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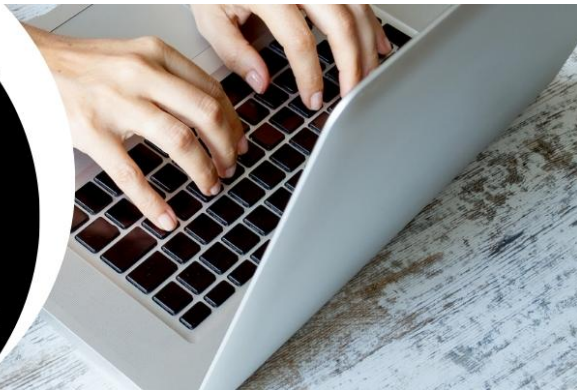


Celebrating Recent Research Achievements September 2021 to November 2021 Issue

Winter break is almost here. What better time to curl up with a new article or book from one of our UCCS researchers?

Below, find a list of the recent achievements in scholarship and sponsored programs. Browse the titles, note the DOI, read an abstract or two, and make a connection to someone's work on campus. Above all, bask in the reflected glory of all the extraordinary achievements on our campus.

Submit your Research Products for this Newsletter



New This Spring

As we move into a new year, the Office of Research and the Kraemer Family Library will be changing how publications and creative works are gathered for this newsletter! If you have a recently published article, book, film, exhibit, album or other research deliverables, we want to know about it! Submit your work through our new self-report portal. You can submit at any time as you get a new research product to share. You can find a link to the form on the Office of Research Website.

Self-Submit Your Research & Creative Work

Recently Funded Awards



September 2021

Magdalene Lim - Aging Families and Caregiver Program. *Pikes Peak Area Council of Governments Award*

Gedare Bloom, Philip Brown, Shouhuai Xu - University of Colorado Colorado Springs CAE Grant. *National Security Agency Grant Award*

Gretchen Bliss - 2021 GenCyber Advanced Teacher C&P; 2021 GenCyber Beginner Teacher Camp. *National Security Agency Grant Award*

Sang-Yoon Chang - Trust Network Model for 6G Networking Security. *Electronics and Telecommunications Research Institute (ETRI)*

October 2021

Stephanie Gangemi - Colorado Child Welfare Scholars Consortium (CCWSC). *Metropolitan State University of Denver Award*

Gregory Plett, Scott Trimboli - Capitalizing on Lithium Metal Batteries (CLiMB). *Cummins Award*

Roger Martinez - Immersive Global Middle Ages Institute for Advanced Topics. *Vanderbilt University Subaward - NEH*

Jessi Smith - Broadening Participation and the Culture of Undergraduate Research Experiences. *San Diego State University Foundation Subaward*

November 2021

Gedare Bloom, Shouhuai Xu, Jugal Kalita - UCCS Sub-Proposal to Rebellion STTR Proposal. *Rebellion Defense Subcontract Award*

Caitlin Lowans - Theatreworks Lecture Series. *Humanities through the American Rescue Plan (COSHARP)*

Hot Off the 2021 Press

Curl up with a good book from one of our outstanding UCCS authors (listed in bold in alphabetical order). Click here to read Past Author Spotlights



Harris, Spencer, and Matthew Dowling. *Sport Participation and Olympic Legacies: A Comparative Study*. Routledge, 2021.

Recent Publications

Starting in Spring 2022, all submission will be gathered using the self-submission portal.

Faculty, Staff, and Research Associate names in **bold**. Names in **blue** are students.

In alphabetical order by first UCCS faculty author.

A

Abrams, Gene, Mikhailo Dokuchaev, and T. G. Nam. "Realizing corners of Leavitt path algebras as Steinberg algebras, with corresponding connections to graph C^* -algebras." *Journal of Algebra* (2021). <https://doi.org/10.1016/j.jalgebra.2021.11.004>

Ahmad, Touqeer, Ebrahim Emami, Martin Čadík, and George Bebis. "Resource Efficient Mountainous Skyline Extraction using Shallow Learning." In *2021 International Joint Conference on Neural Networks (IJCNN)*, pp. 1-9. IEEE, 2021. <https://doi.org/10.1109/IJCNN52387.2021.9533859>

Amicucci, Ann N. "Four Things Social Media Can Teach You about College Writing—and One Thing It Can't." In *Writing Spaces: Readings on Writing*, vol. 4., edited by Dana Driscoll, Megan Heise, Mary Stewart, and Matthew Vetter, 18-34. WAC Clearinghouse, 2021. <https://wac.colostate.edu/docs/books/writingspaces4/amicucci.pdf>

Anderson, Nicholas R., Jonathon Davidson, Dana R. Louie, David Serantes, and **Karen L. Livesey**. "Simulating the Self-Assembly and Hysteresis Loops of Ferromagnetic Nanoparticles with Sticking of Ligands." *Nanomaterials* 11, no. 11 (2021): 2870. <https://doi.org/10.3390/nano11112870>

Li, Beibin, Nicholas Nuechterlein, Erin Barney, Claire Foster, Minah Kim, Monique Mahony, **Adham Atyabi** et al. "Learning Oculomotor Behaviors from Scanpath." In *Proceedings of the 2021 International Conference on Multimodal Interaction*, pp. 407-415. ACM, 2021. <https://doi.org/10.1145/3462244.3479923>

B

Hitchcock, Laurel Iverson, **Johanna Creswell Báez**, Melanie Sage, Matthea Marquart, Kaitlyn Lewis, and Nancy J. Smyth. "Social Work Educators' Opportunities During COVID-19: A Roadmap for Trauma-Informed Teaching During Crisis." *Journal of Social Work Education* 57, no. sup1 (2021): 82-98. <https://doi.org/10.1080/10437797.2021.1935369>

Misra, Sanghamitra M., Natalie Holdstock, **Johanna Creswell Báez**, Nohemi Garcia, Adriana Guterrez, Padma Swamy, Keya Lee, and Arlene Bjugstad. "Systematic review of former unaccompanied immigrant minors' access to healthcare services in the United States." *Journal of Public Health* (2021): 1-13. <https://doi.org/10.1007/s10389-021-01652-5>

Swan, D., **Johanna Creswell Báez**, and D. R. Garza. "Mi hermana's keeper: Empowering the voice of Latina youth to improve services that prevent juvenile justice system involvement." In *Latinas in the Criminal Justice System: Victims, Targets, and*

Offenders, edited by V. Lopez & L. Pasko. NYU Press, 2021.

<https://nyupress.org/9781479804634/latinas-in-the-criminal-justice-system/>

Balytskyi, Yaroslav, and Jianbo Gao. "NNLO soft function for threshold single inclusive jet production." *Physical Review D* 104, no. 5 (2021): 054032.

<https://doi.org/10.1103/PhysRevD.104.054032>

Biermann, Christine, Stuart N. Lane, and Rebecca Lave. "Critical physical geography: In pursuit of integrative and transformative approaches to resource dynamics." In *The Routledge Handbook of Critical Resource Geography*, pp. 225-235. Routledge, 2021. <https://www.taylorfrancis.com/chapters/edit/10.4324/9780429434136-19/critical-physical-geography-christine-biermann-stuart-lane-rebecca-lave>

Banerjee, Vijay, Sena Hounsinnou, **Harrison Gerber**, and **Gedare Bloom**. "Modular Network Stacks in the Real-Time Executive for Multiprocessor Systems." In *2021 Resilience Week (RWS)*, pp. 1-7. IEEE, 2021.

Dubey, Richi, **Vijay Banerjee**, Sena Hounsinnou, and **Gedare Bloom**. "Strong APA scheduling in a real-time operating system: work-in-progress." In *Proceedings of the 2021 International Conference on Embedded Software*, pp. 47-48. ACM, 2021.

<https://doi.org/10.1145/3477244.3477623>

Boult, Terrance E., and **Yanyan Zhuang**. "PORT: Pooled Ordered Rectangular Testing for Improved Public Health Screening." In *2021 IEEE 9th International Conference on Healthcare Informatics (ICHI)*, pp. 238-242. IEEE, 2021.

<https://doi.org/10.1109/ICHI52183.2021.00045>

Quillen, Ellen E., Jaydee Foster, Anne Sheldrake, Maggie Stainback, and **Todd L. Bredbenner**. "Circulating miRNAs associated with bone mineral density in healthy adult baboons." *Journal of Orthopaedic Research* (2021). <https://doi.org/10.1002/jor.25215>

Collins, Brandon, **Philip N. Brown**, and **Oluwatosin Oluwadare**. "ChromeBat: A Bio-Inspired Approach to 3D Genome Reconstruction." *Genes* (2021).

<https://doi.org/10.3390/genes12111757>

Li, Ruolin, **Philip N. Brown**, and Roberto Horowitz. "A Highway Toll Lane Framework that Unites Autonomous Vehicles and High-occupancy Vehicles." In *2021 IEEE International Intelligent Transportation Systems Conference (ITSC)*, pp. 3482-3489. IEEE, 2021.

<https://doi.org/10.1109/ITSC48978.2021.9564777>

C

Jahic, Ilma, Chad R. Trulson, **Jonathan W. Caudill**, Taea Bonner, Alexandra Slemaker, and Matt DeLisi. "Adverse Childhood Experiences and Forensic Typologies: Getting Specific about Trauma among Institutionalized Youth." *International Journal of Environmental Research and Public Health* 18, no. 21 (2021): 11307.

<https://doi.org/10.3390/ijerph182111307>

Chalifour, Artek R., **Jonathon C. Davidson**, **Nicholas R. Anderson**, Thomas M. Crawford, and **Karen L. Livesey**. "Magnetic relaxation time for an ensemble of nanoparticles with randomly aligned easy axes: A simple expression." *Physical Review B* 104, no. 9 (2021): 094433. <https://doi.org/10.1103/PhysRevB.104.094433>

Chakravarty, Sarbarish, and **Michael Zowada**. "Dynamics of KPI lumps." *Journal of Physics A: Mathematical and Theoretical* (2021). <https://doi.org/10.1088/1751-8121/ac37e7>

Al Guqhaiman, Ahmed, Oluwatobi Akanbi, Amer Aljaedi, and **C. Edward Chow**. "Lightweight Multi-factor Authentication for Underwater Wireless Sensor Networks." In

2020 *International Conference on Computational Science and Computational Intelligence (CSCI)*, pp. 188-194. IEEE, 2020. <https://doi.org/10.1109/CSCI51800.2020.00039>

Alfaidi, Arij, and **Edward Chow**. "Health Record Chain (HRC): Implementation of Mobile Healthcare system using Blockchain to enhance Privacy of Electronic Health Record EHR." In *2020 International Conference on Computational Science and Computational Intelligence (CSCI)*, pp. 863-866. IEEE, 2020. <https://doi.org/10.1109/CSCI51800.2020.00161>

Aljuhni, Abdullah, Shaji Yusuf, **C. Edward Chow**, Oluwatobi Akanbi, and Amer Aljaedi. "Proposed Design for Effectively Expand Adaptive-ticks Feature in the Linux Kernel to Full Tickless Function." In *2020 International Conference on Computational Science and Computational Intelligence (CSCI)*, pp. 1250-1255. IEEE, 2020. <https://doi.org/10.1109/CSCI51800.2020.00233>

Amoroso, José Pedro, Ricardo Rebelo-Gonçalves, Raul Antunes, **Jay Coakley**, Pedro Teques, João Valente-dos-Santos, and Guilherme Eustáquio Furtado. "Teamwork: a systematic review of implications from psychosocial constructs for research and practice in the performance of Ultimate Frisbee games." *Frontiers in Psychology* (2021): 3556. <https://doi.org/10.3389/fpsyg.2021.712904>

Ablowitz, Mark J., and **Justin T. Cole**. "Transverse Instability of Rogue Waves." *Physical Review Letters* 127, no. 10 (2021): 104101. <https://doi.org/10.1103/physrevlett.127.104101>

Parhoon, Kamal, Alireza Moradi, Hamid Alizadeh, Hadi Parhoon, Dhwani P. Sadaphal, and **Frederick L. Coolidge**. "Psychometric properties of the behavior rating inventory of executive function, (BRIEF2) in a sample of children with ADHD in Iran." *Child Neuropsychology* (2021): 1-10. <https://doi.org/10.1080/09297049.2021.1975669>

Corcoran, Aaron J., Theodore J. Weller, Annalise Hopkins, and Yossi Yovel. "Silence and reduced echolocation during flight are associated with social behaviors in male hoary bats (*Lasiurus cinereus*)." *Scientific reports* 11, no. 1 (2021): 1-10. <https://doi.org/10.1038/s41598-021-97628-2>

Julian, Melissa, Huynh-Nhu Le, **Mary Coussons-Read**, Calvin J. Hobel, and Christine Dunkel Schetter. "The Moderating Role of Resilience Resources in the Association between Stressful Life Events and Symptoms of Postpartum Depression." *Journal of Affective Disorders* (2021). <https://doi.org/10.1016/j.jad.2021.05.082>

D

Bloodgood, Ashley M., **J. Jay Dawes**, Robin M. Orr, Michael Stierli, Karly A. Cesario, Matthew R. Moreno, Joseph M. Dulla, and Robert G. Lockie. "Effects of sex and age on physical testing performance for law enforcement agency candidates: Implications for academy training." *The Journal of Strength & Conditioning Research* 35, no. 9 (2021): 2629-2635. <https://doi.org/10.1519/jsc.0000000000003207>

Lockie, Robert G., **J. Jay Dawes**, Matthew R. Moreno, Karly A. Cesario, Katherine Balfany, Michael Stierli, Joseph M. Dulla, and Robin M. Orr. "Relationship between the 20-m multistage fitness test and 2.4-km run in law enforcement recruits." *Journal of strength and conditioning research* 35, no. 10 (2021): 2756-2761. <https://doi.org/10.1519/jsc.0000000000003217>

Dunn, Joshua. "What Teachers Spy in Homes over Zoom Winds Up in Court: Visible guns, Trump banners get students in trouble." *Education Next*, 21, no. 3 (2021). <https://www.educationnext.org/common-sense-constitution-and-covid-19-teachers-students-zoom/>

Dunn, Joshua. "Critical Race Theory Collides with the Law: Can a school require students to 'confess their privilege' in class?" *Education Next* 21, no. 4 (2021).
<https://www.educationnext.org/critical-race-theory-collides-with-law/>

F

Fan, Wenjun, Hsiang-Jen Hong, Xiaobo Zhou, and Sang-Yoon Chang. "A Generic Blockchain Framework to Secure Decentralized Applications." In *ICC 2021-IEEE International Conference on Communications*, pp. 1-7. IEEE, 2021.
<https://doi.org/10.1109/ICC42927.2021.9500924>

Kim, Jinoh, Makiya Nakashima, **Wenjun Fan, Simeon Wuthier, Xiaobo Zhou, Ikkyun Kim, and Sang-Yoon Chang.** "A Machine Learning Approach to Peer Connectivity Estimation for Reliable Blockchain Networking." In *2021 IEEE 46th Conference on Local Computer Networks (LCN)*, pp. 319-322. IEEE, 2021.
<https://doi.org/10.1109/LCN52139.2021.9525012>

Kim, Jinoh, Makiya Nakashima, **Wenjun Fan, Simeon Wuthier, Xiaobo Zhou, Ikkyun Kim, and Sang-Yoon Chang.** "Anomaly detection based on traffic monitoring for secure blockchain networking." In *2021 IEEE International Conference on Blockchain and Cryptocurrency (ICBC)*, pp. 1-9. IEEE, 2021.
<https://doi.org/10.1109/ICBC51069.2021.9461119>

G

Gardner, Donald G., Guo-Hua Huang, Jon L. Pierce, Xiongying Niu, and Cynthia Lee. "Not just for newcomers: Organizational socialization, employee adjustment and experience, and growth in organization-based self-esteem." *Human Resource Development Quarterly* (2021). <https://doi.org/10.1002/hrdq.21458>

Gibbes, Cerian, and Emily Skop. "Disruption, Discovery, and Field Courses: A Case Study of Student Engagement during a Global Pandemic." *The Professional Geographer* (2021): 1-10. <https://doi.org/10.1080/00330124.2021.1970593>

Graham, Helen L., and Melissa J. Benton. "Comparison of Lean Mass in Women With and Without Heart Disease." *Journal of Cardiopulmonary Rehabilitation and Prevention* (2021). <https://doi.org/10.1097/hcr.0000000000000604>

Guinness, Katherine. "Self-Portraiture and Self Performance." In *Visual Culture Approaches to the Selfie*, edited by Derek Conrad Murray, pp. 40-59. Routledge, 2022.

H

Hankiewicz, Janusz H., Zbigniew Celinski, and Robert E. Camley. "Measurement of sub-zero temperatures in MRI using T-1 temperature sensitive soft silicone materials: Applications for MRI-guided cryosurgery." *MEDICAL PHYSICS* (2021).
<https://doi.org/10.1002/mp.15252>

Harris, Dylan M. "Realizing Where I Should Be: Notes on Reflexivity and Positionality in Fieldwork." *The Geographical Bulletin* 62, no. 2A: 77-81.
<https://www.gammathetaupsilon.org/the-geographical-bulletin/2020s/volume62-2/A/article6.pdf>

Harris, Dylan M. "Storying climate knowledge: Notes on experimental political ecology." *Geoforum* 126 (2021): 331-339. <https://doi.org/10.1016/j.geoforum.2021.08.011>

Moulton, Alex A., Stepha Velednitsky, **Dylan M. Harris**, Courtney B. Cook, and Brittany L. Wheeler. "On and beyond traumatic fallout: unsettling political ecology in practice and scholarship." *Journal of Political Ecology* 28 (2021): 677-695. <https://doi.org/10.2458/jpe.3051>

Dowling, Mathew, and **Spencer Harris**. "Apples and oranges? Establishing equivalence in comparative sport policy research." *International Journal of Sport Policy and Politics* (2021): 1-16. <https://doi.org/10.1080/19406940.2021.1996440>

Coalson, Jenna E., Elizabeth J. Anderson, Ellen M. Santos, Valerie Madera Garcia, James K. Romine, Brian Dominguez, Danielle M. Richard, Ashley C. Little, **Mary H. Hayden**, and Kacey C. Ernst. "The Complex Epidemiological Relationship between Flooding Events and Human Outbreaks of Mosquito-Borne Diseases: A Scoping Review." *Environmental health perspectives* 129, no. 9 (2021): 096002. <https://doi.org/10.1289/ehp8887>

Cole, Sarah E., Esther M. John, **Lisa M. Hines**, Amanda I. Phipps, Jocelyn Koo, Sue A. Ingles, Kathy B. Baumgartner, Martha L. Slattery, Roberta McKean-Cowden, and Anna H. Wu. "Cumulative menstrual months and breast cancer risk by hormone receptor status and ethnicity: The Breast Cancer Etiology in Minorities Study." *International Journal of Cancer* (2021). <https://doi.org/10.1002/ijc.33791>

J

Jones, Reed, Olha Melnyk, Rair Macêdo, and **Robert E. Camley**. "Vertically Stacked Soliton-Like Domain Walls in Nematic Liquid Crystals." *Advanced Theory and Simulations* (2021): 2100252. <https://doi.org/10.1002/adts.202100252>

Harmon, Monica, **Barbara L. Joyce**, Regina (Gina) H. Johnson, Vicki Hicks, Nancy Brown-Schott, and Lucille Pilling. "Mixed-method analysis of the quad council competencies for public health nurses." *Public Health Nursing*. (2021) <https://doi.org/10.1111/phn.13009>

K

Alhojely, Suad, and **Jugal Kalita**. "Recent Progress on Text Summarization." In *2020 International Conference on Computational Science and Computational Intelligence (CSCI)*, pp. 1503-1509. IEEE, 2020. <https://doi.org/10.1109/CSCI51800.2020.00278>

Chowdhury, Hussain Ahmed, Dhruba Kumar Bhattacharyya, and **Jugal Kumar Kalita**. "UICPC: Centrality-based clustering for scRNA-seq data analysis without user input." *Computers in Biology and Medicine* 137 (2021): 104820. <https://doi.org/10.1016/j.compbiomed.2021.104820>

Lam, Khang Nhut, Kim-Ngoc Thi Nguyen, Loc Huu Nguy, and **Jugal Kalita**. "Facial Expression Recognition and Image Description Generation in Vietnamese." In *Fuzzy Systems and Data Mining VII*, pp. 63-69. IOS Press, 2021. <https://ebooks.iospress.nl/volumearticle/57836>

Lam, Khang Nhut, Nguyen Hoang Huynh, Nguyen Bao Ngoc, To Thi Huynh Nhu, Nguyen Thanh Thao, Pham Hoang Hao, Vo Van Kiet, Bui Xuan Huynh, and **Jugal Kalita**. "Using Artificial Intelligence and IoT for Constructing a Smart Trash Bin." In *International Conference on Future Data and Security Engineering*, pp. 427-435. Springer, Singapore,

2021. https://doi.org/10.1007/978-981-16-8062-5_29

Kenny, Deborah J. and Jessica Zumba. "Moral Stress and Injury in Military and Veterans." In *Caring for Veterans and Their Families: A Guide for Nurses and Healthcare Professionals*, edited by Rita F. D'Aoust and Alicia Gill Rossiter, pp. 387-400. Jones & Bartlett Learning, 2021.

Clark, Terry, and **Thomas Martin Key**. "The methodologies of the marketing literature: mechanics, uses and craft." *AMS Review* (2021): 1-16. <https://doi.org/10.1007/s13162-021-00210-2>

Key, Thomas Martin, Astrid L. Keel, **Andrew J. Czaplewski**, and **Eric M. Olson**. "Brand activism change agents: strategic storytelling for impact and authenticity." *Journal of Strategic Marketing* (2021): 1-17. <https://doi-org.libproxy.uccs.edu/10.1080/0965254X.2021.1904435>

Klingner, Donald E. "What Privacy?." *Public Integrity* 23, no. 5 (2021): 531-534. <https://doi.org/10.1080/10999922.2021.1935502>

Kosloski, Anna E., and Bridget Diamond-Welch. "The Men and Women Who Purchase Sex in the United States: Understanding Motives, Practices, and Preferences." *Women & Criminal Justice* (2021): 1-19. <https://doi.org/10.1080/08974454.2021.1993424>

Fisher, Kim W., Heather J. Williamson, Nichole Guerra, and **Scott Kupferman**. "Digital Citizenship: Technology Access and Use for Youth With and Without Intellectual and Developmental Disabilities." *Inclusion* 9, no. 4 (2021): 263-275. <https://doi.org/10.1352/2326-6988-9.4.263>

L

Bernard, L. C., **Andrew Lac**, M. Richter, J. Ciecuch, B. Zuro, N. Silvestrini, D. Krupic, and B. Von Helversen. "A cross-cultural study of purposive "traits of action": measurement invariance of scales based on the action-trait theory of human motivation using exploratory structural equation modeling." *Studia Psychologica: Theoria et Praxis* 21, no. 1 (2021): 5-29. <https://doi.org/10.21697/sp.2021.21.1.01>

Laroche, Rebecca, and Jennifer Munroe. "Teaching Environmental Justice and Early Modern Texts: Collaboration and Connected Classrooms." In *Teaching Social Justice Through Shakespeare: Why Renaissance Literature Matters Now*, edited by Hillary Eklund and Wendy Beth Hyman, 124-33. Edinburgh University Press, 2021. <http://www.jstor.org/stable/10.3366/j.ctvrs912p.16>.

Lauderbaugh, Leal K., and **Curtis D. Holder**. "The biomechanics of leaf oscillations during rainfall events." *Journal of Experimental Botany* (2021). <https://doi.org/10.1093/jxb/erab492>

Carballo, Marina Villalba, and **Byeong Kil Lee**. "Accuracy-aware Structured Filter Pruning for Deep Neural Networks." In *2020 International Conference on Computational Science and Computational Intelligence (CSCI)*, pp. 679-682. IEEE, 2020. <https://doi.org/10.1109/CSCI51800.2020.00122>

Chism, Joshua, and **Byeong Kil Lee**. "Performance characterization of supervision on knowledge distillation." In *Proceedings of the Future Technologies Conference*, pp. 40-55. Springer, Cham, 2021. https://doi.org/10.1007/978-3-030-89880-9_4

Knight, Autumn, and **Byeong Kil Lee**. "Performance Analysis of Network Pruning for Deep Learning based Age-Gender Estimation." In *2020 International Conference on Computational Science and Computational Intelligence (CSCI)*, pp. 1684-1687. IEEE,

2020. <https://doi.org/10.1109/CSCI51800.2020.00310>

Edwards, Katie M., Laura Siller, **Heather Littleton**, Lorey Wheeler, Donna Chen, Kayla Sall, and Stephanie Lim. "Minority stress and sexual partner violence victimization and perpetration among LGBTQ+ college students: The moderating roles of hazardous drinking and social support." *Psychology of violence* 11, no. 5 (2021): 445. <https://psycnet.apa.org/doi/10.1037/vio0000394>

Littleton, Heather, and David DiLillo. "Global perspectives on sexual violence: Understanding the experiences of marginalized populations and elucidating the role of sociocultural factors in sexual violence." *Psychology of violence* 11, no. 5 (2021): 429. <https://doi.org/10.1037/vio0000397>

Zinzow, Heidi M., **Heather Littleton**, Emma Muscari, and Kayla Sall. "Barriers to Formal Help-seeking following Sexual Violence: Review from within an Ecological Systems Framework." *Victims & Offenders* (2021): 1-26. <https://doi.org/10.1080/15564886.2021.1978023>

Chalifour, Artek R., **Jonathon C. Davidson**, **Nicholas R. Anderson**, Thomas M. Crawford, and **Karen L. Livesey**. "Magnetic relaxation time for an ensemble of nanoparticles with randomly aligned easy axes: A simple expression." *Physical Review B* 104, no. 9 (2021): 094433. <https://doi.org/10.1103/PhysRevB.104.094433>

Macêdo, Rair, Arjun S. Kudinoor, **Karen L. Livesey**, and **Robert E. Camley**. "Breaking Space Inversion-Symmetry to Obtain Asymmetric Spin-Wave Excitation in Systems with Nonuniform Magnetic Exchange." *Advanced Electronic Materials* (2021). <https://doi-org.libproxy.uccs.edu/10.1002/aelm.202100435>

Zhang, Michael, Samuel W. Wong, Jason N. Wright, Sebastian Toescu, Maryam Mohammadzadeh, Michelle Han, **Seth Lummus** et al. "Machine Assist for Pediatric Posterior Fossa Tumor Diagnosis: A Multinational Study." *Neurosurgery* 89, no. 5 (2021): 892-900. <https://doi.org/10.1093/neuros/nyab311>

Walsh, Ian J., Federica Pazzaglia, **Matthew CB Lyle**, and Karan Sonpar. "EXPRESS: Professional Credibility under Threat: Responses to Negative Social Evaluations in Newly Contested Professions." *Human Relations* (2021): 00187267211056531. <https://doi.org/10.1177%2F00187267211056531>

M

Tyboroski, Markus, **Rair Macêdo**, and **Robert E. Camley**. "Nonreciprocity in millimeter wave devices using a magnetic grating metamaterial." *Physical Review Materials* 5, no. 11 (2021): 115201. <https://doi.org/10.1103/PhysRevMaterials.5.115201>

Iverson, Katherine M., Sara B. Danitz, Danielle R. Shayani, Dawne Vogt, Shannon Wiltsey Stirman, Alison B. Hamilton, **Colin T. Mahoney**, Megan R. Gerber, and Melissa E. Dichter. "Recovering From Intimate Partner Violence Through Strengths and Empowerment: Findings From a Randomized Clinical Trial." *The Journal of Clinical Psychiatry* 83, no. 1 (2021): 0-0. <https://doi.org/10.4088/jcp.21m14041>

Marrus, Ellen, **Malikah Marrus**, and Rifqa Sa'Aadat. "My voice must be heard too: Why children need a voice in custody hearings." In *Global Reflections on Children's Rights and the Law*, pp. 89-102. Routledge, 2021.

Peloquin, Andrew J., **Jena M. McCollum**, Colin D. McMillen, and William T. Pennington. "Halogen Bonding in Dithiane/Iodofluorobenzene Mixtures: A New Class of Hydrophobic Deep Eutectic Solvents." *Angewandte Chemie* 133, no. 42 (2021): 23165-23171. <https://doi.org/10.1002/ange.202110520>

Morgan, Jonathan. "Overlapping Magisteria." *The Electronic Journal for Research in Science & Mathematics Education* 25, no. 3 (2021): 34-42.

<https://ejrsme.icrsme.com/article/view/21785>

Morris, Phillip, Michael McNamee, and **Kayleen St. Louis.** "Assessing the Impact of Military Cultural-Competence Training: Lessons for Creating an Inclusive Campus Environment." *The Journal of Continuing Higher Education* (2021): 1-18.

<https://doi.org/10.1080/07377363.2021.1938804>

N

Nobles, Jason E., Kevin Smiley, Dario Bueno Baques, E. Economou, Jakub Herman, Ian Harward, Anatoliy Tolya Glushchenko, Robert E. Camley, and Zbigniew Celinski. "Eight-element liquid crystal based 32 GHz phased array antenna with improved time response." *Engineering Research Express* (2021). <https://doi.org/10.1088/2631-8695/ac3848>

O

Overmann, Karenleigh A. "Finger-counting and numerical structure." *Frontiers in Psychology* 12 (2021). <https://doi.org/10.3389/fpsyg.2021.723492>

Ross, Kharah M., Christine Dunkel Schetter, Judith E. Carroll, Roberta A. Mancuso, Elizabeth C. Breen, **Michele L. Okun**, Calvin Hobel, and **Mary Coussons-Read.** "Inflammatory and immune marker trajectories from pregnancy to one-year post-birth." *Cytokine* 149 (2022): 155758. <https://doi.org/10.1016/j.cyto.2021.155758>

Okun, Michele L., Vanessa Kohl, and **Leilani Feliciano.** "Comparison of Longitudinal Diary and Actigraphy-Assessed Sleep in Pregnant Women." *Sleep Medicine* (2021). <https://doi.org/10.1016/j.sleep.2021.09.015>

P

Nurmi, Jari, and **Darshika G. Perera.** "Intelligent Cognitive Radio Architecture Applying Machine Learning and Reconfigurability." In *2021 IEEE Nordic Circuits and Systems Conference (NorCAS)*, pp. 1-6. IEEE, 2021. <https://doi.org/10.1109/NorCAS53631.2021.9599858>

Balytskyi, Yaroslav, Manohar Raavi, Anatoliy Pinchuk, and Sang-Yoon Chang. "Detecting Bias in Randomness by PT-Symmetric Quantum State Discrimination." In *ICC 2021-IEEE International Conference on Communications*, pp. 1-6. IEEE, 2021. <https://doi.org/10.1109/ICC42927.2021.9500704>

Rasheed, Marium, Hongjie Wang, Regan Zane, Dragan Maksimovic, Khurram Afridi, **Gregory L. Plett**, and **M. Scott Trimboli.** "Composite Hybrid Energy Storage System utilizing Capacitive Coupling for Hybrid and Electric Vehicles." In *2021 IEEE Applied Power Electronics Conference and Exposition (APEC)*, pp. 939-946. IEEE, 2021. <https://doi.org/10.1109/APEC42165.2021.9487261>

Elvira, David García, **Rosa Machado, Gregory L. Plett, M. Scott Trimboli, Hugo Valderrama Blavi, Angel Cid Pastor, and Luis Martinez Salamero.** "Simplified Li Ion Cell Model for BMS Coupling an Equivalent Circuit Dynamic Model with a Zero Dimensional Physics Based SEI Model." *Journal of The Electrochemical Society* (2021). <https://doi.org/10.1149/1945-7111/ac3597>

Plys, Evan, and Rachel Johnson-Koenke. "Perceived social standing in assisted living communities: A mixed-methods study of social hierarchies among residents." *Research on Aging* 43, no. 1 (2021): 47-57. <https://doi.org/10.1177/0164027520932823>

Horner, Dylan E., Alex Sielaff, **Tom Pyszczynski**, and Jeff Greenberg. "The role of perceived level of threat, reactance proneness, political orientation, and coronavirus salience on health behavior intentions." *Psychology & Health* (2021): 1-20. <https://doi.org/10.1080/08870446.2021.1982940>

Rosenfeld, Daniel L., Emily Balcetis, Brock Bastian, Elliot T. Berkman, Jennifer K. Bosson, Tiffany N. Brannon, Anthony L. Burrow... **Tom Pyszczynski** ... et al. "Psychological science in the wake of COVID-19: Social, methodological, and meta-scientific considerations." *Perspectives on Psychological Science* (2021). <https://doi.org/10.1177/1745691621999374>

R

Chesser, Ian, **Brandon Runnels**, and Elizabeth Holm. "A taxonomy of grain boundary migration mechanisms via displacement texture characterization." *Acta Materialia* (2021): 117425. <https://doi.org/10.1016/j.actamat.2021.117425>

S

Samuelson, Kristin W., **Kelly Dixon**, Joshua T. Jordan, **Tyler Powers**, **Samantha Sonderman**, and **Sophie Brickman**. "Mental Health and Resilience during the Coronavirus Pandemic: A Machine Learning Approach." *Journal of Clinical Psychology* (2021). <https://doi.org/10.1002/jclp.23254>.

de Boer, Esther, Irina Petrache, Nir M. Goldstein, J. Tod Olin, Rebecca C. Keith, Brian Modena, Michael P. Mohning, Zulma X. Yunt, **Inigo San-Millán**, and Jeffrey J. Swigris. "Decreased Fatty Oxidation and Altered Lactate Production During Exercise in Post-Acute COVID-19 Patients." *American Journal of Respiratory and Critical Care Medicine* (2021). <https://doi.org/10.1164/rccm.202108-1903LE>

Butler, Christopher R., **Justin Bendesky**, and **Allen Milton Schoffstall**. "Regioselective Reduction of 1H-1, 2, 3-Triazole Diesters." *Molecules* 26, no. 18 (2021): 5589. <https://doi.org/10.3390/molecules26185589>

Alfaro, Ana Jessica, Chalise Carlson, **Daniel L. Segal**, and Christine E. Gould. "Distinctions between depression and anxiety with fear of being a burden in late life." *Aging & Mental Health* (2021): 1-6. <https://doi.org/10.1080/13607863.2021.1993131>

Granier, Katie L., **Daniel L. Segal**, and **Frederick L. Coolidge**. "Relationships Among Executive Dysfunction, Constructive Worrying, and Worry Responses in Older Adults." *The International Journal of Aging and Human Development* 92, no. 3 (2021): 322-337. <https://doi.org/10.1177/0091415019896227>

Shields, Michelle M., Morgan N. McGinnis, and **Diana Selmeczy**. "Remote Research Methods: Considerations for Work With Children." *Frontiers in Psychology* 12 (2021). <https://doi.org/10.3389/fpsyg.2021.703706>

Bahkali, Ismail Mohammed, and **Sudhanshu Kumar Semwal**. "How Can Organizations Prevent Cyber Attacks Using Proper Cloud Computing Security?." In *Proceedings of the Future Technologies Conference*, pp. 173-183. Springer, Cham, 2021. https://doi.org/10.1007/978-3-030-89912-7_14

Bahkali, Ismail Mohammed, and **Sudhanshu Kumar Semwal**. "Multiple Ways for Medical Data Visualization Using 3D Slicer." In *2020 International Conference on Computational Science and Computational Intelligence (CSCI)*, pp. 793-800. IEEE, 2020. <https://doi.org/10.1109/CSCI51800.2020.00149>

Escote, Damia Fuentes, and **Sudhanshu Kumar Semwal**. "Drone interactions within the field of Augmented Reality." *Journal of the WSCG* 22, no. 1-2 (2021): 1-10. <https://doi.org/10.24132/JWSCG.2021.29.1>

Harris, Mark Wesley, and **Sudhanshu Semwal**. "Deep Rendering Graphics Pipeline." *Computer Science Research Notes* 29, no. 1-2 (2021): 101-108. <https://doi.org/10.24132/CSRN.2021.3002.11>

Mudrak, George, and **Sudhanshu Kumar Semwal**. "Using Agent Based Modeling to Frame Autonomous Vehicle Navigation as Complex Systems." In *Proceedings of the Future Technologies Conference*, pp. 154-172. Springer, Cham, 2021. https://doi.org/10.1007/978-3-030-89906-6_12

Semwal, Sudhanshu Kumar. "Gray Matters and Complex Systems: Mind, Consciousness, and Attention." In *Proceedings of the Future Technologies Conference*, pp. 340-348. Springer, Cham, 2021. https://doi.org/10.1007/978-3-030-89912-7_26

Tirado, Guilleum Budia, and **Sudhanshu Semwal**. "Autonomous Parking Spot Detection System for Mobile Phones using Drones and Deep Learning." *Computer Science Research Notes* 29, no. 1-2 (2021): 115-124. <https://doi.org/10.24132/CSRN.2021.3002.13>

Velazquez, Eric Marin, and **Sudhanshu Semwal**. "Using Autonomous Drone Interactions towards MobilePersonal Spaces for Indoor Environments." *Computer Science Research Notes* 29, no. 1-2 (2021): 125-134. <https://doi.org/10.24132/CSRN.2021.3002.14>

Smith, Andrew J., Hannah Wright, Brandon J. Griffin, Anandi C. Ehman, **Kotaro Shoji**, Tiffany M. Love, Ellen Morrow... **Charles C. Benight** et al. "Mental Health Risks Differentially Associated with Immunocompromised Status among Healthcare Workers and Family Members at the Pandemic Outset." *Brain, Behavior, & Immunity-Health* (2021): 100285. <https://doi.org/10.1016/j.bbih.2021.100285>

Thoman, Dustin B., Melo-Jean Yap, Felisha A. Herrera, and **Jessi L. Smith**. "Diversity interventions in the classroom: From resistance to action." *CBE—Life Sciences Education* 20, no. 4 (2021): ar52. <https://doi.org/10.1187/cbe.20-07-0143>

Stroud, John, Janusz Hankiewicz, Robert E. Camley, and **Zbigniew Celinski**. "On the Optimization of Imaging Parameters for Magnetic Resonance Imaging Thermometry using Magnetic Microparticles." *Journal of Magnetic Resonance* (2021): 107108. <https://doi.org/10.1016/j.jmr.2021.107108>

Bertilsson, Jon, Jens Rennstam, and **Katie Sullivan**. "Brand orientation: Tensions and conflicts in public management." *Managing Public Services: Making Informed Choices*, edited by Irvine Lapsley and Ola Mattison. Routledge, 2022.

T

Tapia-Fuselier, Nicholas. "Enhancing Institutional Undocu-Competence through Establishing Undocumented Student Resource Centers: A Student-Encompassed Approach." *Journal of College Access* 6, no. 2 (2021): 10. <https://scholarworks.wmich.edu/jca/vol6/iss2/10>

Morse, Erica, Ingrid A. Binswanger, **Emmeline Taylor**, Caroline Gray, Matthew Stimmel, Christine Timko, Alex HS Harris, David Smelson, and Andrea K. Finlay. "Strategies to improve implementation of medications for opioid use disorder reported by veterans involved in the legal system: A qualitative study." *Journal of Substance Abuse Treatment* 129 (2021): 108353. <https://doi.org/10.1016/j.jsat.2021.108353>

Taylor, Emmeline N., Christine Timko, Ingrid A. Binswanger, Alex HS Harris, Matthew Stimmel, David Smelson, and Andrea K. Finlay. "A national survey of barriers and facilitators to medications for opioid use disorder among legal-involved veterans in the Veterans Health Administration." *Substance Abuse* (2021): 1-8. <https://doi.org/10.1080/08897077.2021.1975867>

Taylor, Joseph A., Catrina T. Adams, Anne L. Westbrook, Jodi Creasap Gee, Jessaca K. Spybrook, Susan M. Kowalski, April L. Gardner, and Mark Bloom. "The effect of a student–teacher–scientist partnership program on high school students' science achievement and attitudes about scientists." *Journal of Research in Science Teaching* (2021). <https://doi.org/10.1002/tea.21733>

Taylor, Joseph A., Terri Pigott, and Ryan Williams. "Promoting Knowledge Accumulation About Intervention Effects: Exploring Strategies for Standardizing Statistical Approaches and Effect Size Reporting." *Educational Researcher* (2021): 0013189X211051319. <https://doi.org/10.3102%2F0013189X211051319>

Stypulkowski, Katie, and **Rachel E. Thayer**. "Long-Term Recreational Cannabis Use Is Associated With Lower Executive Function and Processing Speed in a Pilot Sample of Older Adults." *Journal of Geriatric Psychiatry and Neurology* (2021): 08919887211049130. <https://doi.org/10.1177/08919887211049130>

Titus, M. Brandon, Ethan G. Wright, **Jeremy M. Bono**, Andrea K. Poliakon, **Brandon R. Goldstein**, **Meg K. Super**, Lauren A. Young, **Melpomeni Manaj**,..., and **Eugenia C. Olesnicky**. "The conserved alternative splicing factor caper regulates neuromuscular phenotypes during development and aging." *Developmental Biology* 473 (2021): 15-32. <https://doi.org/10.1016/j.ydbio.2021.01.011>

Watts, Brennan P., Caleb Rolsma, **Marshal Dolan**, and **Kevin Tvrđy**. "Mechanism and Mitigation of Irreversible Material Loss within Gel-Based Single-Walled Carbon Nanotube Purification Schemes." *The Journal of Physical Chemistry C* (2021). <https://doi.org/10.1021/acs.jpcc.1c05832>

W

London, Andrew S., Carrie Elliot, Rebecca Wang, **Tre Wentling**, and Natalie Simpson. "Gender transition and same-sex marriage: A qualitative consideration." In *The Social Science of Same-Sex Marriage: LGBT People and Their Relationships in the Era of Marriage Equality* edited by Aaron Hoy. Routledge, 2022.

Alanis, Jennifer, **Patty Witkowsky**, and **Nicholas Tapia-Fuselier**. "Undocumented Students' Perceptions of Institutional Support." *Journal of College Access* 6, no. 2 (2021): 11. <https://scholarworks.wmich.edu/jca/vol6/iss2/11>

Witkowsky, Patricia, **S. Nicole Ferguson**, **Les Knotts**, and **Mona Shaker**. "Lost in Translation: Perspective and Skills Developed by Student Affairs Professionals Abroad." *Journal of Student Affairs Research and Practice* (2021): 1-16. <https://doi-org.libproxy.uccs.edu/10.1080/19496591.2021.1939039>

X

Charlton, John, Pang Du, and **Shouhuai Xu**. "A New Method for Inferring Ground-Truth Labels and Malware Detector Effectiveness Metrics." In *International Conference on Science of Cyber Security*, pp. 77-92. Springer, Cham, 2021. https://doi.org/10.1007/978-3-030-89137-4_6

Chen, Lin, Ahmed Imtiaz Sunny, Lei Xu, **Shouhuai Xu**, Zhimin Gao, Yang Lu, Weidong Shi, and Nolan Shah. "Computational complexity characterization of protecting elections from bribery." *Theoretical Computer Science* 891 (2021): 189-209. <https://doi.org/10.1016/j.tcs.2021.08.036>

Collins, Brandon, **Shouhuai Xu**, and **Philip N. Brown**. "Paying Firms to Share Cyber Threat Intelligence." In *International Conference on Decision and Game Theory for Security*, pp. 365-377. Springer, Cham, 2021. https://doi.org/10.1007/978-3-030-90370-1_20

Li, Deqiang, Qianmu Li, Yanfang Ye, and **Shouhuai Xu**. "Arms Race in Adversarial Malware Detection: A Survey." *ACM Computing Surveys (CSUR)* 55, no. 1 (2021): 1-35. <https://doi.org/10.1145/3484491>

Xu, Shouhuai. "SARR: A Cybersecurity Metrics and Quantification Framework (Keynote)." In *International Conference on Science of Cyber Security*, pp. 3-17. Springer, Cham, 2021. https://doi.org/10.1007/978-3-030-89137-4_1

Guo, Feng, Adi Masli, **Yang Xu**, and Joseph H. Zhang. "Corporate Innovation and the Auditor's Assessment of Going Concern Corporate Innovation and Going Concern Opinions." *Accounting Horizons* (2021). <https://doi.org/10.2308/HORIZONS-18-087>

Y

Pascual, Hector, and **Xin C. Yee**. "Least squares regression principal component analysis: A supervised dimensionality reduction method." *Numerical Linear Algebra with Applications* (2021): e2411. <https://doi.org/10.1002/nla.2411>

Yoo, Monica S. "Positioning Gender Through Interpreting Character in Reader Response to a Multicultural Text." *Genders, Cultures, and Literacies: Understanding Intersecting Identities*, edited by Barbara J. Guzzetti. Routledge, 2021.

Yoon, Kay, and **Elena Svetieva**. "Leadership and knowledge sharing in teams: The effects of the leader's communicative framing of team goals." *Communication Research Reports* (2021): 1-11. <https://doi.org/10.1080/08824096.2021.2001323>

Z

Raavi, Manohar, Pranav Chandramouli, **Simeon Wuthier**, **Xiaobo Zhou**, and **Sang-Yoon Chang**. "Performance Characterization of Post-Quantum Digital Certificates." In *2021 International Conference on Computer Communications and Networks (ICCCN)*, pp. 1-9. IEEE, 2021. <https://doi.org/10.1109/ICCCN52240.2021.9522179>

Zhao, Junxian, Aidi Pi, Shaoqi Wang, and **Xiaobo Zhou**. "FlashByte: Improving Memory Efficiency with Lightweight Native Storage." In *2021 IEEE/ACM 21st International Symposium on Cluster, Cloud and Internet Computing (CCGrid)*, pp. 61-70. IEEE, 2021. <https://doi.org/10.1109/CCGrid51090.2021.00016>

Sim, Mong Tee, and **Yanyan Zhuang**. "A SpaceWire PHY with Double Data Rate and Fallback Redundancy." In *2020 IEEE 33rd International System-on-Chip Conference*

(SOCC), pp. 283-288. IEEE, 2021. <https://doi.org/10.1109/SOCC49529.2020.9524763>

Zug, Charles U. "Creating a Demagogue: The Political Origins of Daniel Shays's Erroneous Legacy in American Political History." *American Political Thought* 10, no. 4 (2021): 601-628. <https://doi.org/10.1086/716687>

Zug, Charles U. "Support for Nationalization and State Building in the Early American Republic." *Journal of Law and Courts* 9, no. 2 (2021). <https://doi.org/10.1086/713452>

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