



## UW Tacoma Office of Research Roundup



### Summer 2018

The Office of Research welcomes you back to campus and wishes you a smooth start to the fall 2018 quarter!

UW Tacoma faculty had a productive summer, as evidenced by the diverse and impactful contributions highlighted in our below quarterly [Office of Research Roundup](#). This Roundup also provides an update on Office of Research news and events that support faculty research, scholarship, and creative activities in the upcoming fall 2018 quarter.

In this issue:

- [Recent publications](#)
- [New sponsored research awards](#)
- [UW Tacoma Publicly Engaged "Alternate RRF" Pilot Fund Awardees](#)
- [Upcoming Funding Opportunities](#)
- [Upcoming workshops and events](#)
- [Introducing the UW Tacoma Statistical Consulting Group](#)
- [Recent updates from the UW Seattle Office of Research](#)
- [New resources](#)

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

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### Recent publications

UW Tacoma faculty and staff published an impressive body of work during the summer 2018 quarter\*. Congratulations to the following authors:

#### Peer-reviewed articles

**Uba Backonja** (Nursing and Healthcare Leadership), with co-authors: "Comfort and attitudes towards robots among young, middle-aged, and older adults: A cross-sectional study" in *Journal of Nursing Scholarship*

**Orlando Baiocchi** (School of Engineering and Technology), with co-author: "A Low-Cost IoT System for State Monitoring of Equipment in Industrial Plants" in *Proceedings of the IoTsm International Conference on Industrial Internet of Things and Smart Manufacturing*

**Katherine Baird** (SIAS/PPPA): "Including private health care costs in measuring nations' redistributive effort" in *Journal of Income Distribution*

**Ruth Bernstein** (SIAS/SHS), with co-author: "Invisible children: Advocacy and accidental viral marketing" and "ARNOVA Governance Symposium Case Studies for Use in the Classroom and Practitioner Training" in *Journal of Nonprofit Education and Learning*

**Sunny Cheng** (Nursing and Healthcare Leadership), with co-authors: "Examining age-related differences in functional domain impairment following traumatic brain injury" in *International Journal of Older People Nursing*

**David Coon** (SIAS/CAC): "Mythgarden: Collaborative authorship and counter-storytelling in Queer independent film" in *Journal of Film and Video*

**Martine De Cock** and **Anderson Nascimento** (School of Engineering and Technology), with co-authors: "Character Level based Detection of DGA Domain Names" in *Proceedings of the IEEE International Joint Conference on Neural Networks*

with co-authors: "Detecting misogynous tweets" in *Proceedings of the Third Workshop on Evaluation of Human Language Technologies for Iberian Languages*

with co-authors: "Dictionary Extraction and Detection of Algorithmically Generated Domain Names in Passive DNS Traffic" in *Proceedings of the 2<sup>nd</sup> International Symposium on Research in Attacks, Intrusion, and Defenses*

**Denise Drevdahl** (Nursing and Healthcare Leadership): "Impersonating culture: The effects of using simulated experiences to teach cultural competence" in *Journal of Professional Nursing*

**Tessa Francis** (Center for Urban Waters), with co-authors: "Quantifying the benefits of spatial fisheries management – An ecological-economic optimization approach" in *Ecological Modelling*

with co-authors: "Transient phenomena in ecology" in *Science*

**Andrea Hill** (Social Work and Criminal Justice), with co-author: "Reconfiguring worker subjectivity: Career advice literature and the "branding" of the worker's self" in *Sociological Forum*

**Tom Koontz** (SIAS/SAM), with co-author: "Use of science in collaborative environmental management: Evidence from local watershed partnerships in the Puget Sound" in *Environmental Science and Policy*

**Rupinder Jindal** (Milgard School of Business), with co-authors: "Selling, general, and administrative expense (SGA)-based metrics in marketing: Conceptual and measurement challenges" in *Journal of the Academy of Marketing Science*

**Seyed Karimi** (SIAS/PPPA), with co-author: "The effect of prenatal exposure to Ramadan on children's height" in *Economics & Human Biology*

**Ed Kolodziej, Katherine Peter, and Zhenyu Tian** (Center for Urban Waters), with co-authors: "Using high-resolution mass spectrometry to identify organic contaminants linked to urban stormwater mortality syndrome in coho salmon" in *Environmental Science and Technology*

**Sharon Laing** (Nursing and Healthcare Leadership), with co-authors: "Mobile health technology knowledge and practices among patients of safety-net health systems in Washington State and Washington, DC" in *Journal of Patient-Centered Research and Reviews*

**Wes Lloyd** (School of Engineering and Technology), with co-authors: "Container memory allocation discrepancies: An investigation on memory utilization gaps for container-based application deployments" in *2018 IEEE International Conference on Cloud Engineering*

with co-authors: "Serverless computing: An investigation of factors influencing microservice performance" in *2018 IEEE International Conference on Cloud Engineering*

**Belinda Louie** (Education), with co-authors: "Washington principals' perceptions of their professional development needs for the spike of English learners" in *Professional Development in Education*

**Bidisha Mallik** (SIAS/PPPA): "Sarala Behn: The silent crusader" and "Review of George A. James, Ecology is Permanent Economy: The Activism and Environmental Philosophy of Sunderlal Bahuguna" in *Deportate, esuli, profughe*

**Gillian Marshall** (Social Work and Criminal Justice), with co-authors: "Pain and hardship among older men: Examining the buffering effect of Medicare insurance coverage" in *American Journal of Men's Health*

**Emma Rose** (SIAS/CAC), with co-authors: "Usability testing with teens: Adapting human-centered design and UX methods" and "Social justice in UX: Centering marginalized users" in *Proceedings of the 36<sup>th</sup> ACM International Conference on the Design of Communication*

with **Alison Cardinal** (SIAS/CAC): "Participatory video methods in UX: Sharing power with users to gain insights into everyday life" in *Communication Design Quarterly*

**Claudia Sellmaier** (Social Work and Criminal Justice), with co-authors: "Longitudinal impact of a randomized clinical trial to improve family function, reduce maternal stress and improve child outcomes in families of children with ADHS" in *Maternal and Child Health Journal*

**Peter Selkin** (SIAS/SAM), with co-authors: "Evaluation of student learning, self-efficacy, and perception of the value of geologic monitoring from Living on the Edge, an InTeGrate curriculum module" in *Journal of Geoscience Education*

**Jie Sheng** (School of Engineering and Technology): "Teaching devices and controls for computer engineering and systems students using Arduino and MATLAB/Simulink" in *Proceedings of the IEEE Conference on Control and Automation*

**Dan Shugar** (SIAS/SAM), with co-authors: "Late Holocene activity of Sherman and Sheridan glaciers, Prince William Sound, Alaska" in *Quaternary Science Reviews*

with co-authors: "Late Quaternary landscape evolution in a region of stable postglacial relative sea levels, British Columbia central coast, Canada" in *Boreas*

with co-authors: "Submarine deposition of a subaerial landslide in Taan Fiord, Alaska" in *Journal of Geophysical Research: Earth Surface*

with co-authors: "The 2015 landslide and tsunami in Taan Fiord, Alaska" in *Scientific Reports*

**Huatong Sun** (SIAS/CAC), with co-authors: "Approaching engagement towards human-engaged computing" in *Proceedings of the ACM CHI Conference on Human Factors in Computing Systems*

**Matt Tolentino** (School of Engineering and Technology), with co-authors: "Tracking hazardous aerial plumes using IoT-enabled drones" and "Characterizing the impact of topology on IoT stream processing" in *Proceedings of the IEEE World Forum on Internet of Things*

with co-authors: "Evaluating the impact of pushing voice-driven interaction pipelines to the edge" in *Proceedings of the ACM International Conference on Computing Frontiers*

**Anne Taufen Wessells** (Urban Studies), with co-authors: "Unsettling planning theory" in *Planning Theory*

**Carolyn West** (SIAS/SBHS), with co-authors: "Institutional strategies to promote the health of Black women survivors of intimate partner violence" in *Meridians: Feminism, race, transnationalism*

**Ka Yee Yeung** (School of Engineering and Technology), with co-authors: "Identifying dynamical time series model parameters from equilibrium samples, with application to gene regulatory networks" in *Statistical Modelling*

with **Ling-Hong Hung** and **Wes Lloyd** (School of Engineering and Technology): "Hot-starting software containers for STAR aligner" in *Gigascience*

with **Ling-Hong Hung** (School of Engineering and Technology) and co-authors: "Integration of multiple data sources for gene network inference using genetic perturbation data" in *Proceedings of the 9<sup>th</sup> ACM Conference on Bioinformatics, Computational Biology and Health Informatics*

## Book Chapters

**Orlando Baiocchi** (School of Engineering and Technology), 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)

with co-authors: "Digital Signal Processing" in [Communications and Signal Processing Series](#) (Momentum Press)

**Yonn Dierwechter** (Urban Studies): "The smart state as utopian urban politics" in [The Routledge Handbook of Spaces of Urban Politics](#) (Routledge)

**Larry Knopp** (SIAS/SHS), with co-authors: "Queering urban politics and ecologies" in [The Routledge Handbook of Spaces of Urban Politics](#) (Routledge)

**Eric Madfis** (Social Work and Criminal Justice), with co-author: "Rampage school shootings" in [The Cambridge Handbook of Social Problems](#) (Cambridge University Press)

**Divya McMillan** (SIAS/CAC): "Global trends in media theory" in [20 Questions in Youth and Media](#) (Peter Lang)

**Ali Modarres** (Urban Studies): "Livability and the challenge of planning in Tehran" in [Livable Cities from a Global Perspective](#) (Taylor and Francis)

**Paulo Barreto** (School of Engineering and Technology), with co-authors: "Faster Isogeny-Based Compressed Key Agreement" in [Post-Quantum Cryptography](#) (Springer)

**Carolyn West** (SIAS/SBHS): "Mammy, Sapphire, Jezebel, and the Bad Girls of reality television: Media representations of Black women" in [Lectures on the psychology of women](#) (Waveland Press)

"Treatment Interventions for Intimate Partner Violence in the Lives of African American Women: A Social Justice Approach" in [Radical Psychology: Multicultural and Social Justice Decolonization Initiatives](#) (Lexington Books)

## Books and Edited Volumes

**Michael Berry** (SIAS/CAC): [Listening to Rap: An Introduction](#) (Routledge)

**Theda Braddock** (SIAS/Sciences and Mathematics): [Wetlands: An Introduction](#), 3<sup>rd</sup> ed. (Bernan Press)

**David Coon** (SIAS/CAC): [Turning the Page: Storytelling as Activism in Queer Film and Media](#) (Rutgers University Press)

**Yonn Dierwechter** (Urban Studies), with co-author: [Smart Transitions in City Regionalism: Territory, Politics and the Quest for Competitiveness and Sustainability](#) (Routledge)

**Rachel Endo** (School of Education): [The Incarceration of Japanese Americans in the 1940s: Literature for the High School Classroom](#) (National Council of Teachers of English)

**Tony Perone** (SIAS/SBHS), with co-editor: [Big Ideas and Revolutionary Activity: Selected Essays, Talks, and Articles by Lois Holzman](#) (Eastside Institute)

*\*Note: This list comprises all known peer-reviewed publications first published, including on-line, during the summer 2018 quarter (June 9–Sept 23, 2018), 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 awards\*!

### Highlighted Award:



**Ed Kolodziej** (PI), Center for Urban Waters

Diagnosing Urban Stream Syndrome: Identifying Novel Contaminants and Toxicants in Our Stormwater

*National Science Foundation (NSF)*

Congratulations to Ed Kolodziej for his successful proposal submitted to the NSF Environmental Engineering program. His project is one of the 5-7% of several hundreds of proposals to be funded through this very selective program. Ed and his colleagues at the [Center for Urban Waters](#) will focus on identifying toxic chemicals in urban stormwater, with a particular focus on understanding the link between stormwater pollution and acute mortality in adult coho salmon in the Pacific Northwest. By identifying harmful pollutants in stormwater, the project will inform management of urban water quality through chemical source control and optimization of treatment technologies, thus protecting the economically and culturally important coho salmon and ecosystem health. Ed will lead a team of citizen scientists in monitoring watersheds for salmon mortality so that researchers are able to collect water and tissue samples during acute mortality events. In addition to local citizen scientists, this work will be conducted in collaboration with: Washington State University-Puyallup's Stormwater Center; Puget Sound Institute; local, regional, state, and tribal communities; and regional and federal agencies, including NOAA-National Marine Fisheries Service. Support from the NSF for this project indicates Center for Urban Water's substantial capability for cutting edge research and community engagement around issues of stormwater quality and environmental health!

### Other Recent Awards:



**Kathleen Beaudoin** and **Laura Feuerborn**, School of Education

Improving Safety Conditions for All Special Education Personnel through Collaborative Safety Protocol Training

*Washington State Department of Labor and Industries*



**Wei Cheng**, School of Engineering and Technology

Acquisition, Collection and Computation of Dynamic Big Sensory Data in Smart Cities

*National Science Foundation*



**Joyce Dinglasan-Panlilio**, SIAS/Sciences and Mathematics

Sampling Conducted by Utilities for Per- and Poly-Fluoroalkyl Substances in Drinking Water Sources in Washington State Starting in 2018

*Washington State Department of Health*



**Andy James**, Center for Urban Waters

Evaluating Chemical Tracers of Boat Waste Discharges to Puget Sound

*Washington State Parks and Recreation Commission*

**Jarek Sierschynski**, School of Education (co-Investigator; Lead PI: Scott Spaulding, UW College of Education)

Development of a Web-based Integrated Behavior Support and Teacher Coaching System for Early Childhood Settings (ibestt-EC)

*Institute of Education Sciences*

*\*Note: This list comprises all new sponsored research awards funded in summer 2018 quarter (June 9-Sept 23, 2018) and for which a UW Tacoma organization is specified as lead, as reported by the UW Business Intelligence portal.*

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

## UW Tacoma Publicly Engaged “Alternate RRF” Pilot Fund Awardees

In spring 2018, the Office of Research announced an internal “alternate RRF” pilot program – funded by the Vice Chancellor of Academic Affairs – in which faculty who submitted unfunded proposals to the [UW Royalty Research Fund](#) (RRF) in the 2017-18 (September and March) cycles were eligible to apply for awards of up to \$10,000 through a competitive process. The intention of this fund is to invest in the promising and high-quality work of UW Tacoma Principal Investigators that were nonetheless not funded through the RRF. See the full solicitation [here](#) for details on this internal fund.

The Office of Research is proud to be supporting five excellent proposals through this pilot program:



**Laura Feuerborn and Kathy Beaudoin**, School of Education  
Student perceptions of behavior and discipline in middle and high schools



**Michael Kula**, SIAS/Culture, Arts, and Communication  
The letters and travels of Kazimierz Nowak: The trans-Africa bicycle expedition of a Polish journalist during the interwar period



**Michelle Montgomery**, SIAS/Social and Historical Studies  
Reclaiming and Empowering the Indigenous Narrative



**Marc Nahmani**, SIAS/Sciences and Mathematics  
Uncovering thalamocortical axonal structure and function relationships for targeted stroke interventions



**Barb Toews**, Social Work and Criminal Justice  
Understanding correctional staff perceptions of the work environment: A case study at a correctional center for women

If the pilot program is successful and funds continue to be available, the Office of Research will provide this opportunity in July 2019 to UW Tacoma faculty who submitted an unfunded RRF proposal in September 2018 and/or March 2019.

Please contact [Kara Luckey](#) to learn more, or if you would like to discuss the possibility of submitting a RRF proposal in an upcoming round.

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## Upcoming Funding Opportunities

### UW Global Innovation Fund – due November 1, 2018

This program provides funding to support initiatives and programs that enhance the UW’s global engagement and reach. Awards of up to \$20,000 are provided, although most are much smaller. At least 25% of total program costs must be matched by departments. More details available [here](#).

### UW Provost Bridge Funding Program – due November 1, 2018

This program provides support to UW faculty in order to temporarily fill funding gaps for critical research programs. It is not intended to initiate new research projects. A maximum of \$50,000 may be requested, with a requirement for total funds to be matched 1:1 by the applicant’s college/school. More details available [here](#).

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## Upcoming Office of Research events and workshops

Our **Fall 2018 Faculty Development Events series** is full of opportunities to learn new and refresh existing skills, discuss emerging practices in research and pedagogy, increase competitiveness in grant-seeking, and connect with colleagues. We hope to see you there!

The below highlighted workshops will be held in **TLB 307b (Atrium)**.

### Introduction to R and R Studio

**Thurs, Oct 11<sup>th</sup>**

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

Join us for an introduction to the basics of the open source statistical software, R, and the user-friendly R Studio interface led by an expert from the UW Center for Social Science Computation & Research

### Grants Resource Center (GRC) at UW Tacoma

**Thurs, Oct 18<sup>th</sup>**

9-3:30pm

**Fri, Oct 19<sup>th</sup>**

by appointment

Join GRC staff for a day-long workshop on federal funding opportunities, with a particular focus on support for research PUIs, as well as best practices in proposal development.

### Race, Racism, and Anti-Racist Methodologies

**Thurs, Nov 8<sup>th</sup>**

12:30-1:30pm

Join Drs. James McShay (AC of Equity and Inclusion) and Turan Kayaoglu (AVC of Research) as they lead a faculty roundtable on racism in the academy, and anti-racist methodologies

We hope you will join us to connect with colleagues and learn about their impressive scholarly contributions at two lightning talks:

### Faculty Research Lightning Round

**Thurs, Nov 1<sup>st</sup>**

12:30-1:30pm

### Global Lightning Round

**Thurs, Nov 15<sup>th</sup>**

3-4pm

For the complete schedule of faculty development events, please see [our website](#).

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## Introducing the UW Tacoma Statistical Consulting Group

One of several actions to result from the April 2018 “Quantitative Needs Listening Session” co-hosted by the UW Tacoma Office of Research and Teaching and Learning Center (TLC) is the **UW Tacoma Statistical Consulting Group**, a pilot program set to begin this fall quarter. This volunteer-based group of UW Tacoma faculty and staff with expertise in statistics and statistical software will be available on a pilot basis to serve as statistical consultants to faculty (and in some cases, staff) in need of support with research design, analysis, data interpretation, and data visualization. The Office of Research and TLC will facilitate this service through an on-line submission process.

More details can be found on the Office of Research website, [here](#). Requests for support must be submitted through the program’s on-line [Problem Submission Form](#). Questions about the UW Tacoma Statistical Consultants Group may also be submitted through the form.

This Tacoma campus-based pilot program complements a host of resources that remain available to UW Tacoma faculty on the Seattle campus, as outlined [here](#).

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## Recent updates from the UW Seattle Office of Research

### Required activities related to foreign influence on federally-sponsored research:

Both the National Institutes of Health and National Science Foundation have recently provided updated guidance on activities to ensure national security. UW researchers supported by federal funding are reminded to thoroughly document other research support and to keep biosketches current and accurate. Progress reports should indicate any change in support since the proposal submission. There are also several changes to the UW’s requirements related to intellectual property.

More details can be found at the UW Seattle Office of Research, [here](#). Questions should be directed to the UW Office of Research at [research@uw.edu](mailto:research@uw.edu).

## Coming soon: Changes to the Human Subjects Division (HSD) Common Rule

UW researchers should be aware that a revised Common Rule – the informal name for the regulations that govern the responsibilities and requirements of Institutional Review Boards (IRBs) and researchers– will be implemented by the UW HSD on January 21, 2019. A number of changes are being rolled out incrementally as HSD prepares for this change.

If you plan to submit an application to the IRB this fall quarter, please be sure to review these changes on the HSD website, [here](#).

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## New Resources

### National Center for Faculty Development and Diversity (NCFDD) resources\*

#### Faculty Success (“Bootcamp”) Program:

Registration is now open for the NCFDD’s highly regarded [Faculty Success Program](#) (FSP). This 12-week (Jan-April) program is open to all UW Tacoma faculty, although priority is given to assistant and associate faculty using FSP to support tenure and promotion. 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 [Norma Rodriguez](#), Director of the Office of Faculty Advancement.

#### Upcoming webinars:

Several upcoming NCFDD webinars may be of interest to UW Tacoma faculty:

- [Writing for a broader audience: How to convey complex ideas with clear, accessible prose](#) – Wed, Oct 24<sup>th</sup> (9:00am PST)
- [Networking for introverts \(and extroverts, too!\): How to make the most of your next conference](#) – Mon, Nov 5<sup>th</sup> (11:00am PST)
- And many more [archived](#) and [upcoming](#) webinars

\*Instructions for how to access NCFDD resources through UW’s institutional membership, see [our website](#).

### UW Center for Social Science Computation and Research (CSSCR) courses

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

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## 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.