Faculty Achievements

December 2020-February 2021

Evelyn Adkins, assistant professor, Department of Classics

National and International Conference Presentation

 Co-organized a panel on "The Ancient Novel and Material Culture" with Edmund P. Cueva of the University of Houston-Downtown at the annual meeting of the Society for Classical Studies, held virtually January 2021.

Jeremy Bendik-Keymer, Beamer-Schneider Professor in Ethics, Department of Philosophy

Books and Publications

- The Other Species Capability & the Power of Wonder, Journal of Human Development and Capabilities, Symposium on Animals in Captivity, 2021.
- Beneficial Relations between Species & the Moral Responsibility of Wondering, Environmental Politics, 30th Anniversary Symposium on Multi-Species Justice, 2021.
- Facing Mass Extinction, It Is Prudent to Decolonise Lands & Laws: A Philosophical Essay on Respecting Jurisdiction, Griffith Law Review, Issue on Extinction and the Law, 2021.
- Ghosts of the Future: Behrens & Sanders, Blog of the APA, December 2020.
- Changing our Institutions: PfS, Blog of the APA, January 2021.
- On Flight: Bin Song (part I), Blog of the APA, February 2021.
- Genealogies of Philosophy: Lynne Huffer (part I), with Sidra Shahid, Blog of the APA, February 2021.

Other Achievements

• Joined the editorial board of Environmental Ethics, 2021-2030.

Tim Black, associate professor, Department of Sociology

Books and Publications

Timothy Black and Sky Keyes. 2021. It's a Setup: Fathering from the Social and Economic Margins.
 Oxford University Press.

Jean Burns, associate professor, Department of Biology

Books and Publications

- <u>Liu, Yu, Juliana S. Medeiros, Jean H. Burns. 2020. The soil biotic community protects</u>

 Rhododendron spp. across multiple clades from the oomycete Phytophthora cinnamomi at a cost to plant growth. Oecologia.
- Compagnoni, Aldo, Sam Levin, Dylan Childs, William Harpole, Maria Paniw, Gesa Römer, Jean Burns, Judy Che-Castaldo, Nadja Rüger, Georges kunstler, Joanne Bennett, C. Ruth Archer, Owen Jones, Roberto Salguero-Gómez, and Tiffany Knight. In press. Herbaceous perennial plants with short generation time have stronger responses to climate anomalies than those with longer generation time. Nature Communications.
- Paniw, Maria, Tamora James, C. Ruth Archer, Gesa Römer, Sam Levin, Aldo Compagnoni, Judy Che-Costaldo, Joanne Bennett, Andrew Mooney, Dylan Childs, Arpat Ozgul, Owen Jones, Jean H. Burns, Andrew Beckerman, Abir Patwary, Nora Sanchez-Gassen, Tiffany Knight, Roberto Salguero-Gómez. In press. The myriad of complex demographic responses of terrestrial mammals to climate change and gaps of knowledge: A global analysis. Journal of Animal Ecology.

Gilbert Doho, associate professor of French, Department of Modern Languages and Literatures

Books and Publications

• Gilbert Doho (Associate Professor of French): De Singue Mura à Mémoire amputée ou devoir de mémoire envers les maquisardes : Essai d'approche matriarcale de l'Afrique contemporaine. Women in French Studies, Volume 8, Special Issue 2020, pp. 90-102.

Julie Exline, professor, Department of Psychological Sciences

Books and Publications

• Exline, J. J., Wilt, J. A., Harriott, V. A., Pargament, K. I., & Hall, T. W. (2021). *Is God listening to my prayers? Initial validation of a brief measure of perceived divine engagement and disengagement in response to prayer.* Religions, 12(2), 80.

National and International Conference Presentations

• Exline, J. J. (2021, February). *Supernatural attributions: A social psychological perspective.* Invited keynote address for the Society for the Psychology of Religion and Spirituality preconference at the annual meeting of the Society for Personality and Social Psychology, held online.

Norah Feeny, professor, Department of Psychological Sciences

Books and Publications

- Burton, M. S., Cooper, A. A., Mello, P. G., Feeny, N. C., & Zoellner, L. A. (2021). Latent profiles of comorbid depression as predictors of PTSD treatment outcome. Behavior Therapy.
- Kline, A. C., Klein, A. B., Bowling, A., & Feeny, N. C. (2021). Exposure therapy beliefs and utilization for treatment of PTSD: A survey of licensed mental health providers. Behavior Therapy.
- Post, L., Youngstrom, E. A., Connell, A. M., Zoellner, L. A., & Feeny, N. C. (2021). *Transdiagnostic emotion regulation processes explain how emotion-related factors affect co-occurring PTSD and MDD in relation to trauma*. Journal of Anxiety Disorders, 78, 102367.
- Baier, A. L., Kline, A. C., & Feeny, N. C. (2020). Therapeutic alliance as a mediator of change: A
 systematic review and evaluation of research. Clinical Psychology Review, 82, 101921.
- Bentley, J., Feeny, N. C., Dolezal, M., Klein, A., Marks, L. H., Graham, B., & Zoellner, L.A. (2020).
 Islamic Trauma Healing: Integrating faith and empirically supported principles in a community-based program. Cognitive and Behavioral Practice.
- Bentley, J. A., Mohamed, F., Feeny, N., Ahmed, L. B., Musa, K., Tubeec, A. M., Angula, D., Egeh,
 M. H., & Zoellner, L. (2020). Local to global: Somali perspectives on faith, community, and resilience in response to COVID-19. Psychological Trauma: Theory, Research, Practice, and Policy, 12(S1),
 S261-S263.

Pavel Fileviez Perez, associate professor, Department of Physics

Books and Publications

- P. Fileviez Perez, C. Murgui, A. D. Plascencia, Baryonic Higgs and Dark Matter, Journal of High Energy Physics 02 (2021) 163.
- P. Fileviez Perez, A. D. Plascencia, *Electric Dipole Moments, New Forces and Dark Matter*, Journal of High Energy Physics (2021), in press.

Awards and Honors

Elected member of the Division of Particles and Fields (DPF) Ethics Advisory Committee,
 American Physical Society.

National and International Conference Presentations

• Theories for Baryon and Lepton Number Violation, talk given at Rare Processes and Precision Frontier Workshop, 2020.

Elina Gertsman, Archbishop Paul J. Hallinan Professor in Catholic Studies II, Department of Art History and Art

Books and Publications

- Abstraction in Medieval Art: Beyond the Ornament (Amsterdam: Amsterdam University Press, 2021).
- *Iconography and the Loss of Representation.* In The Lives and Afterlives of Medieval Art, eds. Pamela Patton and Henry D. Schilb. Series: Signa. Papers of the Index of Medieval Art 1 (University Park, PA: Penn State Press, 2021), 127–59.
- Playthings: Ivory on Ivory. In Games and Visual Culture in the Middle Ages, eds. Elizabeth Lapina
 Vanina Kopp. Series: Ludic Cultures, 1100–1700 (Turnhout: Brepols, 2020), 221-37.

Awards and Honors

• Baker-Nord Award for Distinguished Scholarship in the Humanities.

National and International Conference Presentations

- Presenter and discussant, with Gerhard Lutz (Cleveland Museum of Art) in the Mining the Collection series, International Center for Medieval Art.
- Nothing is the Matter: Locating God in the Cosmic Void. The Newberry Library European Art Seminar, Newberry Library, via Zoom.

Other Achievements

Elected chair of the Nominating Committee, International Center for Medieval Art.

Lisa Huisman Koops, professor, Department of Music

Books and Publications

- Koops, L. H. & Webber, S. (2021). Something is better than nothing: Early childhood
 caregiver-child music classes taught remotely in the time of COVID-19. International Journal
 of Music in Early Childhood, 15(2), 135-156. One of the first published studies of remote
 early childhood music teaching (due to COVID-19).
- Koops, L. H. & Tate, K. (2021). *A Framework for Considering Teacher-Child Musical Interactions in the Early Childhood Classroom*. Early Child Development & Care.
- Svec, C. & Koops, L. H. (2021). Early Childhood Music Research, Practice and Policy: A COVID-19
 Collaboration. International Journal of Music in Early Childhood, 15(2), 129-134.

Lydia Kisley, Warren E. Rupp Assistant Professor, Department of Physics

Books and Publications

• Saini, A.; Messenger, H.; Kisley, L. *Fluorophores "turned-on" by corrosion reactions can be detected at the single-molecule level.* ACS Applied Materials and Interfaces 2021, 13, 2000-2006. DOI: 10.1021/acsami.0c18994.

Other Achievements

- Research group hosted a virtual booth at the Sciencepalooza Reverse Science Fair organized by the CWRU Science and Human Rights Coalition. Group members explained microscopy to high school students at the Cleveland Metropolitan School District's John Hay High School.
- Undergraduate researchers Shawn Yoshida and Hannah Messenger in the Kisley group swept the December 2020 SOURCE Intersections Awards in the physical sciences category.

Walter Lambrect, professor, Department of Physics

Books and Publications

- Buckled honeycomb antimony: Higher order topological insulator and its relation to the Kekulé
 lattice Santosh Kumar Radha and Walter R. L. Lambrecht Phys. Rev. B 102, 115104 (2020).
- <u>Topological quantum switch and controllable one-dimensional conducting paths in</u> antimonene facilitated by breaking the inversion symmetry Santosh Kumar Radha and Walter R. L. Lambrecht Phys. Rev. B 102, 245413 (2020).
- Quasiparticle self-consistent GW energy band calculations for Ge3N4 phases Benthara
 Hewage Dinushi Jayatunga and Walter R. L. Lambrecht Phys. Rev. B 102, 195203 (2020).
- Quasiparticle self-consistent GW band structures and high-pressure phase transitions of LiGaO2 and NaGaO2 Santosh Kumar Radha, Amol Ratnaparkhe, and Walter R. L. Lambrecht Phys. Rev. B 103, 045201 (2021).
- Electron microscopy and spectroscopic study of structural changes, electronic properties, and conductivity in annealed LixCoO2 Halyna Volkova, Kevin Pachuta, Kyle Crowley, Santosh Kumar Radha, Emily Pentzer, Xuan P. A. Gao, Walter R. L. Lambrecht, Alp Sehirlioglu, and Marie-Hélène Berger Phys. Rev. Materials 5, 015401 (2021).
- <u>Topological obstructed atomic limit insulators by annihilating Dirac fermions Santosh Kumar</u> Radha and Walter R. L. Lambrecht Phys. Rev. B 103, 075435 (2021).

Brooke Macnamara, associate professor, Department of Psychological Sciences

Books and Publications

- Güllich, A., Macnamara, B. N., & Hambrick, D. Z. (in press). What makes a champion? Early multi-disciplinary practice, not early specialization, predicts world-class performance. Perspectives on Psychological Science.
- Navarro, E., Macnamara, B. N., Glucksberg, S., & Conway, A. R. A. (2020). What influences successful communication? An examination of cognitive load and individual differences. Discourse Processes.
- Hambrick, D. Z., & Macnamara, B. N. (2020). Toward a science of expertise: Obstacles, implications, and applications. In S. McCauley (Ed.), Conceptual Frameworks for Giftedness and Talent Development. Waco, TX: Prufrock Press.

Awards and Honors

• Co-PI on National Science Foundation, \$150,000 planning grant 2020-2021. FW-HTF-P: Clinical Skill Acquisition, Retention and Atrophy with Artificial Intelligence Aids.

National and International Conference Presentations

- Macnamara, B. N. (2021, April). Interpreting as complex human performance: The role of cognitive abilities, experience, and task demands. Keynote speaker for the 2nd International Conference on Interpreting, Hong Kong.
- Macnamara, B. N. (2020, December). The '10,000-hour rule' and other misconceptions about the role practice plays in expertise. Invited presentation at the Southern Society for Philosophy and Psychology annual conference.

Colin McLarty, professor, Department of Philosophy and Mathematics

Awards and Honors

 Winner of a \$500 essay prize, celebrating the 25th Anniversary of the Bulletin of Symbolic Logic in January 2021 for the essay What does it take to prove Fermat's Last Theorem?
 Grothendieck and the logic of number theory. Originally published in the Bulletin of Symbolic Logic, vol. 16, (2010), pages 359-377.

National and International Conference Presentations

 Mathematics as a Love of Wisdom: the case of Saunders MacLane. Peking University December 2020, for PKU lecture series in honor of Bertrand Russell. Grothendieck's personal idea of topos as a space, University of Michigan Department of Mathematics, October 2020.

Ean Nisenboum, instructor, Department of Psychological Sciences

Other Achievements

 Started a zoom "Choir" for individuals with acquired communication disorders (due to stroke, degenerative diseases, etc). The focus is on providing socialization and models for fluency for these adults. The group is run by graduate students and provides the students with clinical opportunities to work with these individuals.

Maddalena Rumor, lecturer, Department of Classics

Books and Publications

Akkadian Sikillu and Greek Σκίλλα in their Medical and Magico-Ritual Contexts. In J. C. Johnson (ed.), Patients and Performative Identities: At the Intersection of the Mesopotamian Technical Disciplines and Their Clients (Winona Lake, IN: Eisenbrauns, 2020), pp. 169–192.

Awards and Honors

American Council of Learned Societies (ACLS) Fellowship awarded for the academic year
 2020-2021 for the book project: *Dreckapotheke in Ancient Mesopotamia and the Graeco-Roman World.*

Rachel Sternberg, associate professor, Department of Classics

Books and Publications

• The Ancient Greek Roots of Human Rights (University of Texas Press, 2021).

Jonathan Tan, Archbishop Paul J. Hallinan Professor of Catholic Studies and associate professor, Department of Religious Studies

Awards and Honors

• <u>Louisville Institute Sabbatical Grant for Researchers 2020</u>. \$40,000 to work on the project entitled *Beyond Model Minority, Privilege, and Power: Rethinking and Transforming Asian American Theologies*.

Robert Ward, associate professor, Department of Biology

Books and Publications

Rice, C., Macdonald, S., Wang, X., and Ward, R. E. 2020. The Broad Transcription Factor Links
 Hormonal Signaling, Gene Expression, and Cellular Morphogenesis Events During Drosophila
 Imaginal Disc Development. Genetics 216:1137-1152.

Elisabeth Werner, professor, Department of Mathematics, Applied Mathematics and Statistic

Books and Publications

- The Loewner Function of a Log-Concave Function (with Ben Li and C. Schuett), Journal of Geometric Analysis 3, 423-456 (2021).
- Asymptotic normality for random simplices and convex bodies in high dimensions (with D. Alonso-Gutierrez, F. Besau, J. Grote, Z. Kabluchko, M. Reitzner, C. Thaele, B. Vritsiou), Proceedings AMS 149, 355-367 (2021).

National and International Conference and Presentations

- December 2020, Shaanxi Normal University virtual colloquium talk, Shaanxi, China, Convex floating bodies of equilibrium.
- December 2020, Virtual Combinatorics and Geometry Days III workshop, MIPT, Moscow Convex floating bodies of equilibrium.

Other Achievements

• Co-Organizer of a Research Program *The Interplay between High-Dimensional Geometry and Probability* at the Hausdorff Institute. Bonn. Germany. January 2021–April 2021.

Shulei Zhang, assistant professor, Department of Physics

Books and Publications

- Ruihao Li, Anton Burkov, Olle Heinonen, Steven S.-L. Zhang*, Nonlinear Hall effect in Weyl semimetals induced by chiral anomaly, Phys. Rev. B 103, 045105 (2021). *Corresponding author.
- Yongming Luo, Changjiang Liu, Hilal Saglam, Yi Li, Wei Zhang, Steven S.-L. Zhang, John E
 Pearson, Brandon Fisher, Anand Bhattacharya, Axel Hoffmann. Distinguishing antiferromagnetic
 spin sublattices via the spin Seebeck effect, Phys. Rev. B 103, L020401 (2021). Editors'
 suggestion.

Peng Li*, Jinjun Ding*, Steve S.-L. Zhang*, James Kally, Timothy Pillsbury, Gaurab Rimal, Chong Bi, August DeMann, Stuart B. Field, Weigang Wang, Jinke Tang, J. S. Jiang, Olle G. Heinonen, Axel Hoffmann, Nitin Samarth, and Mingzhong Wu, Topological Hall Effect in a Topological Insulator Interfaced with a Magnetic Insulator, Nano Lett. 21(1), 84 (2021). * Contributed equally.