar Allan Poe Review*
- "The strata of my history': Reading the ecological chronotope in Wendell Berry's *That Distant Land*" in *Landscapes: The Journal of the International Centre for Landscape and Language*
- "Green burial, home burial: A Return to Redbud Hill" in *Trumpeter*
- Erin Casey** (SWC), with co-authors: "Examining men's perceptions of GBV prevention programming content" in *Violence Against Women*
- Ed Chamberlain** (SIAS/CAC): "Desire, intimacy, and other feelings in: collections of queer testimonios" in *Pacific Coast Philology*
- Wei Cheng** (SET), with co-authors: "A model for integrating heterogeneous sensory data in IoT systems" in *Computer Networks*

Martine De Cock and **Anderson Nascimento** (SET), with co-authors: “Algorithmically generated domain detection and malware family classification” in *Security in Computing and Communications*

with **Raj Katti** (SET) and co-authors: “Efficient and private scoring of decision trees, support vector machines and logistic regression models based on pre-computation” in *IEEE Transactions on Dependable and Secure Computing*

Haluk Demirkan (Milgard), with co-authors: “Smart services: The move to customer orientation” in *Electronic Markets*

Charles Emler (SWCJ), with co-author: “Giving back is receiving: The role of generativity in successful aging among HIV-positive older adults” in *Journal of Aging and Health*

Ander Erickson (SIAS/SAM): “Introducing information literacy to mathematics classrooms: A cross-case analysis” in *Numeracy*

Robin Evans-Agnew (NHL), with co-authors: “Federal weatherization and health education team up: Process evaluation of a new strategy to improve health equity for people with Asthma and Chronic Obstructive Pulmonary Disease” in *Journal of Public Health Management and Practice*

Laura Feuerborn (SET), with co-authors: “Factor validation of the Staff Perceptions of Behavior and Discipline (SPBD) Survey” in *Remedial and Special Education*

Michael Forman (SIAS/PPPA): “The nationalist temptation: Labor and the crisis of global capitalism” in *New Labor Forum*

Jim Gawel (SIAS/SAM), with co-authors: “Contrasting arsenic cycling in strongly- and weakly-stratified contaminated lakes: Evidence for temperature control on sediment-water arsenic fluxes” in *Limnology and Oceanography*

Rachel Hershberg (SIAS/SBHS), with co-author: “Critical reflection about socioeconomic inequalities among white young men from poor and working-class backgrounds” in *Developmental Psychology*

Maureen Kennedy (SIAS/SAM): “Experimental design principles to choose the number of Monte Carlo replicates for stochastic ecological models” in *Ecological Modelling*

with co-author: “Altered vegetation structure from mechanical thinning treatments changed wildfire behaviour in the wildland–urban interface on the 2011 Wallow Fire, Arizona, USA” in *International Journal of Wildland Fire*

with co-authors: “How big is enough? Vegetation structure impacts effective fuel treatment width and forest resiliency” in *Ecosphere*

Christopher Knaus (SOE), with co-authors: “The Grow Your Own Collective: A Critical Race Movement to transform education” in *Teacher Education Quarterly*

Umit Kucuk (Milgard): “Consumer Brand Hate: Steam rolling whatever I see” in *Psychology & Marketing*

Patsy Maloney (NHL), with co-author: “Ninety years and counting: The past, present, and future of the nursing professional development specialty” in *Journal for Nurses in Professional Development*

Gillian Marshall (SWCJ), with co-authors: “Food security in the context of paternal incarceration: Family impact perspectives” in *International Journal of Environmental Research and Public Health*

Benjamin Meiches (SIAS/PPPA): “Traumas without bodies: A reply to Emma Hutchison’s Affective Communities” in *Millennium: Journal of International Studies*

“The charge of genocide: Racial hierarchy, political discourse, and the evolution of international institutions” in *International Political Sociology*

Altaf Merchant (Milgard), with co-authors: “Developing an emic scale to measure ad-evoked nostalgia in a collectivist emerging market, India” in *Journal of Business Research*

“Big Data: Ushering new vistas in market research” in *Projectics / Proyectica / Projectique*

Andrea Modarres and **Ellen Bayer** (SIAS/CAC): “A more complete Ahab: Into the darkness of *Moby-Dick*” in *Reconstruction: Studies in Contemporary Culture*

Pierpaolo Mudu (Urban Studies): “Dies-non: Refusal of work in the 21st century” in *Gender, Place & Culture: A Journal of Feminist Geography*

Emma Rose (SIAS/CAC), with co-authors: “Can we keep him forever? Teens’ engagement and desire for emotional connection with a social robot” in *International Journal of Social Robotics*

with co-authors: “Participatory research principles in human-centered design: Engaging teens in the co-design of a social robot” in *Multimodal Technologies and Interaction*

Claudia Sellmaier (SWCJ), with co-authors: “Is online training an effective workforce development strategy for transition service providers? Results of a comparative study” in *Journal of Emotional and Behavioral Disorders*

Jarek Sierschynski (SOE): “Improvising identity, body, and race” in *Cultural Studies – Critical Methodologies*

Barb Toews (SWCJ), with co-authors: “Designing the correctional landscape: An invitation to landscape architecture professionals” in *Landscape Journal*

Erik Tou (SIAS/SAM): “Asymptotic counting theorems for primitive juggling patterns” in *International Journal of Number Theory*

Ingrid Walker (SIAS/CAC), with co-author: “Developing a transformative drug policy research agenda in the United States” in *Contemporary Drug Problems*

Yi Jenny Xiao (SIAS/SBHS), with co-author: “Sudden shifts in social identity swiftly shape implicit evaluation” in *Journal of Experimental Social Psychology*

Ka Yee Yeung, Ling-Hong Hung, and Wes Lloyd (SET), with co-authors: “Holistic optimization of an RNA-seq workflow for multi-threaded environments” in *Bioinformatics*

Diane Young (SWC), with co-author: “Young adult reflections on the impact of parental incarceration and reentry” in *Journal of Offender Rehabilitation*

Books

Umit Kucuk (Milgard): Brand Hate: Navigating Consumer Negativity in the Digital World (Palgrave MacMillan)

Benjamin Meiches (SIAS/PPPA): The Politics of Annihilation: A Genealogy of Genocide (University of Minnesota Press)

Beverly Naidus (SIAS/CAC), with co-author: Not Just Words: A 30-Year Exhortation to Love and Resistance (self-published)

Libi Sundermann (SIAS/SHS), with co-authors: A History of the World Since 1500 (Cognella)

Book Chapters

Orlando Baiocchi (SET), with co-author: “Energy resources in agriculture and forestry: How to be prepared for the Internet of Things (IoT) revolution” in Energy Systems and Environment (IntechOpen)

Michael Forman (SIAS/PPPA): “Human Rights” in The Oxford Handbook of Global Studies

Susan Johnson (NHL): “Workplace bullying in the nursing profession” in Handbooks of Workplace Bullying, Emotional Abuse and Harassment: Special Topics and Particular Occupations, Professions and Sectors (Springer)

Divya McMillin (SIAS/CAC): “Citizen media and civic engagement in globalizing cities” in Place, Power, Media: Mediated Responses to Globalization (Peter Lang)

Randy Nichols (SIAS/CAC): “Pokemon Go: Globalization” in How to Play Video Games (New York University Press)

Laura Rattner (SIAS/CAC), with co-author: “Is a Feminist lens enough? The challenges of ‘going mobile’ in an intersectional world” in Feminist Interventions in Participatory Media: Pedagogy, Publics, Practice (Routledge)

Matthew Weinstein (SOE), with co-authors: “EcoJust STEM education mobilized through counter-hegemonic globalization” in The Wiley Handbook on Global Educational Reform (Wiley Blackwell)

Edited Volumes

Orlando Baiocchi (SET) (collection editor): Digital Signal Processing (Momentum Press)

Colleen Carmean (Academic Innovation), with co-editor: An Analytics Handbook: Moving from Evidence to Impact (Society for College and University Planning)

Haluk Demirkan (Milgard), with co-editors: T-Shaped Professionals: Adaptive Innovators (Business Expert Press)

Divya McMillin (SIAS/CAC), with co-editors: Place, Power, Media: Mediated Responses to Globalization (Peter Lang)

**Note: This list comprises all known peer-reviewed publications first published, including on-line, during the winter 2019 quarter (Dec 17, 2018-Mar 24, 2019), as well as books, book chapters, and edited volumes published during the same period and reported to the UWT Library Digital Commons and/or Office of Research.*

Do you have a recent publication not identified here? [Let us know!](#)

Congratulations to recipients of new sponsored (external) research awards*!



Wes Lloyd (PI), School of Engineering and Technology

Improving Software Deployments to Serverless Computing Environments
National Science Foundation (NSF)

Congratulations to Dr. Lloyd who was awarded a 2-year grant from the NSF Directorate for Computer and Information Science and Engineering (CISE) through the “Research Initiation Initiative,” a program that supports early career computer science investigators in establishing their independent research programs. Dr. Lloyd will use this funding to develop the “Serverless Application Analytics Framework” (SAAF), which will provide measurement support for serverless software deployments enabling new insights and data driven analytics that can be used by practitioners to evaluate tradeoffs between alternate architectures and service compositions. Dr. Lloyd will engage both undergraduate and graduate students at the UW Tacoma through paid research assistantships. His proposal was considered under NSF’s Research at Undergraduate Institutions (RUI) designation, meaning that NSF recognized the value of Dr. Lloyd’s research to undergraduate students, and particularly those from backgrounds underrepresented in STEM fields.



Jim Thatcher (PI), Urban Studies, with **Ruth Vanderpool** (Senior Personnel; SIAS/ Sciences and Mathematics) and Courtney Thatcher (co-PI; University of Puget Sound)

Research Experiences for Undergraduates (REU) “Site” Award:
Spatial Models and Electoral Districting
National Science Foundation (NSF)

Congratulations to Dr. Thatcher and his collaborators at UW Tacoma and University of Puget Sound (UPS), who have been awarded UW Tacoma’s first NSF REU Site award. This 3-year award will enable the team to create meaningful summer research experiences for a diverse group of undergraduate students from UW Tacoma, UPS and beyond centered on the socially and politically urgent topic of electoral districting. Students – who will live and be based at the UPS campus through the summer – will engage deeply in interdisciplinary approaches with broad real-world implications spanning geography, computer science, data science, and mathematics. Recruiting, underway now, emphasizes participation among students who are underrepresented in STEM fields in terms of gender and economic and racial identities, as well as those from smaller colleges with limited research opportunities.



Other Recent External Awards:



Ji-Hyun Ahn, SIAS/Culture, Arts and Communication

A Comparative Study on Anti-Korean Sentiment in Taiwan and Japan
Academy of Korean Studies



Jim Gawel, SIAS/Sciences and Mathematics and **Stanley Joshua**, Director of Facilities Services

UWT Sustainable Waste Management
City of Tacoma



Ka Yee Yeung, School of Engineering and Technology

Diversity supplement to “Intelligent deployment of containerized bioinformatics workflows on the cloud”
National Institutes of Health

*Note: This list comprises all new sponsored research awards funded in winter 2019 quarter (Dec 16, 2018-Mar 24, 2019) and for which a UW Tacoma organization is specified as lead (as reported by the UW Business Intelligence portal), as well as internal (UW) awards reported to the Office of Research.

Have you recently received an award not identified here? [Let us know!](#)

Congratulations to recipients of new UW (internal) research awards!

Highlighted Internal Award:



Weichao Yuwen (Lead Co-I) and **Sunny Chieh Cheng** (Co-I), Nursing and Healthcare Leadership, with co-Is Teresa Ward (UW Seattle), Dong Si, and Bill Erdley (UW Bothell) **CocoBot – Tailored Self-Management Program for Caregivers of Children with Chronic Conditions**

UW Population Health Initiative Pilot Research Grant

Congratulations to Drs. Yuwen, Cheng and their collaborators in Bothell and Seattle who were awarded funds to develop and pilot test the usability and feasibility of “CocoBot,” a theory-based self-management intervention designed to improve caregivers’ well-being and health. CocoBot uses artificial intelligence ‘chatbot’ technology to provide family caregivers of children with chronic asthma and arthritis with on-demand and interactive support and skill development. In recognition of the particularly high need for support of caregivers in underserved communities, CocoBot will be specifically designed for this population through a user-centered design approach. Dr. Yuwen and her collaborators expect to leverage the preliminary results funded through this internal award to increase competitiveness for future NIH funding to support a definitive trial of the intervention.



Royalty Research Fund (RRF)* Awards:

In January 2019, an unprecedented three out of seven RRF proposals were awarded to UW Tacoma faculty. Congratulations to the following faculty!



Ander Erickson, SIAS/Sciences and Mathematics
Mathematics on the Internet: Charting a Hidden Curriculum



Laura Feuerborn and **Kathy Beaudoin**, School of Education
Student Perceptions of Behavior and Discipline in Middle and High Schools



Ed Kolodziej, Center for Urban Waters
Improving Environmental Forensics: Resolving and Apportioning Stormwater and Legacy Pollutant Sources with Non-Target High Resolution Mass Spectrometry

*The **RRF program** awards grants of up to \$40,000 to UW faculty in order to launch new research and pave the way for future external funding. This program offers an excellent opportunity for jump-starting a promising research project. [Contact us](#) if you would like to discuss a possible RRF proposal!

Have you recently received an award not identified here? [Let us know!](#)

Upcoming UW funding opportunities

Institute of Translational Health Sciences (ITHS):

Academic/Community Partnership Research Awards – Letter of intent due mid-June (expected)
Supports collaborations between academic and community investigators. Up to \$20,000 over 1-year is available to faculty engaged in work that enhances or implements sustainable health programs in community settings. Special consideration given to teams with matching funds. More details [here](#).

Walter Chapin Simpson Center for the Humanities:

Colloquia and Conferences Grants – due April 26

Supports cross- and inter-disciplinary symposia, colloquia, and conferences of various scales that are of interest to scholars across multiple disciplines. Typical awards range \$6,000 to \$15,000. More details [here](#).

Cross-disciplinary Research Clusters – due April 26

Supports new scholarly activity and further pathways for collaboration among faculty and students from different disciplines and departments. Typical awards are \$1,000 to \$7,500. More details [here](#).

Large-Scale Collaborations – due April 26

Enables faculty and students to pursue extended cross-disciplinary/-departmental collaborative projects in research, teaching, and/or public engagement. Typical awards are \$7,000 to \$15,000. More details [here](#).

UW CoMotion-Amazon Catalyst Award – due May 31

Supports current students, faculty, and staff from all fields – including humanities, engineering, science, and art – in pursuing big, bold solutions to a problem in the world that are centered around the 2019 themes of “urban transportation” and “computational social science.” Awards are up to \$10,000. More details [here](#)

Interested in pursuing one of the above, or any other, funding opportunities? [Contact us!](#)

Recent workshops and events – recordings available

The Office of Research facilitated or co-hosted eight faculty development events in winter 2019. Materials and recordings of several of these and others from earlier quarters are available on [our website](#), including:

- [Introduction to proposal writing](#) (Kara Luckey, Office of Research)
- [Institutional Review Board \(IRB\) submissions](#) (Bailey Bodell, UW Human Subjects Division)
- [Royalty Research Fund info session](#) (Kara Luckey, Office of Research)
- [Introduction to R and R Studio](#) and [Intermediate R: Managing data](#) (Chuck Lanfear, UW Center for Social Science Computation & Research)
- [Uncovering hidden pathways: An anti-racist, purposed-based, creative learning guide to engaging non-dominate youth in STEM activities](#) (Jaleesa Trapp, MIT Media Lab)

Videos from our **Winter 2019 ‘Publish and Flourish’** event celebrating recently-published UW Tacoma authors are also available [here!](#)

UW Tacoma Statistical Consulting Group is here to help!

A reminder that the [UW Tacoma Statistical Consulting Group](#) – a volunteer-based group of faculty and staff with expertise in statistics and statistical software facilitated by the Office of Research and the Teaching and Learning Center (TLC) – provides free support to faculty and staff with research design, analysis, data interpretation, and data visualization. It is often most productive to begin working with consultants *before* beginning data collection in order to ensure that data collection instruments are designed effectively.

Submit your request or direct any questions to the team via the program’s online [Problem Submission Form](#).

Upcoming faculty development workshops and events

The **Spring 2019 Faculty Development Events schedule** is full of opportunities to learn new skills, increase competitiveness in grant seeking, and connect with colleagues. For the complete schedule, see [our website](#).

A few highlights (all to be held in TLB 307b):

Data visualization in R open-source statistical software

Thurs, April 25th

12-1:30pm presentation
1:30-2pm extended Q&A

Join Chuck Lanfear, consultant with the UW Center for Social Science Computation & Research, for an introduction to data visualization using 'ggplot' in R

Creating a culture of undergraduate research at UW Tacoma

Fri, May 3rd

1:30-3pm

Join the Undergraduate Research High-Impact Practices Working Group for a faculty panel and workshop about possible mechanisms and practices to promote and support faculty in conducting undergraduate research

Listening session: Research support for Assistant Professors

Tues, May 14th

12:30-1:30pm

Join us to share your experiences of conducting research at UW Tacoma as a junior faculty, and to discuss ideas for how the Office of Research can support your scholarship most effectively

Collaborative Publicly-Engaged Scholarship (CPES) awardees

Thurs, June 6th

12:30-1:30pm

Come learn about the impressive and impactful publicly-engaged work supported by this year's CPES awards.

New resources to support faculty training and development

National Center for Faculty Development and Diversity (NCFDD)*

Faculty Success (“Bootcamp”) Program: Registration closes April 18th for the NCFDD’s highly regarded Faculty Success Program (FSP), [here](#). This 12-week (May-Aug) program is open to all UW Tacoma faculty, although faculty using FSP to support tenure and promotion are prioritized. The UW Office of Faculty Advancement will provide one-third of required tuition on a cost-sharing basis with faculty member’s own academic unit. Please direct questions to [Simone Willynck](#), Program Coordinator in the UW Office of Faculty Advancement.

Webinars: A reminder that NCFDD maintains a library of excellent faculty development resources, including the following recent and upcoming webinars that may be of interest to UW Tacoma faculty:

- [Navigating the Barriers to Getting your STEM Grant Funded](#) – Thurs, May 9th (11:00am PST)
- [Mastering Academic Time Management](#) – Thurs, April 11th (11:00am PST)
- [Daily Writing for Academic Scientists and Engineers](#) – recording
- [Managing Multiple Roles: How to be a Faculty Member and an Administrator](#) – recording
- [Writing for a Broader Audience: How to Convey Complex Ideas in Clear, Accessible Prose](#) - recording
- And many more [archived](#) and [upcoming](#) webinars

*Information about resources available to faculty through UW’s NCFDD membership and instructions for activating your account are available on [our website](#).

UW Center for Social Science Computation and Research (CSSCR) Courses

A reminder that the UW CSSCR offers a number of free introductory courses on quantitative and qualitative analysis software, including SPSS, STATA, R, Python, ArcGIS and Atlas.ti. See the [CSSCR website](#) for details.

Work with us!

Are you looking for funding opportunities, planning to submit a proposal to support your scholarship, and/or interested in talking through ideas for future research this coming quarter? [Contact us!](#) The Office of Research is here to support your work.