UNI Impact:
Faculty/Staff Scholarly Publications & Featured Awards Newsletter

From Rod Library, Research & Sponsored Programs, and UNI Foundation
Volume 1, Issue 2 (2022)

• Welcome
• Open Access
• Publications
• Featured Awards
• Editors

WELCOME

Welcome to the second issue of the UNI Impact: Faculty/Staff Scholarly Publications & Featured Awards Newsletter! The newsletter aims to highlight the wide range of scholarship, research, and other scholarly work produced by UNI faculty, students, and staff. The newsletter is a joint effort of the Rod Library, Research & Sponsored Programs, and UNI Foundation. The UNI Foundation recently joined this collaborative project with the second newsletter issue. The newsletter is focused on sharing current published scholarly works and recently funded external sponsored awards. In the future we hope to broaden the scope to better capture the variety of endeavors that take place at UNI. Our intent is to promote and support current scholarly efforts and facilitate collaboration across campus.

The newsletter is distributed quarterly. This issue covers the period of January - March 2022. For more information about UNI faculty/staff publications see the UNI Faculty Publications collection in UNI ScholarWorks, UNI’s institutional repository.
We encourage feedback and suggestions on how to communicate best and continue to support you.

OPEN ACCESS

An unlocked symbol appears beside all available Open Access (OA) works. Peter Suber defines open access as work that “is digital, online, free of charge, and free of most copyright and licensing restrictions.” We call attention to OA work because it enables wider reach and potential impact. For the work to be designated below as available OA, the work must be either published in an OA journal; shared via a disciplinary OA repository; or deposited in UNI ScholarWorks. If you have questions about how to openly share your work, please contact us at the following email address: scholarworks@uni.edu.

PUBLICATIONS

The following faculty and staff published works covering the period of January - March 2022. The entries below are ordered according to the Scopus database publication date beginning with the most recently published. Congratulations to you all.

If we missed your publication/work, please submit your information through the feedback form. We will make sure the publication is listed in a future newsletter issue.

**Schneider, Wei Shuang** and **Hooper, Lisa M.** (Center for Educational Transformation) “Mental and Physical Health Profile of Syrian Resettled Refugees” in *Primary Health Care Research & Development* (2022-03-28) DOI: [https://doi.org/10.1017/S146342362200007X](https://doi.org/10.1017/S146342362200007X) and UNI ScholarWorks (Creative Commons License) Link: [https://scholarworks.uni.edu/facpub/5227/](https://scholarworks.uni.edu/facpub/5227/)

**McNamara, Scott** (Department of Kinesiology) "Adapted Physical Educators' Social Media Usage for Professional Learning" in *Frontiers in Education* (2022-03-22) DOI: [https://doi.org/10.3389/feduc.2022.849919](https://doi.org/10.3389/feduc.2022.849919) and UNI ScholarWorks (Creative Commons License) Link: [https://scholarworks.uni.edu/facpub/5228/](https://scholarworks.uni.edu/facpub/5228/)
Moriarty, Terence (Department of Kinesiology); Johnson Andrea (School of Music); Thomas, Molly; Evers, Colin; Auten, Abi; Cavey, Kristina; Dorman, Kate; and Bourbeau, Kelsey (Department of Kinesiology) "Acute Aerobic Exercise-Induced Motor Priming Improves Piano Performance and Alters Motor Cortex Activation" in Frontiers in Psychology (2022-03-18) DOI: https://doi.org/10.3389/fpsyg.2022.825322


Ellison, Scott (Department of Educational Psychology, Foundations & Leadership Studies) “Assessing Systemic Inequity: Teacher Perspectives, Solutions, and “Radical Possibilities” in Urban Review (2022-03-01) DOI: https://doi.org/10.1007/s11256-021-00606-1

Etscheidt, Susan Larson (Department of Special Education) and Schmitz, Stephanie L. (Department of Educational Psychology, Foundations & Leadership Studies) “Legal Issues in Early Childhood Special Education” in Journal of Disability Policy Studies (2022-03-01) DOI: https://doi.org/10.1177/10442073211023165

Gurjar, Nandita (Department of Curriculum & Instruction) “Connecting Elementary Students Through Grid Pals to Develop Literacy Skills” in Reading Teacher (2022-03-01) DOI: https://doi.org/10.1002/trtr.2083

Joram, Elana and Gabriele, Anthony J. (Department of Educational Psychology, Foundations, & Leadership Studies) "Shifting Preservice Teachers' Sources of Mathematics Teaching Efficacy Through Scaffolded Reflection: Fostering Commitment to Reform-Based Mathematics in Global Perspectives and Practices for Reformed-Based Mathematics Teaching (2022-03-01) DOI: https://doi.org/10.4018/978-1-7998-9422-3.ch006 & UNI ScholarWorks (Accepted Author Manuscript) LINK: https://scholarworks.uni.edu/facpub/5252/

Kidd, Timothy E.; Shand, Paul M.; Stollenwerk, Andrew; Gorgen, Colin; Moua, Young; Stuelke, Lukas; and Lukashev, Pavel V. (Department of Physics) "Large-Field Magnetoresistance of Nanometer Scale Nickel Films Grown on Molybdenum Disulfide" in AIP Advances (2022-03-01) DOI: https://doi.org/10.1063/9.0000291 and UNI ScholarWorks (Creative Commons License) Link: https://scholarworks.uni.edu/facpub/5230/
Petrov, Andrey N. (Department of Geography) “Fires on Ice: Emerging Permafrost Peatlands Fire Regimes in Russia’s Subarctic Taiga” in Land (2022-03-01) DOI: https://doi.org/10.3390/land11030322 and UNI ScholarWorks (Creative Commons License) Link: https://scholarworks.uni.edu/facpub/5233/


Ramker, Adam; Moua, Young; Shand, Paul M.; and Lukashev, Pavel V. (Department of Physics) “Electronic Band Structure and Magnetism of CoFeV_{0.5}Mn_{0.5}Si” in AIP Advances (2022-03-01) DOI: https://doi.org/10.1063/9.0000252 and UNI ScholarWorks (Creative Commons License) Link: https://scholarworks.uni.edu/facpub/5231/

Rosburg, Alicia (Department of Economics) “Information Inputs and Technical Efficiency in Midwest Corn Production: Evidence from Farmers’ Use of Yield and Soil Maps” in American Journal of Agricultural Economics (2022-03-01) DOI: https://doi.org/10.1111/ajae.12251


Berendzen, Peter B.; Holmes, Sam R.; and Abels, Jeremy R. (Department of Biology) “Morphological Diversity within the Ozark Minnow (Notropis nubilus: Leuciscidae)” in Journal of Fish Biology (2022-02-01) DOI: https://doi.org/10.1111/jfb.14951
Burnight, John; Cowley, Danielle; Wilson Hawbaker, Becky; Mattingly, James; Pease, Patrick; Petersen, Amy J.; and Vallentine, John (University of Northern Iowa) “From Shared Governance to shared Leadership: Our COVID Response to Faculty Evaluation, Support, and Advancement” in Teacher-Scholar: The Journal of the State Comprehensive University (2022-01-01) DOI: https://scholars.fhsu.edu/ts/vol11/iss1/1/

Del Carlo, Dawn I. and Wayson, Jessica (Department of Chemistry & Biochemistry) “Secondary Science Teachers’ Definition and Use of Data in Their Teaching Practice” in Research in Science Education (2022-02-01) DOI: https://doi.org/10.1007/s11165-020-09936-8

Flugum, Ryan (Department of Finance) “Do Changes in MD&A Section Tone Predict Investment Behavior?” in Financial Review (2022-02-01) DOI: https://doi.org/10.1111/fire.12280

Haghanikar, Taraneh Matloob (Department of Curriculum & Instruction) and Hooper, Lisa M. (Center for Educational Transformation) “Exploring Pre-Service Teachers’ Perspectives: Gender and Gender Representation across Human Protagonists in Picture Books” in International Journal of Educational Methodology (2022-02-01) DOI: https://doi.org/10.12973/IJEM.8.1.91 and UNI ScholarWorks (Creative Commons License) Link: https://scholarworks.uni.edu/facpub/5235/


Gurjar, Nandita (Department of Curriculum & Instruction) "Predicting and Explaining Pre-Service Teachers’ Social Networking Technology Adoption" in Italian Journal of Educational Technology (2022-01-26) DOI: 4/1245 and UNI ScholarWorks (Creative Commons License) Link: https://scholarworks.uni.edu/facpub/5211/

Larsen, Thomas Barclay (Department of Geography) “Conveying the Applications and Relevance of the Powerful Geography Approach through Humanitarian Mapping” in Geography Teacher (2022-01-01) DOI: https://doi.org/10.1080/19338341.2021.2008470


Petrov, Andrey N. (Department of Geography) “Shaping Arctic’s Tomorrow through Indigenous Knowledge Engagement and Knowledge Co-Production” in Sustainability (Switzerland) (2022-02-01) DOI: https://doi.org/10.3390/su14031331 and UNI ScholarWorks (Creative Commons License) Link: https://scholarworks.uni.edu/facpub/5214/

Pitts, Laura L. (Department of Communication Sciences & Disorders); Cox, Angie (Rod Library); Morales, Sarah; and Tiffany, Hannah “A Systematic Review and Meta-analysis of Iowa Oral Performance Instrument Measures in Persons with Parkinson’s Disease Compared to Healthy Adults” in Dysphagia (2022-02-01) DOI: https://doi.org/10.1007/s00455-021-10254-y


Ai, Jun (Department of Curriculum & Instruction) “Stepping-Up Technology Implementation—How Does it Happen?” in Journal of Special Education Technology (2022-01-01) DOI: https://doi.org/10.1177/01626434221074357

Behroozi, F. (Department of Physics) “The Edge Profile of Liquid Spills” in American Journal of Physics (2022-01-01) DOI: https://doi.org/10.1119/5.0058674

**Chu, Yu (Jade)** (Department of Management) "Supply Chain Transparency: Consumer Reactions to Incongruent Signals" in *Journal of Operations Management* (2022-01-01) DOI: [https://doi.org/10.1002/joom.1180](https://doi.org/10.1002/joom.1180) and UNI ScholarWorks (Creative Commons License) Link: [https://scholarworks.uni.edu/facpub/5262/](https://scholarworks.uni.edu/facpub/5262/)


**Conner, Kimberly A.** (Department of Mathematics) “Explaining Differences in One Teacher’s Instruction across Multiple Tracked Fifth-Grade Classes” in *School Science and Mathematics* (2022-01-01) DOI: [https://doi.org/10.1111/ssm.12504](https://doi.org/10.1111/ssm.12504) and UNI ScholarWorks (Creative Commons License) Link: [https://scholarworks.uni.edu/facpub/5197/](https://scholarworks.uni.edu/facpub/5197/)

**Cox, Angie** and **Vos, Jaycie** (Rod Library) “Virtual Staff Teas: Connecting and Growing” in *College and Research Libraries News* (2022-01-01) DOI: [https://doi.org/10.5860/CRLN.83.1.13](https://doi.org/10.5860/CRLN.83.1.13)

**Donegan-Ritter, Mary; Zan, Betty; and Pattee, Allison** (Department of Curriculum & Instruction) “Reflections on Project Work in Early Childhood Teacher Education” in *Early Childhood Education Journal* (2022-01-01) DOI: [https://doi.org/10.1007/s10643-022-01307-4](https://doi.org/10.1007/s10643-022-01307-4)

**Fontana, Fabio Eduardo** (Department of Kinesiology) “Time Spent in Different Sedentary Activity Domains across Adolescence: A Follow-Up Study” in *Jornal de Pediatria* (2022-01-01) DOI: [https://doi.org/10.1016/j.jped.2021.03.007](https://doi.org/10.1016/j.jped.2021.03.007)


**Hsieh, Wu Ying** (Department of Special Education) “Play-Based Parent Training Programme Supporting Hong Kong Kindergarten Children in Social Competence Development” in *British Journal of Guidance and Counselling* (2022-01-01) DOI: [https://doi.org/10.1080/03069885.2022.2030464](https://doi.org/10.1080/03069885.2022.2030464)
Jaisinghani, Dheryta (Department of Computer Science) “ML-Based Device-Agnostic Human Activity Detection with WiFi Sniffer Traffic” in 2022 14th International Conference on COMmunication Systems and NETWORKs, COMSNETS 2022 (2022-01-01) DOI: https://doi.org/10.1109/COMSNETS53615.2022.9668420


Kotsonis, Amy (School of Music) “Effects of Straw Phonation on Choral Acoustic and Perceptual Measures after an Acclimation Period” in International Journal of Music Education (2022-01-01) DOI: https://doi.org/10.1177/02557614211073145


McNeal, Ramona S. (Department of Political Science) "Victimization: Sexual Minorities" in Research Anthology on Inclusivity and Equity for the LGBTQ+ Community (2022-01-01) DOI: https://doi.org/10.4018/978-1-6684-3674-5.ch008


Muhayimana, Théophile (Department of Educational Psychology, Foundation, & Leadership Studies) “Using Bloom’s Taxonomy to Evaluate the Cognitive Levels of Primary Leaving English Exam Questions in Rwandan Schools” in Curriculum Perspectives (2022-01-01) DOI: https://doi.org/10.1007/s41297-021-00156-2

Nielsen, Curtis P. (Department of Teaching) “Teacher to Teacher: Building Collective Instructional Efficacy in Kappa Delta Pi Record (2022-01-01) DOI: https://doi.org/10.1080/00228958.2022.2005434


Stalp, Marybeth C. (Department of Sociology, Anthropology, & Criminology) “Raging Against the “Neoliberal Hellscape”: Anger, Pride, and Ambivalence in Civil Society Responses to the COVID-19 Pandemic in the USA” in Antipode (2022-01-01) DOI: https://doi.org/10.1111/anti.12813


Wen, Ai; Elgersma, Kenneth J.; Jackson, Laura L.; Meissen, Justin and Myers, Mark C. (Department of Biology) “Wild Bee Visitors and their Association with Sown and Unsown Floral Resources in Reconstructed Pollinator Habitats within an Agriculture Landscape” in Insect Conservation and Diversity (2022-01-01) DOI: https://doi.org/10.1111/icad.12539 & UNI ScholarWorks (Dataset) LINK: https://scholarworks.uni.edu/datasets/2/

Wilcox, Jesse (Department of Biology) "Investigating Elementary Teachers' Views, Implementation, and Longitudinal Enactment of Nature of Science Instruction" in Science & Education (2022-01-01) DOI: https://doi.org/10.1007/s11191-022-00343-1
Zan, Betty (Department of Curriculum & Instruction) “Head Start Teachers Act Their Way into New Ways of Thinking: Science and Engineering Practices in Preschool Classrooms” in *Science Education* (2022-01-01) DOI: [https://doi.org/10.1002/sce.21714](https://doi.org/10.1002/sce.21714)


Zumbach Harken, Nichole (Department of Communication & Media) and Price-Williams, Shelley (Department of Educational Psychology, Foundations, & Leadership Studies) “Historical and Legal Considerations in Development of a For-Credit Internship Program” in *Journal of Experiential Education* (2022-01-01) DOI: [https://doi.org/10.1177/10538259221081669](https://doi.org/10.1177/10538259221081669)

**Missed Earlier Publications**


FEATURED AWARDS

The following faculty and staff were recipients of externally funded awards and contracts during the period of January – March 2022, congratulations!

If we missed your award, please submit your information through the feedback form. We will make sure the award is listed in a future newsletter issue.

Principal Investigator: Francesca Soans
Sponsor: Iowa Department of Cultural Affairs
Title: Speaking Out: Stories of KBBG Radio
Award Funding: $15,233
The funding will be used for the production phase of a 60-minute documentary and podcast on KBBG Radio, the largest African American-owned radio station in Iowa. This grant is a subaward under the Provisional State Partnership Agreement SP-279590-21 issued by the National Endowment for the Humanities to the Iowa Department of Cultural Affairs on November 18, 2020 in the amount of $802,600 for promotion of the humanities.

Principal Investigator: Marcy Seavey
Sponsor: Rochester Institute of Technology (RIT) on behalf of the Army Educational Outreach Program (AEOP)
Title: AEOP High School Apprenticeships – Site Agreement FY22
Award Funding: $15,000
The funding will be used to provide an AEOP High School STEM Apprenticeship program for under-served students in Black Hawk County, Iowa. Apprentices will be placed in a STEM lab at UNI with a faculty mentor and all apprentices will participate in an 8-week long each summer undergraduate research program.

Principal Investigator: James O'Loughlin
Sponsor: Humanities Iowa
Title: The Blues of Eddie Bowles
Award Funding: $6,850
The funding from Humanities Iowa will be used to support a museum exhibit, a “Best of Eddie Bowles” album release, an augmented reality historical tour of Eddie Bowles’s Cedar Falls, and a Midwinter Blues Getaway weekend, which will explore the work and life of Cedar Falls-based blues guitarist, Eddie Bowles (1885-1985).
Principal Investigator: Francesca Soans  
**Sponsor:** Humanities Iowa  
**Title:** The North End  
**Award Funding:** $10,000  
The funding from Humanities Iowa will be used to support the development of a 60-minute documentary about the lost places of a predominantly African American neighborhood in Waterloo, Iowa. The finished documentary will be available for community screenings and discussions on diversity and for educational distribution to public libraries, schools, and higher education institutions.

Principal Investigator: Lyn Countryman  
**Sponsor:** New America  
**Title:** Grow Your Own (GYO) Teacher Pipeline Needs Assessment  
**Award Funding:** $65,000  
The proposed project will be used to better understand how to support and align K–12 and higher education for grow your own (GYO) programs across the state of Iowa.

Funding from this grant will be used for a comprehensive needs assessment aimed at understanding the current landscape of the immediate workforce needs in key rural K–12 school district partners (Charles City; Storm Lake; Marshalltown/South Tama) as well as the actual need for special education educators and TESOL educators at the Des Moines Public Schools.

Principal Investigator: Karla Organist  
**Sponsor:** Kansas Department of Commerce  
**Title:** Rural Kansas Economic Development Training Series  
**Award Funding:** $7,171  
The funding will be used to develop and implement an online economic development training series for board and staff of rural economic development organizations, cities and counties in Kansas.
**Principal Investigator:** Alan Heisterkamp  
**Co-Principal Investigator:** Michael Fleming  
**Sponsor:** Governor’s Office of Drug Control Policy  
**Title:** *Waterloo Youth Empowerment Project Award*  
**Funding:** $70,736  
The funding will support the Center for Violence Prevention’s Community in Motion partnership with the Waterloo Youth Empowerment Project/Hail Mary Project (HMP), in an effort to prevent incidents of community violence and crime by male adolescents by utilizing sports as a platform and building upon evidence-based strategies of mentorship and the Coaching Boys into Men program. The project was fully funded from the State of Iowa ODCP and the U.S. Department of Justice.

---

**Principal Investigator:** Marcy Seavey  
**Sponsor:** Iowa Department of Natural Resources  
**Title:** *Updating Iowa Groundwater Act Guidance for Middle Schools - Planning Grant*  
**Award Funding:** $3,500  
The project will support virtual and in-person training meetings to update Iowa’s implementation of the Iowa Groundwater Act, requiring water education in 7th and 8th grade classes, to identify and address missing water quality education opportunities. Funded by the Resource Enhancement and Protection Conservation Education Program (REAP CEP). Resource Enhancement and Protection Program (REAP): Invest in Iowa, our outdoors, our heritage, our people. REAP is supported by the state of Iowa, providing funding to public and private partners for natural and cultural resources projects, including water quality, wildlife habitat, soil conservation, parks, trails, historic preservation and more.

---

**Principal Investigator:** Lawrence Escalada  
**Sponsor:** National Science Foundation  
**Title:** *Collaborative Research: Building Capacity for Cross-site Research on Promoting Noticing for Equity and Equitable Science Teaching Practice through Video Analysis*  
**Award Funding:** $14,249  
The funding will be used for capacity building in order to support a team of science teacher educators from seven partnering universities to pursue a Noyce Track 4 Research grant that would investigate the use of video analysis tasks in teacher preparation to develop equitable and effective science teaching practice through a cross-site, longitudinal study. This Capacity Building project is supported through the Robert Noyce Teacher Scholarship Program (Noyce).
Principal Investigator: Dana Atwood-Blaine
Co-Principal Investigator: Dawn Del Carlo
Co-Principal Investigator: Robin Dada
Sponsor: National Science Foundation
Title: Building Capacity to Develop Elementary STEM Teacher Leaders in Iowa
Award Funding: $66,682
The funding will be used to develop a project that aims to serve the national need of building capacity to develop an Elementary Master STEM Teacher Leader program in Iowa. The project will lead to the future submission of an Elementary Master STEM Teacher Leader Noyce grant proposal. This Capacity Building project is supported through the Robert Noyce Teacher Scholarship Program (Noyce).

Principal Investigator: Martin Chin
Sponsor: Roy J. Carver Charitable Trust
Title: Updating and Improving the Organic Chemistry Laboratory Course at UNI
Award Funding: $150,000
The Chemistry and Biochemistry department will replace equipment and instruments (gas-chromatographs, infrared spectrometer, microwave synthesizers) used in Organic Chemistry Laboratory (CHEM 2230) to support the updating of the techniques, data acquisition and analysis taught in the course to better align with what is currently practiced in modern industrial and academic laboratories.

2022 UNI Capacity Grant Awards
The Capacity Building program is an internal funding competition which awards seed grants to faculty and staff for research, creative activities, and other projects that need early phase support to become competitive for external funding. The purpose of the program is to enhance the ability of faculty and staff to successfully compete for external funding, as well as building UNI's capacity for scholarship, research, and creative activities.

Principal Investigator: Erika Bass
Department: Languages & Literatures,
Title: Reading and Writing Place: Connecting Schools and Communities
Award Funding: $9,973
Principal Investigator: Michael Fleming
Co-Principal Investigator: H. Alan Heisterkamp
Co-Principal Investigator: Nicole Skaar
Department: Applied Human Sciences Center for Violence Prevention/Educational Psychology, Foundations, & Leadership Studies
Title: Creating an Ecological Approach to Emotional, Physical and Psychological Safety in Schools: Developing Methods for Collaborative Engagement
Award Funding: $10,000

Principal Investigator: HyunSeung Koh
Department: Library
Title: Library Chat Transcripts and Topic Modeling Techniques
Award Funding: $9,993

Principal Investigator: Rebecca Dickinson
Co-Principal Investigator: Kristin Meany-Walen
Department: Social Work / Applied Human Sciences
Title: Impact of Adlerian Play Therapy on Reading Scores of First through Third Graders: A Pilot RCT
Award Funding: $6,345

Principal Investigator: Nilda Rodriguez
Department: Biology
Title: Infection and lipid accumulation in immune cells of male versus female origin
Award Funding: $9,404

Principal Investigator: Thomas Connors
Co-Principal Investigator: John DeGroote
Department: History / GeoTREE Center
Title: Underground Iowans: A Biographical Guide to Iowa’s Cemeteries
Award Funding: $9,998.
Principal Investigator: Lori Norton-Meier  
Co-Principal Investigator: Sarah Vander Zanden  
Co-Principal Investigator: Heather Gallivan,  
Co-Principal Investigator: Thaddeus Atzmon  
Co-Principal Investigator: Marissa Schweinfurth

Department: Jacobson Center for Comprehensive Literary (JCCL) / Curriculum & Instruction / Mathematics  
Title: Building and Assessing an Empirically Based Racial Literacy Curriculum with a Focus on Math and Science Education for Pre-Service K-6 Teachers Who Intend to Teach in Communities of Color  
Award Funding: $10,000

Principal Investigator: Laura Edwards  
Department: Curriculum & Instruction  
Title: Young Women’s Situated Identities and Opportunities in Coastal Colombia: Inequalities and Obstacles  
Award Funding: $9,975
Editors

- Maggie Heretakis, Preaward Specialist, Research & Sponsored Programs, University of Northern Iowa
- Ellen Neuhaus, Digital Scholarship Librarian, Rod Library, University of Northern Iowa

*Special thanks to Melinda Beland, Library Clerk IV, Public Relations, Rod Library, University of Northern Iowa, for her help with creating graphics and formatting the newsletter.

The **UNI Impact: Faculty/Staff Scholarly Publications and Featured Awards Newsletter** is archived in UNI ScholarWorks.

Copyright Information

©2022 Rod Library, Research & Sponsored Programs, and UNI Foundation. University of Northern Iowa.

Creative Commons Attribution-NonCommercial 4.0 International License