

UNIVERSITY OF WYOMING
Endowed Faculty Report
From the Office of the Vice President for Academic Affairs
1 OCTOBER 2023

To the Joint Appropriations and Joint Education Interim Committees

The University of Wyoming (UW) has and continues to benefit greatly from the Excellence in Higher Education Endowment. The Excellence in Higher Education Endowment allows the university to establish state-funded endowed faculty positions to advance teaching and scholarship in the areas of distinction defined in the university's strategic plan. UW has also benefited from state appropriations targeted toward faculty positions in legislatively identified areas of priority the School of Energy Resources positions and the Sustainable Business Practices positions. Furthermore, faculty positions supported (partially or fully) by private endowment gifts through the University of Wyoming Foundation enhance UW's teaching and research programs in areas of mutual interest to the institution and its donors. This report covers all such positions. Part A includes the Excellence in Higher Education Endowment (a continuation of legislative reports prepared annually); Part B encompasses other faculty positions identified in legislative appropriations; and Part C includes privately endowed faculty positions.

Part A. Excellence in Higher Education Endowment Report

[Pursuant to W.S. 21-16-1204]

1. Background

Created in 2006, the Excellence in Higher Education Endowment was funded at \$105 million, the earnings from two-thirds of which, or \$70 million, was designated to the University of Wyoming. Earnings on the state-managed endowment, which are distributed by the state treasurer to the university, allow the university to establish endowed faculty positions (known as Wyoming Excellence Chairs) and to acquire instructional and scholarly materials, classroom equipment, and other resources necessary to support the work of endowed chairs. Distributions to the university are based on a spending policy for FY2022 and was 5.00% of the five (5) year average market value of the corpus.

The statute imposes some constraints on the uses of the endowment earnings. Not less than 2/3 of the amounts shall be used to expand university instruction and research in disciplines related to economic and social challenges facing Wyoming. No fewer than four (4) Wyoming Excellence chairs must be in the College of Education. The remaining earnings shall be used for recruitment and retention of faculty members with established reputations in other areas of distinction as identified in the university academic plan, including business, arts and humanities, mathematics, cultural studies, healthcare, economics, and law.

To initiate the program while the endowment corpus was filling, and pursuant to Senate Enrolled Act 54 Section 1 (c) (ii), the Legislature appropriated \$2.8 million in one-time funds, subsequently reduced to \$1.8 million, to be distributed to the University of Wyoming and expended exclusively for the purposes specified in W.S. 21-16-1202 (b). The one-time appropriation allowed the university to begin filling positions in fiscal years 2007 and 2008. Those initial positions were then funded permanently with earnings from the Excellence in Higher Education Endowment.

2. Summary, history, and accomplishments of authorized positions

Under W.S. 21-16-1204, the University of Wyoming must report annually on faculty positions partially or fully funded through the endowment program, including the name of each faculty member filling a Wyoming Excellence chair, their education and experience, their research and instructional activities, and the benefits of their research and instruction.

The inaugural appropriation became effective July 1, 2006. The provost developed a planning budget for the allocation of positions to be supported with these funds during the 2007-2008 biennium, while the \$70M endowment account began to fill. Based on the planning budget, three (3) searches were authorized with the initial funds: two (2) in the College of Education (fulfilling one-half of the legislative mandate requiring four (4) positions in the College of Education) and one (1) in the College of Arts and Sciences Creative Writing MFA program (aligned with UW's area of distinction Cultural Assets, Arts, and Humanities).

During the second year of that biennium, as more information became available about anticipated payouts to the university from the state-managed endowment account, the provost's office authorized more searches, in two (2) phases. Seven (7) additional Wyoming Excellence endowed positions were authorized during fiscal year (FY) 2008, and five (5) more were authorized in July 2008 for a total of fifteen (15) authorized endowed faculty positions. Four (4) of these fifteen (15) positions were to be funded with earnings combined from both the state account and private endowment gifts to the university, allowing for a greater number of search authorizations and establishing a unique private-public partnership in endowing distinguished professorships.

The decision to authorize the fifteen (15) fully or partially funded positions was based on a budget for salary, benefits, and other position-related costs consistent with the projected payout estimates provided by the state treasurer's office prior to the financial market declines realized later in FY2009. Subsequent financial market events mandated the need to reevaluate the size of the budget and number of permanent positions that could be supported by the endowment earnings. Given the need for exceptional prudence in filling permanent faculty positions, and consistent with representations to the Joint Appropriations Committee, the university placed some of the previously authorized searches on hold through FY2010. At the beginning of FY2011, following careful evaluation of the anticipated earnings stream and the accumulated reserves held in the university account, the provost authorized searches to fill the on-hold positions, including some for a bridging period only in order to ensure that permanent funding commitments would remain in line with the anticipated funding stream. Then, at the beginning of FY2013 based on having received a significantly larger payout during FY2012, as well as enhanced projected payout estimates from the state, and a substantial private gift, the provost was able to complete the originally planned position allocations, and grow the program with additional allocations to Nursing, Law, the Haub School, Native American & Indigenous Studies, and Global Studies.

In FY2022, nineteen (19) and in FY2023 eighteen (18) positions were fully or partially funded by the Wyoming Excellence Endowment, and additional positions were supported with endowment funds. Although all positions are subject to available funding in any year, the ongoing annual expenses associated with the funded positions were in line with the state projections for annual earnings.

The authorized positions conform to the legislative mandate. The College of Education has four (4) positions, as prescribed by the legislation, all important to the future of K-12 education in the state: two (2) in literacy education, one (1) in science education, and one (1) mathematics education. The strategy for the allocation of the other positions was to coordinate a set of positions in areas of distinction identified in the university's strategic

plan, and professions critical to the state such as business, law, and health professions. In addition, positions were selected for allocation based on the potential to address economic and social challenges in the state.

The allocation strategy is reflected in the following table, and the accomplishments of the currently filled positions and the benefits of their research or instruction to students, businesses, industries, or other Wyoming residents are described in detail below.

Allocation strategy	Number of Permanent Positions	College/Academic Unit	Names
Education	3	Education	Dr. Cynthia Brock, (elementary literacy education), Dr. Richard Kitchen (mathematics education), Dr. Timothy Slater (science education), 1 (one) Vacant (literacy education) <i>Filled for FY24</i>
Economic and Social Challenges facing Wyoming: Energy, Natural Resources, Wildlife Science, Earth Sciences, Health Sciences, Agriculture, Engineering	11	Law/Haub School of Environment & Natural Resources Haub School of Environment & Natural Resources Health Sciences Agriculture, Life Sciences and Natural Resources Engineering & Physical Sciences	Temple Stoellinger (law/energy) Dean John Koprowski (ecology, conservation, & management of biodiversity), Dr. Kevin Monteith (wildlife), Dr. Steven Smutko (collaborative resource management) Dr. Christine Porter (community and public health) Dr. Bryant Smalley (rural health) Dr. Bledar Bisha (food microbiology) Dr. Cynthia Weinig (botany) Vacant (disease ecology) <i>Filled for FY24</i> Dr. Dario Grana (geology/geophysics), Dr. Bryan Shuman (geology/geophysics), Dr. Mohammed Piri (petroleum engineering)
Other Disciplines important to the state and region and its history and culture: Business, Arts & Humanities, Mathematics, Cultural Studies, Economics, Law	4	Business/Economics Law Arts & Humanities	Dr. David Finnoff (economics), Dr. H. Jo Albers (economics) Danielle Cover (civil legal services/law) Dr. Scott Henkel (humanities)

FY 2023 Accomplishments of Wyoming Excellence Chairs

COLLEGE OF EDUCATION

The four (4) permanent positions that reside in the College of Education focus on literacy, science education, and mathematics education. The individuals who hold these positions are developing and leading nationally recognized programs in these fields and are expected to be magnets for attracting the best and brightest junior faculty and students into these critical areas of teaching need in Wyoming. These positions represent three (3) Wyoming Excellence chairs that are statutorily required to be in the College of Education. Dr. Leslie Rush has accepted the one (1) 2023 vacant position and her activities will be provided in the 2024 report.

Dr. Cynthia Brock, (Ph.D. in Educational Psychology, Focus: Literacy & English Learners, Michigan State University) *Wyoming Excellence Chair in Literacy Education*.

Across the past year, Dr. Brock worked with Dr. Kim Gustafson (Interim Executive Director of the Literacy Research Center and Clinic) to develop and/or maintain collaborative research/professional literacy learning partnerships in schools in the following counties: Teton, Sublette, Fremont, Uinta, and Albany.

Working in conjunction with Dr. Ana Houseal, Drs. Houseal and Brock successfully implemented the sixth year of the College of Education Academic Writing Fellows Initiative. Dr. Brock also gave a presentation focused on crafting a scholarly line of research to the University of Wyoming Academic Writing Fellows group led by Dr. Rick Fisher. Dr. Brock served as a member of the LRCC Outreach Board in 2022, and she began the lengthy and time-consuming process of chairing two College of Education search committees during the fall of 2022 (LRCC Executive Director & Adolescent Literacy Endowed Chair).

In addition to providing service to the UW College of Education, Dr. Brock provides service at the state and national levels. For example, Dr. Brock completed her third year serving as a member of the Board of Directors for the Literacy Research Association, which is the premier literacy research organization in the U.S. She was one of the founding members of the Bourdieu SIG at AERA (and served on the initial Executive Committee for the AERA Bourdieu SIG) as well as the Program Chair for 2022 Bourdieu SIG presentations. Dr. Brock completed five external reviews for colleagues in the field of literacy seeking promotion from assistant to associate or associate to full professor of literacy at the following institutions: Washington State University, University of Chicago Illinois, Oakland University, University of Missouri-St. Louis, and University of Kentucky. Dr. Brock completed the foreword for a literacy-related book written by an Australian colleague. In 2022, Dr. Brock served as a member of the Wyoming Department of Education English Language Arts Standards Revision Committee. She also serves on the Board of Directors for the *Wyoming English Language Arts Council*. With LRCC colleagues, Dr. Brock co-organized, and co-ran the 2022 Annual LRCC Literacy Conference.

Dr. Brock was co-organizer for the 2022 International Positioning Theory Conference held in Buffalo, NY. As well, she sponsored a group of UW literacy doctoral students to attend and co-present at the 2022 International Positioning Theory Conference. Dr. Brock also sponsored a group of UW literacy doctoral students to attend and co-present research at the 2022 Literacy Research Association (LRA) Conference. During 2022, Dr. Brock served as a member of the Core Project Team, for the Wyoming St. Stephen's Indian School B.I.E. multi-year grant and she is the leader of the research team for that grant. Working collaboratively with Rob Black & Lori Pusateri-Lane (WDE), the Northern Arapaho and Eastern Shoshone Business Councils, and Kim Gustafson (UW), Dr. Brock is leading the K-3 American Indian Education for All Disciplinary Literacy Initiative. (The research team for this

project raised \$60,000 across various external partners to fund this project.) Dr. Brock co-wrote a Spencer Large Grant with four colleagues in Australia, New Zealand, and the U.S. (not funded). She co-wrote two books (one U.S. focused book with Guilford Press & one international book with Routledge), and three Quartile 1 refereed journal articles [*Journal of Writing Research* (Q1), *The Reading Teacher* (Q1), *Asia Pacific Journal of Education* (Q1)]. Dr. Brock's state, national, and international scholarly work benefits the teacher educators and educators she serves in the state of Wyoming because her ongoing learning and development informs the nature of the work that she does with teacher educators, educators, administrators, and children in the state of Wyoming.

Dr. Richard Kitchen, (Ph.D. Curriculum & Instruction Mathematics Education, University of Wisconsin-Madison) *Wyoming Excellence Chair in Mathematics Education*.

In the 2022-23 academic year, Dr. Kitchen continued in his role as the coordinator of both the Ph.D. and Ed.D. degree programs in Mathematics Education at the University of Wyoming. In Fall 2023, 25 students will be enrolled across the Ph.D. and Ed.D. degree programs in Mathematics Education, 10 in the Ph.D. program and 15 in the Ed.D. program. The vast majority of students in the Ph.D. degree program in Mathematics Education live and work in Wyoming, while four students in the Ed.D. program live and work in Wyoming. Also, during 2022-23, Dr. Kitchen was the lead author of a grant proposal that was submitted to the National Science Foundation (pending). The goal of the proposal is to develop and investigate the Discursive Mathematics Protocol, an instructional protocol in mathematics designed for use during problem-solving based lessons with multilingual learners.

In 2022-23, Dr. Kitchen published five refereed journal articles and two book chapters. He collaborated with graduate students and junior faculty on these scholarly publications; Two co-authors on an article published in *Research in Mathematics Education* (Q1) were UW graduate students. Dr. Ali Bicer, junior faculty member in the UW School of Teacher Education, is the fourth author of a manuscript currently under review for publication in *Mathematics Education Research Journal* (Q1). In addition, Dr. Kitchen made seven professional presentations in 2022-23, including an international presentation at the 16th International Conference of The Mathematics Education for the Future Project, King's College, Cambridge, United Kingdom. He also presented at the 2023 Wyoming ESL/DLI Conference held in Casper, Wyoming and made an invited presentation at the TODOS: Mathematics for All 5th National Conference. In Fall 2022, Dr. Kitchen sponsored a UW Ph.D. student in mathematics education to present research that she conducted with him at the 44th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education held in Nashville, Tennessee.

In the UW College of Education, Dr. Kitchen served as the Co-Chair with Dr. Courtney McKim of the Education Summit conference held in March 2023. Nationally, Dr. Kitchen collaborated with the Los Alamos National Laboratory Math & Science Academy to offer professional learning workshops in mathematics for elementary and middle school teachers. Dr. Kitchen also led professional development activities for teachers who work in Denver and Española, New Mexico on the Discursive Mathematics Protocol. Internationally, Dr. Kitchen served as an External Reviewer for the Swiss National Science Foundation and the Japan Society for the Promotion of Science Joint Research Projects. He also served as an external reviewer for three faculty members at universities located throughout the United States who were being considered for tenure and/or promotion.

Dr. Leslie Rush, (Ph.D. Reading Education, University of Georgia) *Wyoming Excellence Chair in Literacy Education (effective 8/24/2023 for FY24)*.

Dr. Timothy Slater, (Ph.D. Geological Sciences, University of South Carolina) *Wyoming Excellence Chair in Science Education*.

Dr. Slater is a Professor in the College of Education's School of Teacher Education and Adjunct Professor in the Department of Physics & Astronomy. Dr. Slater is a prolific author being cited thousands of times in academic papers from international scholars, having published more than 100 refereed journal articles, 31 books, and presented hundreds of papers at conferences, often with his graduate students as co-authors, describing his scholarly research on understanding the underlying cognitive mechanisms related to teaching and learning in introductory science survey courses taught to undergraduates and future teachers. An expert in enhancing STEM and CTE education for high-risk and indigenous students both in Wyoming and across the Pacific-islands, Professor Slater serves as the Editor-in-Chief for the Journal of Astronomy & Earth Sciences Education and serves as the Senior writer for the Society of College Science Teachers. Winner of numerous national awards—including being distinguished as a Sequoia Fellow of the American Indian Science and Engineering Society (AISES) – he is frequently an invited speaker at education conferences worldwide. In addition to working closely with school districts around the state, he teaches graduate-level courses in evidence-based education research methods and the learning sciences for the College of Education each year to teachers across Wyoming. Along with Wyoming graduate students, he further impacts the state by conducting numerous summer and weekend professional development workshops for K-12 teachers across Wyoming. This past year, his outreach efforts have focused on expanding a nascent statewide drone education program, featuring workshops and community education festivals highlighting the teaching of STEM and Career Technical Education in classrooms, and has been awarded extramural funding to support this work supporting Wyoming K-12 teachers and students to learn to engineer and fly drone quadcopters and earn FAA certifications in the service of enhancing Wyoming's emerging technical workforce.

ECONOMIC AND SOCIAL CHALLENGES FACING WYOMING: ENERGY, NATURAL RESOURCES, WILDLIFE, SCIENCE, EARTH SCIENCES, HEALTH SCIENCES, AGRICULTURE, ENGINEERING

Dr. Bledar Bisha, (Ph.D. Food Science and Technology, Iowa State University) *Wyoming Excellence Chair in Animal Science*.

Dr. Bisha's research focus and interests are on post- and pre-harvest food safety microbiology. His work supports the aim to reduce the burden of foodborne illness, using multifaceted approaches, including but not limited to improved diagnostics and surveillance, improved processing technologies, and elimination/reduction of the sources of contamination. Dr. Bisha has directed his efforts towards the development of effective detection and control strategies for foodborne microorganisms, understanding the ecology of foodborne pathogens and antimicrobial resistance, multi-omics (i.e., genomics, proteomics, cytomics) approaches to understand food safety issues and foodborne pathogens, microbial source tracking, culture-independent and molecular methods, microfluidics, and the study of microorganisms at the single cell level.

Highlights of Dr. Bisha's accomplishments during the 2022-2023 academic year include the acquisition of approximately \$700,000 in external funding to support research efforts of his group. Dr. Bisha leads the SARS-CoV-2 wastewater surveillance effort at the University of Wyoming in close collaboration with the Wyoming Department of Public Health and helps provide real-time data to support public health measures statewide. In 2022 and early 2023, he published or submitted for publication five peer-reviewed journal articles, two book chapters, and four conference abstracts. In 2022, Dr. Bisha was awarded the Distinguished Alumni Award from

Iowa State University. During this period, he has mentored five graduate and two undergraduate students, two technicians, and two graduate MCLS rotation students. He has lent his expertise at the national and international level by serving on grant panels for USDA-NIFA, assisting as an external reviewer for multiple tenure and promotion cases, and being selected to serve as a higher education expert and advisor for universities internationally through the READ (Research Expertise from the Academic Diaspora) program.

Vacant, Wyoming Excellence Chair in Civil Engineering.

Dr. David Pascual, (Ph.D. Philosophy, University of Mississippi) ***Wyoming Excellence Chair in Disease Ecology.*** (effective 8/24/2023 for FY24).

Dr. Dario Grana, (Ph.D. Geophysics, Stanford University) ***Wyoming Excellence Chair and School of Energy Resources Associate Professor in Geology and Geophysics.***

Dr. Grana's research areas of interest include modeling and characterization of the subsurface for energy and natural resources using geophysical and data science methods. Subsurface geophysical characterization aims to predict rock and fluid properties to quantify energy and natural resources volume and spatial distribution. Reservoir modeling methods are also used for monitoring to detect the temporal variations of geological properties and processes. Dr. Grana applies innovative modeling methods to hydrocarbon reservoir, carbon dioxide (CO₂) storage, and groundwater aquifer studies to estimate the rock and fluid behavior in the subsurface and optimize the exploitation of energy and natural resources. Dr. Grana's research has been applied to a CO₂ sequestration project near Rock Springs and a mountain watershed study in the Laramie Range. The main contribution of Dr. Grana's research is the improvement of the accuracy of the predictions and the reduction of the uncertainty in the model predictions and associated risk analysis. Dr. Grana published 12 peer reviewed papers in the academic year 2022-23 and delivered several talks in universities and international conferences in the United States and Europe. Dr. Grana currently teaches three classes in the Department of Geology and Geophysics and the School of Energy Resources: an undergraduate level class on the basic concepts of exploration geoscience, an undergraduate class on quantitative reasoning, and a graduate class on mathematical methods for geoscience. Dr. Grana's classes at the University of Wyoming contribute to the formation of the new generation of scientists, including geoscientists and engineers who aim to work in the sector of energy and natural resources.

Dr. John Koprowski, (Ph.D. Biology [Systematics and Ecology], University of Kansas) ***Wyoming Excellence Chair in Environment and Natural Resources***

Dean Koprowski joined the University of Wyoming as a Wyoming Excellence Chair in October 2021, moving from the University of Arizona where he had spent 20 years ending as the Director of the School of Natural Resources & the Environment. He is a Certified Wildlife Biologist (The Wildlife Society) and is an elected Fellow of the American Association for the Advancement of Science, The Wildlife Society and the Linnean Society of London, the first person to be elected to Fellow status in these 3 organizations. He also received The Wildlife Society's highest honor, the Aldo Leopold Memorial Medal and Award for his lifetime of achievements in the conservation and management of wildlife. His scholarship focuses on community-based conservation approaches to wildlife management that involve local people in creating sustainable solutions...an excellent match with the Haub School's mission to make a difference for our wild and working lands through interdisciplinarity and collaboration. His commitment to provide training through such approaches to UW students continues with his mentorship of five graduate students, 4 undergraduates and 1 postdoctoral researcher in his research laboratory. In 2022-23, Dean Koprowski published 11 peer-reviewed articles and signed 2

scholarly book contracts. Dr. Koprowski assisted the Haub School through the challenges of the pandemic and economic downturn by expanding connections across campus, service to the state, and partnerships around the globe. He developed and have overseen the initiation of WORTH (Wyoming Outdoor Recreation, Tourism and Hospitality) initiative with the College of Business to connect the Haub School most directly to the second leading economic driver of Wyoming. He joined with UW's office of global engagement to initiate international partnerships that will provide numerous opportunities for our students in Mongolia and Uzbekistan and presented invited talks on the importance of conservation partnerships to rotary clubs, community organizations and universities in the USA and Mongolia. Dean Koprowski is honored to serve as a Wyoming Excellence Chair and continues to seek expanded impact through partnership and collaboration.

Dr. Kevin Monteith, (Ph.D. Biological Sciences, Idaho State University) *Wyoming Excellence Chair in Environment and Natural Resources.*

Monteith was promoted to Professor in 2022 in the Haub School of Environment and Natural Resources, with a joint appointment in the Wyoming Cooperative Fish and Wildlife Research Unit and the Department of Zoology and Physiology. Monteith joined the faculty at the University of Wyoming in 2015 and was named a Wyoming Excellence Chair in 2021. Monteith's research program is focused on addressing important, timely, and often vexing questions in natural resource management to offer sound insight into strategies for wildlife conservation while simultaneously striving to advance scientific thought. His research group, the [Monteith Shop](#), works hand-in-hand with natural resource agencies to address questions that have direct links to land and population management, and maintain strong ties to non-profits and foundations within the state and beyond. Support in external funding was \$1.7 million in 2022. Monteith's collaborative research was featured in 11 scientific publications in 2022, ranging from top ecological journals to more applied outlets. Moreover, Monteith's program works hard to communicate findings not only to the scientific community, but also to stakeholders outside of the academic community who interface with wildlife policy. And in addition, they work hard to make science accessible to the public, participate in multiple K-12 classroom visits, and continue to develop educational pieces for K-12 classrooms. Moreover, their co-produced film [Deer139](#) continues to broaden its reach and they co-produced the film [The Road Less Traveled](#) to communicate the challenges that deer face in a changing world and help nonprofit partners raise money for wildlife crossings. The Wyoming Wildlife Fellowship Program was initiated in 2021, is a collaborative endeavor between the Monteith Shop in the Haub School and the Wyoming Game and Fish Department. It is in its second successful year to provide immersive and experiential opportunities to undergrads in a natural resource field. The program provides fellows with direct links to field opportunities, seasonal jobs, dedicated instruction to bolster critical thinking and soft skills associated with communication, a generous stipend, and ideally, produces high-end graduates that are prepared for a career and highly competitive in the job market. During 2022, the Monteith Shop was recognized as 'Partner of the Year' by the Wyoming Wildlife and Natural Resource Trust—one of the leading conservation practitioners and influencers in the state of Wyoming. Monteith is honored to serve as a Wyoming Excellence Chair and blessed to continue to serve the state of Wyoming and her natural resources.

Dr. Mohammad Piri, (Ph.D. Petroleum Engineering, Imperial College London) *Wyoming Excellence Chair in Petroleum Engineering and Thomas and Shelley Botts Endowed Chair in Unconventional Reservoirs in the College of Engineering and Applied Sciences and Alchemy Sciences Petroleum Engineering Chair.*

In the 2022-2023 fiscal year, Prof. Piri and members of his research group disseminated their research results through approximately fifteen (15) papers published (or accepted for publication) in peer-reviewed journals and with approximately twenty (20) more manuscripts that are either submitted or in preparation. Prof. Piri and his

research team continued further development of the world's most advanced Center of Innovation for Flow through Porous Media (COIFPM) located at University of Wyoming's (UW) High Bay Research Facility. In this period, he, in close collaboration with The Dow Chemical Company, established a \$25 million (to be matched dollar-for-dollar to become \$50 million) research and field pilot testing project that is titled 'The Wyoming Gas Injection Initiative (WGII)'. The Initiative has been approved to receive the funds from the State of Wyoming (State) to implement, in close collaboration with The Dow Chemical Company and oil and gas operators, multiple field pilot projects in the State of Wyoming. The initiative involves field pilot testing of advanced enhanced oil recovery technologies, such as foam-assisted gas injection using recovered hydrocarbon gases, carbon dioxide, or other gases, for revitalization of oil fields as well as mitigation of greenhouse gas emissions by operations in the State. It also includes laboratory-scale de-risking of the recovery schemes, both research and technical services using site-specific rock and fluid samples at relevant field implementation conditions, at the world-leading Center of Innovation for Flow through Porous Media of the University of Wyoming. Both components (field pilot testing and laboratory-scale studies) will receive funding to advance implementation. This grant will fund projects over a 3-to-5-year period to enhance well productivity and recovery from existing fields/well in the State that are in significant decline. The funding will support the operators for field implementation and the university for the laboratory work. Prof. Piri's external research funding exceeds \$24 million.

His research group currently includes twenty-seven (27) Ph.D. students, fourteen (14) post-doctoral research associates, and four (4) staff members. In this period, Prof. Piri recruited at least ten (10) high-caliber Ph.D. students, most of whom have significant opportunities to also learn from graduating students. During the calendar year 2022, COIFPM held numerous preliminary exams and final thesis defense sessions for its Ph.D. students. Prof. Piri graduated, in collaboration with his colleagues at UW, seven (7) Ph.D. students. He taught two classes: 1) Flow through Porous Media and 2) Hydrogen Geostorage.

Prof. Piri's specialty is multiphase flow through porous media with applications in oil and gas recovery from unconventional and conventional reservoirs, pore-scale modeling of displacement processes, wettability, CO₂ sequestration and leakage, and Hydrogen storage. Prof. Piri's expertise and research findings have direct relevance to enhancing oil and gas recovery from the reservoirs in the State of Wyoming and elsewhere. Since joining UW in 2005, he has designed, installed, integrated, and commissioned three unique research facilities that have put the University of Wyoming at the forefront of research in the area of flow through porous media. These research facilities include Encana Three-Phase Flow and Computed Tomography Research Laboratory, Hess Digital Rock Physics Laboratory, and the Center of Innovation for Flow through Porous Media. These platforms provide UW students with exceptionally rich research and educational experiences that are seldom available elsewhere. Prof. Piri also leveraged these to attract three new faculty members to the Petroleum Engineering program at UW. Furthermore, he has been diligently working on commercialization of the technologies developed in his research group at the University of Wyoming. This has been made possible by a spin-off company, Piri Technologies, LLC, in Laramie, Wyoming. UW is an equity owner of this company. This entity provides distinctive technical services in the broad area of Flow through Porous Media. Through this initiative, Prof. Piri has established an avenue for diversification of the economy in the State of Wyoming as well as creating job opportunities for UW graduates and others. Since the start of its operations in September 2017, Piri Technologies has developed several projects with large national and international corporations. This indicates that its technologies are relevant globally. It currently employs seven (7) full-time and three (3) part-time, highly talented professionals with advanced degrees. Six (6) of these full-time employees are University of Wyoming graduates. Furthermore, in March 2022, and in close collaboration with UW, Prof. Piri founded a new company (Digital Pore Solutions, LLC) as a subsidiary of Piri Technologies, LLC to commercialize software-based Intellectual Properties conceived in his research group. The entity is focused on digitizing porous materials and computing

flow and transport in them. Prof. Piri successfully developed a series of agreements with UW to formalize the initiative. The new company is focused on the computational aspects of flow through porous media taking advantage of high-performance computing and data processing and visualization techniques, state-of-the-art multi-GPU systems, and other advanced methods and hardware. Prof. Piri is currently the President of Piri Technologies and Digital Pore Solutions. Since the start of its operations in mid-2022, Digital Pore Solutions has developed, in close collaboration with Piri Technologies, several projects that are focused on application of Digital Rock Technologies in real-world field development projects.

Dr. Christine M. Porter, (Ph.D. Community Nutrition, Cornell University) *Wyoming Excellence Chair in Community & Public Health.*

Dr. Porter has been with the Division of Kinesiology & Health since 2010. She teaches about public health and food systems while leading action and research in those areas with support from over \$8 million in external funding. Publications this year (3) share results from these studies and co-editing a special journal section on solving college student food insecurity. That section included a UW student as a co-editor and another as a lead author. The BoT also approved a new online graduate certificate in community and public health. It already has 2 graduates, 14 students enrolled, and (at the most recent count) 16 applicants. Nationally, this has been Porter's last year of chairing a Kellogg-endowed network of food systems academics called INFAS. The network gave her its "overall impact award," including for co-founding two national mentored graduate fellowship programs in partnership with the Intertribal Agriculture Council and Tuskegee University. She most recently co-led a team of these and other partners in a \$20m proposal to USDA (currently in review) to support diversifying who enters food system, environment and natural resources professions.

Dr. Bryant Smalley, (Ph.D. PsyD. Clinical Psychology, Nova Southeastern University) *Wyoming Excellence Chair in Rural Health.*

Dr. Smalley is the Wyoming Excellence Chair in Rural Health and Professor of Public Health in the College of Health Sciences. Dr. Smalley is a licensed clinical psychologist and rural health expert whose work focuses on collaboratively identifying and addressing health inequities that particularly impact rural communities. Dr. Smalley joined the University of Wyoming in Fall of 2022 and quickly began seeking funding to support rural-focused work to improve health in Wyoming communities.

Within one month of his start date, he received a \$3 million federal grant from the Health Resources and Services Administration (HRSA) to start the first Community Health Worker (CHW) training program in Wyoming. This statewide collaborative is creating a new certified healthcare profession within the State that will allow individuals with a high school diploma or GED to become a part of the healthcare workforce through the training program. CHWs are members of communities disproportionately impacted by health conditions who become trained advocates for their community members, helping them navigate their healthcare system, access resources, and learn how to best manage their health conditions. The first cohort, which includes 25 trainees, began June 30th, and will produce a new workforce focused on improving health across Wyoming's rural and frontier communities. The program involves collaborators from many sectors, including the State of Wyoming Division of Public Health, the State of Wyoming Department of Workforce Services, the State of Wyoming Apprenticeship Expansion Program, the Wyoming Primary Care Association, the Wyoming Hospital Association, the Educational Health Centers of Wyoming, the Cheyenne Family Medicine Residency, the Casper-Natrona County Health Department, the Laramie County Community College, the Wyoming Community College Commission, and Wind River Cares (a healthcare system on the Wind River Indian Reservation).

In January 2023, Dr. Smalley received an additional \$375,000 grant from the Fund for Health Equity to increase access to chronic disease self-management services in Laramie, Casper, and Cheyenne, with a particular focus on providing services to individuals who are not otherwise able to access care. In addition to directly providing services in Wyoming, the grant will provide hands-on training opportunities for graduate students.

During his first year, Dr. Smalley also submitted two additional grants. The first was a \$10.1 million grant to the National Institutes of Health to start a Center of Excellence for Rural and Frontier Health Research designed to increase capacity across UW to address rural and frontier health needs in Wyoming. The second was a \$5 million grant to HRSA that would establish a statewide Maternal Health Innovation Program (MHIP). The project represents a close collaboration with the Wyoming Department of Health (specifically the Public Health Division). If funded, the MHIP would develop a statewide strategic plan to improve maternal health outcomes, enhance state-level maternal health data and surveillance to guide ongoing activities, and identify, implement, and research the impact of innovations in clinical care, workforce development, data collection, and community engagement to improve maternal health outcomes in Wyoming.

In addition, Dr. Smalley was asked by Springer Publishing Company to update his seminal text *Health Equity: A Solutions-Focused Approach* after it exceeded all performance expectations. He is now under contract to produce the 2nd edition of the text.

In summary, in just his first year as Wyoming Excellence Chair in Rural Health, Dr. Smalley received \$3.4 million of grant funding and submitted an additional \$15 million of grants with funding decision pending, all focused directly on improving health within rural Wyoming. He has also been contracted for the second edition of an important text. Across this work he has engaged more than a dozen partners to ensure his work is having a statewide impact.

Dr. Bryan Shuman, (Ph.D. Geological Sciences, Brown University) *Wyoming Excellence Chair in Geology and Geophysics*.

Dr. Shuman has taught in the Department of Geology and Geophysics at the University of Wyoming since 2007 and works with undergraduates, graduate students, and post-docs to study the geological record of past climate changes and their influence on water and ecosystems. Shuman has published over 115 peer-reviewed journal articles, including 5 new publications in 2022. His past awards include a National Science Foundation CAREER award. Shuman is currently co-leading a \$20 million grant, received from the National Science Foundation EPSCoR program in 2022, which is enabling faculty and students in disciplines from atmospheric science to economics to help Wyoming communities anticipate and respond to ongoing climate and hydrologic changes. As part of this project, Shuman coordinated a stakeholder workshop on the future of the Snake River at the UW-National Park Service Research Station at the end of August 2022. Outcomes include ongoing collaboration with a range of agencies and organizations to anticipate, monitor, and respond to changes in Wyoming's portion of the Snake River and to learn from these outcomes to develop similar programs focused on the Green and Wind rivers. In 2022, Shuman also presented results from the 2021 Greater Yellowstone Climate Assessment, which he helped write, to the State Engineer's Office Wyoming Water Forum, the Snake River Agency coordinating meeting, the cutthroat trout interstate coordinating group, the Geologists of Jackson Hole, the Wyoming Outdoor Council's Wyoming Climate Summit in Lander, and the Department of Energy Lawrence Berkeley National Lab's Watershed Function Science team. Feedback from these and other groups are driving projects for 2023, including a new collaboration with the Lawrence Berkeley National Lab.

Overall, Shuman’s research includes work placing recent temperature, drought, snowpack, and wildfire trends in the long-term context of natural environmental variations recorded by geological evidence since the last ice age. For example, in 2022, Shuman and his students published results showing that the hydrology of the northern Rocky Mountains has changed substantially over the past 2000 years and that millennia-long droughts have previously reduced the water supply in Wyoming’s Snowy Range. This work, as well as another ongoing project focused on past changes to Wyoming’s permanent snowfields, highlights the risk to critical water supplies in the future. These projects enabled Shuman to develop a new class-based research experience for UW undergraduates, which was taught in the new UW Science Initiative Building labs, and enabled Wyoming students to learn and apply cutting-edge techniques in geochemistry and sedimentology to investigate how our natural resources have changed over the past >14,000 years. Shuman and his students are conducting field-based research about past environmental changes in the Bighorns, Beartooths, Wind River Range, and the Snowies as well as other sites in Colorado and Montana, the Great Lakes region, and New England. The work confirms significant climate-related challenges ahead for Wyoming, its citizens, and its landscapes, and underscores the need to develop adaptation and mitigation strategies.

Dr. L. Steven Smutko, (Ph.D. Economics, Auburn University) *Wyoming Excellence Chair and Eldon & Beverly Spicer Chair in Environmental and Natural Resources*).

Dr. Smutko carries out a research, teaching and outreach program in policy development and public decision-making in natural resources management. He also serves as the Associate Dean for Academic Programs in the Haub School of Environment & Natural Resources. Dr. Smutko's outreach work focuses on engaging with local governments, state and federal agencies, and the private and nonprofit sectors to enhance participatory decision-making on complex and often contentious environmental and natural resource policy issues. Dr. Smutko's research activities focus on understanding how collaborative processes can lead to better public policy decisions. In FY 22-23 Dr. Smutko led a study to gauge public perceptions of carbon management technologies in Wyoming with the goal of engaging policy makers and communities in informed discussions to help improve the siting and operation of these technologies as the carbon management sector continues to grow. As a Co-Investigator on a Department of Energy grant (Engaging Wyoming Communities in an Environmental Justice Approach for Advanced Nuclear Energy Facility Siting, CFA-22-27138), Dr. Smutko initiated research on the development of protocols for public engagement in siting advanced nuclear facilities. He also participated in another DOE grant proposal focusing on community engagement in nuclear waste siting. For his outreach work Dr. Smutko convened the “Water and Collaboration in Wyoming and the West,” a symposium to foster collaboration in water management decisions. Dr. Smutko also organized the Ruckelshaus Institute Fellowship to foster the creative and impactful work of scholars and practitioners engaged in environmental and natural resources policy and management in support of the Ruckelshaus Institute mission. He continues to teach courses in negotiation, negotiation analysis, and decision analysis at UW. He also oversees the Collaboration Program in Natural Resources, a yearlong series of professional development workshops attended by natural resources professionals in the public, private and nonprofit sectors in Wyoming and adjacent states.

Temple Stoellinger, (J.D. with honors, University of Wyoming College of Law) *Wyoming Excellence Chair in Law & Haub School*.

Professor Stoellinger is an Associate Professor in the Haub School of Environment and Natural Resources with a joint appointment at the College of Law where she is also the Co-Director of the Gina Guy Center for Law and Energy Resources in the Rockies. Professor Stoellinger oversees the Haub School’s JD/MA program, a joint master’s degree offered in collaboration with the Law School, and she is also an Adjunct Faculty member with the School of Energy Resources. Professor Stoellinger’s teaching, research and outreach continue to have a direct and impactful benefit to the State of Wyoming. During the Fall 2022 semester she taught Environment and Natural

Resource Law and Policy (ENR 4750/5750) along with two new graduate natural resource policy courses Public Lands (ENR 5890(02)) and NEPA Law and Policy (ENR 5890(01)). During the Spring 2023 semester, Professor Stoellinger was on sabbatical, based in Salzburg Austria. While on sabbatical, Professor Stoellinger researched the European legal framework for wildlife conservation and developed a comparative analysis of the US and EU wildlife law frameworks. Through her sabbatical research Professor Stoellinger has developed an extensive network with European number wildlife policy makers, practitioners, and academics.

Professor Stoellinger's scholarship continues to focus on environmental and natural resource law and policy, with emphasis on wildlife law, land conservation, and energy law. Her scholarship this past year include the publication of the following articles: Shawn Regan, Temple Stoellinger, and Jonathan Wood, [*Opening the Range: Reforms to Allow Markets for Non-Use of Federal Grazing Permits*](#), 1-2023 UTAH L. REVIEW 197 (2023); Temple Stoellinger, "Federal Public Land Agency NEPA Authorities: The Current State of Affairs," Public Land Law, Regulation, and Management 2-1 (Fdn. For Nat. Res. & Energy L. 2022); Arthur Middleton, Temple Stoellinger, Drew Bennett, Laura Giglotti, Sam Maher, Travis Brammer, Hilary Byerly, and Bryan Leonard, [*The Role of Private Lands in Conserving Yellowstone's Wildlife in the 21st Century*](#), 22(2) WYO. L. REV. 237 (2022); Temple Stoellinger, *The Case for Conservation Leasing*, Trends, A.B.A. NATURAL RESOURCE & ENVIRONMENT, (Spring 2023); Temple Stoellinger, [*Reciprocity and Sovereignty: An Interview with Wes Martel on Tribal Wildlife Conservation*](#), WESTERN CONFLUENCE (2023). Additionally, Professor Stoellinger and Haub School Advisory Board Member Rebecca Watson, compiled an extensive National Environmental Policy Act electronic resource and repository that is available for purchase through the Foundation for Natural Resources and Energy Law. As co-director of CLERR, Professor Stoellinger organized the [*2022 Landscape Discussion on Energy Law and Policy in the Rockies*](#), which was attended by over 200 participants and covered the following topics: developments in hydrogen energy development, oil and gas law and policy, federal and Wyoming carbon capture utilization and storage law and policy, renewable energy policy. Keynote speakers included Governor Gordon, DOI Deputy Secretary Tommy Beaudreau, and Director of the DOE Office of Indian Energy, Wahleah Johns. Professor Stoellinger is a member of the UWYO Graduate Council and is the Chair of the Haub School's Graduate Committee. She is also a member of the Foundation for Natural Resources and Energy Law's Natural Resources Law Teachers Committee and was just asked to join the American Bar Association's Natural Resources and Energy Editorial Board.

Dr. Cynthia Weinig, (Ph.D. Ecology, Evolution, and Behavior, Indiana University) *Wyoming Excellence Chair in Botany*.

Dr. Weinig is a Professor in the Departments of Botany and Molecular Biology, and in the Program in Ecology. Her research focuses on plant evolutionary genetics, that is, the genetic underpinnings of plant performance in natural or agricultural settings. In the past year, she worked as a co-Principal Investigator on a \$20M NSF EPSCoR Track I award examining the diversity and function of microbes found on Wyoming landscapes (where microbes can be defined simply as organisms that cannot be observed with the naked eye). Also in the past year, she led as the Principal Investigator a \$3.5M NSF Plant Genome award testing how microbes may promote growth of crop plants. Dr. Weinig's research funded by the WY Excellence Chair in the past year also focused on the interaction between plants and microbes, in particular if plants have the capacity to "sanction" or exclude some microbes from the rootzone while promoting microbes that will improve their (the plant's) growth.

By way of background: When growing in agricultural or natural field settings, plants interact with complex microbial communities. As many as ten billion microbial organisms are present in each gm of soil, meaning that soil in the immediate proximity of plant roots harbors abundant microbial life and is the site of continuous host

plant-microbe interactions. Not only are microbes highly abundant in soil, but also their communities are exceptionally diverse, with a gram of soil including thousands to tens of thousands of microbial species. As a consequence of this taxonomic diversity and associated differences in their functions, microbes can have pronounced negative or positive effects on the growth of plants with which they interact. Her research seeks to identify both the plant traits that may attract beneficial microbes as well as the plant growth responses to the presence of microbes. The research focus of her lab is currently expanding to examine plant-microbe interactions in the context of Controlled Environment Agriculture, a relatively new approach to agriculture that is a state priority.

Dr. Weinig's lab hosted several UG researchers in the past year as well as several graduate students and postdoctoral fellows as collaborators on her research. Further, plant-microbe research was used to illustrate multiple concepts in a large-enrollment undergraduate class, Genetics (LIFE 3050) that she teaches; direct application such as these are known to enhance student engagement, learning outcomes, and retention. Dr. Weinig's lab members, including a former Wyoming Research Scholar, published 4 papers in the past year on plant-microbe interactions in top-tier subject area journals. Past students have recently entered jobs at Plenty and West Inc.

OTHER DISCIPLINES IMPORTANT TO THE STATE AND REGION AND ITS HISTORY AND CULTURE: BUSINESS, ARTS & HUMANITIES, MATHEMATICS, CULTURAL STUDIES, ECONOMICS, LAW

Dr. Heidi J. Albers, (Ph.D. Economics, University of California at Berkeley) *Wyoming Excellence Chair in Economics*.

In the 2022-2023 academic year, Dr. Albers taught her core PhD course in Natural Resource Economics and her advanced undergraduate course in Environmental Economics, in addition to providing guest lectures for Economics' Research Methods and the Program in Ecology's Ecology and Society courses. Her teaching benefits students by giving them strong decision analytic tools that empower them to make well-developed arguments for their positions, improve their decision-making, and help them achieve employment success. To further foster students' educational growth, Dr. Albers used her Excellence funding for graduate students and recent graduates for various experiences including summer work, conference presentation experience, and publishing, which provides students with important learning/networking, develops marketable skills, and deepens understanding of tools and issues. The funding enriches the students' educational programs by enabling them to explore topics and develop skills differently than classroom work and by providing experience with analytical tools that employers value. Through these experiences, students become stronger contributors to Wyoming's economy and resource management debates. In 2022-2023, Albers advised, or served on the committees for, 4 graduate students and mentored former students as they navigate their careers. She also served as a mentor to students and junior faculty on campus, as through UW's Diverse Graduate Student Mentorship program, and worldwide, as through her work with women in economics through the Environment for Development Initiative's WinEED and the ASSA's CSWEP. She also conducted Center Reviews at 3 EfD Centers (India, Kenya, and Ethiopia).

Dr. Albers maintains an internationally respected research agenda based around determining biodiversity conservation and resource management strategies that integrate socio-economic, ecological, and institutional characteristics of the setting. Her current projects include analysis of pollinators and pest-control services, migratory species conservation policy, reserve siting with consideration of people's threats, and marine conservation and livelihoods. In 2022-23, she gave 4 research presentations, with two in international settings.

Her contributions to the economics, policy, and interdisciplinary literatures through editorial roles (at the *Environmental and Resource Economics*, *Ambio: A Journal of the Human Environment*, *Conservation Biology*, and *Environment and Development Economics*) enable Albers to lead research in important directions and to raise the visibility of UW's research and programs. Dr. Albers had accepted or published 9 peer-reviewed or refereed papers. Of particular note, in 2019, Albers coordinated an interdisciplinary workshop on seasonal migratory species that brought faculty from over 5 UW programs together with national and international scholars and Wyoming stakeholders. That workshop and subsequent research led to the 2023 publication of a symposium of papers on seasonal migratory species in a prominent journal that both defines research and policy directions for these conservation questions and places UW at the center of the related policy debates. In 2022-23, Albers also conducted fieldwork to define new conservation research programs in Uganda, Tanzania, and India.

Danielle R. Cover, (J.D. *Cum Laude*, Tulane University School of Law) *Wyoming Excellence Chair in Law, Director of the Civil Legal Services Clinic*.

Professor Cover was on sabbatical for the Spring 2023 semester. During her sabbatical time, she submitted proposals to the 9th Annual Legal Storytelling Conference in London, England, the ECTL Teaching and Learning Academy, and the ECTL Teaching Retreat. Professor Cover was selected to present or attend all the events. In addition, she is awaiting a decision on her application to the Democracy Lab for AY 2023-2024 and in June 2023 plans to submit a proposal to the Clinical Law Review Writer's Workshop. Professor Cover refocused her scholarly agenda to focus on ways to protect and expand democratic processes and participation through persuasive legal writing.

As Director of the Civil Legal Services Clinic, Professor Cover continues to expand the substantive case law offerings to low-income residents of the State of Wyoming and is currently exploring opportunities to train students in bankruptcy proceedings. The CLSC is a trusted and well-respected legal service provider in the state and has a close relationship with Equal Justice Wyoming, the primary funder for legal services within the state. In addition, judges in multiple counties have contacted the CLSC directly to provide representation in complex litigation involving some of Wyoming's most economically vulnerable clients. In AY 22-23, the CLSC represented fewer people than average because of Professor Cover's sabbatical; the cases represent a variety of legal matters from divorce and custody to property disputes and debt collection. In addition, the CLSC continues to provide services to transgender students on campus in a joint project with the ASUW.

Professor Cover's work has a direct positive impact on the State of Wyoming. The number of Wyoming residents eligible for free legal services continues to increase in the face of economic difficulties in the state. As one of the largest providers of pro bono legal assistance in the state, the Civil Legal Services Clinic works diligently to develop and direct the rich resources of Wyoming's College of Law toward promoting access to justice for low-income individuals. When vulnerable populations receive direct legal representation and community education, many members of those populations can overcome severe barriers to maintaining financial stability. The clinical experience promotes a practical, holistic legal education to students while re-affirming a strong commitment to public service. A semester in the CLSC also increases awareness among matriculating law students of the vast need for legal representation for people living in poverty. This in turn can influence the willingness of law students to incorporate pro bono or low bono legal assistance into their legal careers, regardless of their ultimate practice choices. Students experience first-hand how economic independence and income stability improve not only the lives of their clients but the functioning of entire communities. In-person meetings with clients and relationships with local judicial bodies, together with community outreach and education that takes the students where the clients live, work, and build their families, amplifies the benefits the CLSC program offers. Because a significant

proportion of College of Law students remain in Wyoming, many returning to the small towns from which they came, they can provide access to the legal system in ways they may not have anticipated.

Dr. David Finoff, (Ph.D. Economics, University of Wyoming) *Wyoming Excellence Chair in Economics*.

Dr. Finoff returned to his alma mater 19 years ago, and two years ago was honored to be named a Wyoming Excellence Chair and McMurry Fellow. For the academic year 2022-23, Finoff continued to work on teaching, research, service, and outreach.

Finoff taught a course for graduate students in Spring 2023, the core graduate class “Dynamic Optimization.” The class introduced new tools (theory and computational) that graduate students might direct at their own research questions, where Finoff worked to try to increase the relevance of the material to potential research areas for the students across natural resource economics, energy economics, health economics and economic growth. In Fall 2022 Finoff taught parts of 2 courses: a solo course of mathematical economics, and 1/3 of a team taught (with Sasha Skiba and Klaas van 't Veld) computational economics. Mathematical economics and computational economics are dual listed at the undergraduate and graduate levels (although predominately taken by undergraduate students). In mathematical economics, Finoff pushed to further integrate numerical analyzes throughout all parts of the course and worked to help the students gather a theoretical and computationally comprehension in the techniques and tools. Computational economics is a team-taught class with the goal of providing our students a working basis of tools in computational data analysis. Finoff’s component of the class is a rigorous section on regional economic impact and policy analysis (using IMPLAN data and the GAMS software package) with the intent of building a computable general equilibrium model of the Wyoming economy and using it to analyze the impact of a policy (or phenomena) of the students’ choice. In this, the students have recently focused their work on analyzing the impact of alternative statewide public finance schemes (such as moving away towards a different tax base portfolio) and while the development of the material was intensive, the students appear to get a tremendous amount out of the course. Finoff also chaired or co-chaired the Ph.D. committees for several Ph.D. students, advises numerous recent graduates to help them with their research program and serves on the committees of several Ph.D. and MS candidates.

Dr Finoff’s research program focused on developing public policies to improve social welfare, taking into account the coupling between human and natural systems. His research seeks to understand (1) how coupled human and natural systems co-evolve over time and space in the presence of uncertainty and market failure, and (2) how economics can use information about the coupling between human and natural systems to construct public policies in the face of uncertainty that can correct market failures and move society towards more sustainable outcomes. Finoff’s work as a Principle Investigator (with other COB colleagues) was successful in generating a proposal that was awarded a \$1 million grant from the National Science Foundation (RAISE:IHBEM Understanding and predicting behavioral responses to infectious disease risks and control policies: implications for epidemiological models and policy design) and his work as a CO-PI helped win a \$20 million NSF-EPSCOR grant for UW (WY-ACT: Anticipating the climate-water transition and cascading challenges to socio-environmental systems in America’s headwaters). Finoff was also part of another NSF team that was successful in winning another \$1million NSF grant (Predicting Emergence in Multidisciplinary Pandemic Tipping-points (PREEMPT)). His work yielded 7 refereed publications.

Finoff and his collaborators instrumental in helping the University and State of Wyoming in developing policy guidance related to the COVID-19 epidemic. Finoff presented his research to diverse groups including Wyoming

audiences (COBAB and Leadership Wyoming) and at a prestigious Greater Yellowstone Ecosystem Science conference of the National Park Service.

Dr. Scott Henkel, (Ph.D. English, Michigan State University) *Wyoming Excellence Chair in the Humanities*.

Dr. Henkel carries out a research, teaching, and outreach program that spans the humanities disciplines at the University of Wyoming and in close partnership with state partners like Leadership Wyoming, the Center for a Vital Community at Sheridan College, and federal agencies such as the National Academy of Arts and Sciences and the National Endowment for the Humanities. A faculty member in the Departments of English and African American and Diaspora Studies at UW and an expert in the 19th century literatures of the Americas and the history of the Land-Grant University mission, Dr. Henkel's research activities focus on the quality of democracy, the history and future of work, and civic engagement. Henkel has published award-winning books, as well as articles and reviews, and guest editorials for the *Casper Star-Tribune* and the *Wyoming Tribune-Eagle*. A first-generation college graduate, and current mentor to first-generation students, Henkel has also served as president of the Working-Class Studies Association. Dr. Henkel facilitates public engagement at UW and throughout the state, serving on the Wyoming Humanities Council board of directors and the editorial board of the University of Wyoming Press, which published its first book this year, *The Art and Life of Merritt Dana Houghton in the Northern Rockies, 1878-1919*, by Michael A. Amundson. Henkel is helping to establish the curriculum for the Public Humanities concurrent major and minor, which will unite the theoretical and practical skills students need for careers in public service jobs that interact highly with the public, such as work in national parks, libraries, museums.

Dr. Henkel is the PI for the Democracy Laboratory, a project of the Wyoming Institute for Humanities Research. The Democracy Laboratory seeks to empower students, faculty, and the public using interdisciplinary methods in order to connect our communities and to strengthen the quality of our democracy. Inspired by the preamble to the constitution, "We, the people, in order to form a more perfect union," the Democracy Lab seeks to find ways to improve the quality of democracy at the local, state, and national levels. The Democracy Lab also draws inspiration and support from the National Endowment for the Humanities' "A More Perfect Union" initiative; the American Academy of Arts & Sciences Commission on the Practice of Democratic Citizenship and its report *Our Common Purpose: Reinventing American Democracy for the 21st Century*; and from UW's Grand Challenges initiative. In the best spirit of the Land-Grant University mission, the Democracy Lab is an incubator where researchers, students, and the public can gather, discuss issues, discover and experiment with new ideas, and learn from one another. During 2022-23, the Democracy Lab accepted its first participants to its yearly cohort program. These participants met bi-weekly during the year for lab meetings, participated in public events, all leading to a public symposium to share their work, which was held at the Albany County Public Library on Saturday, April 29th, 2023. The culmination of the cohort experience is the publication of the participants' individual research projects in the journal *Experiments in Democracy*, which is hosted on the UW Libraries' Open Journal system.

Wyoming Excellence in Higher Education Endowment Fiscal Summary

The costs associated with each position include salaries commensurate with the market for top academics, employer paid benefits, ongoing budgets to support research and instructional activities, as well as one-time start-up expenses which are especially critical to recruiting distinguished scholars with large established laboratory research programs.

The balance in the Excellence in Higher Education Endowment expenditure account held at the university as of June 30, 2022 was over \$5 million. Total expenditures for the 2023 fiscal year were currently budgeted at nearly \$3 million. The planning budget was designed to maintain an adequate cash balance to cover on-going expenses for an acceptable period, in the event of diminished revenue.

The following table summarizes the uses and expenditures of the budgets for filled positions, and the total estimated cost of the program when all allocated positions are filled.

Balance July 1, 2022	\$5,889,769
Advertising and Recruitment	\$ 8,506
Salaries and Benefits	\$2,775,763
Support	\$ 199,695
Equipment/facilities	\$ 8,338
Total Expenses	\$2,992,302*
Income (distribution from state and interest)	\$3,739,314
Balance June 30, 2023	\$6,636,781

*Expenses to date (June 30, 2023). Due to UW Year-End processes, full accounting for FY2023 is not complete.

Planning for FY2024

Planning for the FY2024 budget is based on anticipated annual projected income as per State Spending Policy for FY22 (WS 9-4-719). The table below includes the estimated annual budget for the permanently funded positions.

<i>Estimated FY24 Spending Policy Amount for UW*</i>	\$3,877,483
Income FY24 90% per W.S. 21-16-1201(c)	\$3,489,735
Salaries and Benefits (for Chairs and GAs)	\$4,035,728
Support for Chairs	\$ 440,407
Equipment/facilities	\$ 20,000
Total Expenses	\$4,496,135

* The FY 2024 Spending Policy Amount was not available prior to the due date of this report; therefore, an estimate based on the FY 2023 Spending Policy Amount was used.

Part B. Legislatively identified faculty positions

1. School of Energy Resources (SER) faculty

The Wyoming Legislature established and appropriated initial funding for the School of Energy Resources (SER) in 2006. The plan for SER stipulated the hiring of up to twelve (12) distinguished faculty who were to be co-appointed in departments across campus. Professors in the SER are internationally recognized energy experts who are actively involved in both energy research and teaching. They work in a variety of disciplines and have formed productive collaborations across campus. The current SER professors include:

Dr. Po Chen, (Ph.D. Geological Sciences, University of Southern California) *SER Associate Professor of Geology and Geophysics*.

In the past year, Dr. Chen and his collaborators from the National Cheng Kung University and the Central Weather Bureau in Taiwan have been working actively in adapting the latest developments in artificial intelligence in processing and analyzing seismic data collected in tectonically active regions around the world. This collaborative study has produced state-of-the-art machine-learning algorithms that have the potential to completely transform the conventional seismic data processing workflow, which often involves manual work done by many experienced seismologists. These machine-learning algorithms will liberate many well-trained seismologists from mundane routine tasks and allow them to focus more on creative work. Their research developments in the past year have been documented in two peer-reviewed journal articles and the computer code developed during our study is hosted on open-source repositories and accessible to seismologists around the world. A second research direction that Dr. Chen has started to explore in the past year is the application of mesh-free methods in solving partial differential equations related to geosciences and energy. The mesh-free methods have been developed mainly in the mathematics community in the past five decades but have not been widely adopted in practical numerical simulations in science and engineering. Compared with the widely adopted finite-element method, mesh-free methods remove the labor-intensive mesh-building process from the simulation workflow and provide improved simulation accuracy at the expense of increased computational cost. With the rapid advances in computing technology, mesh-free methods are becoming increasingly attractive. The first problem that Dr. Chen and his colleagues in SER started to tackle in the past year is related to the multi-phase fluid flow in porous media, which has wide applications in petroleum engineering, enhanced oil/gas recovery and carbon sequestration. Dr. Chen has developed a new computer algorithm for simulating two-phase porous flow with shocks using the mesh-free method and his research was published in one peer-reviewed journal article in the last year. The next problem Dr. Chen will start to work on is related to the neutron transport equation used in nuclear reactor core modeling, which has been dominated by conventional simulation techniques such as finite-element and finite-difference methods for several decades and is really in need of new simulation techniques that can accommodate modern reactor core designs. In the past year, Dr. Chen taught “Methods in Petroleum Geology” in both Spring and Fall and “Introduction to Machine Learning for Scientists and Engineers” in the Fall.

Dr. Timothy Considine, (Ph.D. Natural Resources Economics, Cornell University) *SER Professor of Economics and Finance*.

During academic year 2022-2023, Dr. Considine taught undergraduate courses in Oil: History, Culture, and Power, and Energy Markets and Policy and a graduate course in Energy Economics. He is currently working with the School of Energy Resources on two grants on carbon capture and hydrogen sponsored by the US Department of Energy. In addition, he is supporting two Ph.D. graduate students with external foundation support who will be writing their dissertations under his supervision. His research team is currently working on studies of oil and gas development on federal lands, the fiscal and economic impacts of energy production, whether environmental social governance criteria affects oil and gas investment, and how carbon capture may affect the social cost of carbon.

Dr. Craig Douglas, (Ph.D. Computer Science, Yale University) *SER Professor of Mathematics*.

Dr. Douglas is an internationally recognized expert in computational sciences who leads a research group that creates sophisticated mathematical models of physical phenomena using networks of remote sensors and high-

performance parallel computers. He has a long-term collaboration with AirLoom, LLC, a renewable energy company located in Laramie. Two of his current or former Ph.D. students have worked there, including one full-time. He has published a research paper recently with AirLoom staff on optimization techniques relevant to wind energy design development. Dr. Douglas also has a project on dual porosity models relevant to both the fracking industry and aquifer modeling. An open source two and three-dimensional high-performance code has been released that runs efficiently on one to thousands of processors. A recent project involves the Wyoming Department of Transportation to create a machine learning model for predicting when Interstate 80 should be closed and re-opened. It currently works well with historical data. We are working to create a better model using a live data stream. Federal dollars are spent in state and the results enhance UW's reputation through high visibility internationally. One of his projects has created the first 100 Gigabit/second computer network in Wyoming, which enhances Wyoming's ability to attract large data centers to the state. He has taught a first-year seminar course on Energy, the Environment, and Economics, that covers all aspects and forms of energy from the viewpoints of Wyoming and globally. Dr. Douglas is also an adjunction professor in the School of Computer, where he concentrates on providing new opportunities for Wyoming residents for careers in data sciences and machine learning.

Dr. Maohong Fan, (Ph.D. Iowa State University; Ph.D. Osaka University) *SER Professor of Chemical and Petroleum Engineering.*

In the last year, his research was focused on carbon capture and utilization, coal-to-carbon materials, including carbon fibers and carbon quantum dots, production of critical materials, such as rare earth elements (REEs) and lithium. He led and co-led 10 DOE and NSF projects in energy production, material synthesis, and environmental protection areas. Significant progress was made with these projects in the last year. The results achieved with the projects have led to multiple patent applications and publications in various chemical engineering, energy, and environmental science and technology journals. He was granted 3 U.S. Patents in the last year. The projects supported the research activities of 5 faculty members, 12 postdocs, research associates, and graduate students. He continued to work for the National Academies of Science, Engineering, and Medicine (NASEM) on CO₂ utilization reports. The first report of the NASEM was published. He and his colleague are working on the 2nd report, which is expected to be published next year.

Dr. Fan's academic achievements have been recognized in the U.S. (e.g., being selected to serve on the CO₂ utilization committee of NASEM) and worldwide. For example, he has been on the Highly Cited Researcher list in the world since 2018, according to the Web of Science (WoS), which acknowledges his academic contributions in his research areas, as WoS says that "Of the world's scientists and social scientists, Highly Cited Researchers truly are one in 1,000." In 2022, he was the only one winning the global Highly Cited Researcher honor in the University of Wyoming. Another example is that he has been on Stanford University's Top 2% Scientists List Worldwide since 2019 (the List's starting year).

Dr. Dario Grana, (Ph.D. Geophysics, Stanford University) *SER Associate Professor of Geology and Geophysics* and *Wyoming Excellence Chair and School of Energy Resources Associate Professor in Geology and Geophysics* (See WY Excellence Endowment Report)

Dr. John Kaszuba, (Ph.D. Geochemistry, Colorado School of Mines) *SER Associate Professor of Geology and Geophysics* and *John and Jane Wold Chair of Energy.*

Professor Kaszuba has over 25 years of experience researching geochemical interactions between fluids and rocks. His research group of six graduate students and one undergraduate student presently focus on

unconventional oil and gas reservoirs, carbon storage, and rare earth elements/critical minerals in Wyoming. His former students have successful careers in industry (Chesapeake Energy Corporation, ConocoPhillips, Enerplus Corporation, ExxonMobil, Ormat Technologies, Wyoming Whiskey) and government (Pacific Northwest National Laboratory, Los Alamos National Laboratory). His research is funded by several extramural resources, including an Energy Frontiers Research Center funded by DOE and a Joint Industry Project with ConocoPhillips Company. He teaches courses in the Department of Geology and Geophysics and SER. He serves on numerous committees, including graduate student committees as well as SER and University committees, and is a member of the Wyoming State Geological Survey Advisory Board. In collaboration with SER and the Wold Foundation, he co-organized and lead the Symposium on Wyoming's Energy Future in September 2022. Professor Kaszuba is the John and Jane Wold Centennial Chair in Energy and a Nielson Faculty Fellow.

Dr. Subhashis Mallick, (Ph.D. Geology and Geophysics, University of Hawaii) ***SER Professor of Geology and Geophysics.***

Dr. Mallick's FY2023 included work on a research grant seismic waveform inversion by deep learning-one key tool toward attaining a carbon-neutral future, which also provided funding to a PhD student studying Geology and Geophysics. Dr. Mallick had three (3) publications/presentations and continued work on his book, *Computational Seismology, Optimization, and Machine Learning*, which is scheduled for publication in 2023. He submitted one (1) research proposal as Principal Investigator on Comprehensive Mapping of Climate Change: High-resolution Projection of Oceanic Temperature and Salinity from Seismic Data. Pejamn Tahmesebi was listed as Co-PI's on the three-year project with \$780,528 funding requested by from the National Science Foundation. The project status at the time of this report was not funded. Dr. Mallick continues to work on a research proposal for Seismically derived oceanwater properties and their roles in global climate modeling. The three (3) year 1.5-million-dollar project with the National Science Foundation and/or Department of Defense has two (2) Co-PI's: Minal K. Sen (UT, Austin), Yunsoo Choi (University of Houston)

Dr. Mallick was selected to receive the 2023 Society of Exploration Geophysicists' *Reginald Fessenden Award*. This award is given in recognition of specific technical contributions to exploration geophysics, such as an invention or a theoretical or conceptual advancement which merits special recognition.

Vacant, *SER Professor of Environment and Natural Resources.*

Vacant, *SER Professor of Soil Sciences.*

Tara Righetti, (J.D. Law, University of Colorado Boulder) ***SER Associate Professor of Law.***

Tara Righetti is faculty in the College of Law, the Haub School of Environment and Natural Resources, and the School of Energy Resources. She also co-directs the Nuclear Energy Research Center (NERC) at the School of Energy Resources. Professor Righetti's teaching, research, and outreach activities continue to positively support efforts to advance energy driven economic development in the state of Wyoming.

Professor Righetti teaches energy law classes in the College of Law and the School of Energy Resources. In the Fall of 2022 Professor Righetti offered two sections of oil and gas law at the graduate and undergraduate level. Her research relates to property and administrative law issues associated with energy development. Articles authored by Professor Righetti were acknowledged in both 2021 and 2022 as among the top 20 articles by The Environmental Law and Policy Annual Review. During the 2022-2023 academic year, Professor Righetti

published articles in the Harvard Environmental Law Review Online, Wyoming Lawyer, and Energy Environment and Infrastructure. She also contributed to a report prepared for DOE's microreactor program on legal, regulatory, economic, and technology implications of microreactor applications in U.S. Markets. That report specifically acknowledged market opportunities for use of microreactors in Wyoming industries. Together with colleague, Professor Righetti wrote grant proposals as a Principal Investigator or Collaborator to DOE's NEUP Program, DOE's Microreactor Program, Battelle Energy Alliance, and the Nuclear Regulatory Commission. Collectively these applications resulted in the award of approximately \$2.2 million dollars in total awards. She wrote several additional grant proposals which are currently under review by the National Science Foundation, Department of Energy, and the Department of Defense. In the Spring of 2023, Professor Righetti co-organized the Research Explorations for Nuclear Energy in Wyoming (RENEW) conference with Professor Caleb Hill. Professor Righetti is dedicated to service to the legal profession, Wyoming's energy industry, and the Laramie Community. She serves on the special institutes committee and as chair of the Diversity and Inclusion Committee for the Foundation for Natural Resources and Energy Law and on the board of the Albany County Safe Project.

Part C. Privately Endowed Faculty Positions

In the 2022-23 Academic Year more than fifty (50) UW faculty positions are partially or fully supported by privately funded endowments established with gifts to the UW Foundation. In the 2022-23 Academic Year established endowed accounts support twenty-two (22) faculty chair positions, of which two (2) positions were vacant and thirty (30) professorship positions, of which five (5) were vacant during the year. Leadership support includes: two (2) Deanships with a future named Deanship approved in the College of Business. The single Curator position is located at the American Heritage Center, and single Librarian position is located at Coe Library. A complete list of the privately endowed chairs, professorships, and faculty fellowships is available from the UW Foundation. That list describes the history of the endowment, the qualifications or purpose, the uses, and the current and past faculty recipients. Some of these endowed positions are not filled at the present time; others fund various faculty from year-to-year.

In all cases, the uses of the endowment earnings are specified in the gift agreements and are reflected in the focus of the teaching, research, and extension/outreach programs of the faculty member beneficiaries.

As discussed in Part A of this report, the funding for some privately endowed positions is bolstered by earnings from the state-funded Excellence in Higher Education Endowment. These public-private partnerships include:

The Thomas and Shelley Botts Endowed Chair in Unconventional Reservoirs in the College of Engineering and Applied Sciences and Alchemy Sciences Petroleum Engineering Chair, held by Dr. Mohammad Piri (College of Engineering and Applied Sciences).

The Eldon & Beverly Spicer Chair in Environmental and Natural Resources, held by Professor Steve Smutko (Haub School and College of Agriculture).

The individuals who held endowed faculty positions for this reporting period are as follows:

College of Agriculture and Natural Resources

Dr. Michael Dillon, (Ph.D. Biology, University of Washington) *L. Floyd Clarke Professorship in Zoology and Physiology*

Michael E. Dillon (Ph.D., University of Washington), the L. Floyd Clarke Endowed Chair. Dr. Dillon is a Professor in the Department of Zoology and Physiology and in the Program in Ecology. His research centers around two core and related questions: How do environments determine whether and where animals persist?, and how do animals respond to environmental challenges? Dr. Dillon published 4 peer-reviewed manuscripts in the last year. He has two active grants bringing ~\$3.5 million to UW and gave 4 invited seminars in 2022 in addition to 4 poster presentations and 8 talks by him and his students at international conferences. In addition to mentoring 4 graduate students and WRSP and INBRE undergraduate scholars, he served on graduate committees for an additional 7 UW students and 5 students from institutions across the US. He taught Comparative Physiology, a core course for three undergraduate majors, Animal Biology, a large (~200 students) introductory course that serves undergraduates from across campus as well as developing a new study abroad course, The Art and History of Medicine, co-taught with a colleague and with 12 undergraduate students enrolled in the trip during the last two weeks of May. One of his graduate students was awarded the prestigious National Science Foundation Graduate Research Fellowship Award (1 of only 4 graduate students at UW to receive this award). He engaged with communities across the state with his Field Guide to Native Bees of Wyoming, published by the UW Biodiversity Institute and shared as a resource for state and federal agencies, local organizations and the broader public. He worked with the Shell 3D visualization center to develop an online video game to engage the public in understanding how bumble bees survive in extreme environments, like Wyoming. The game was used in middle and high school classrooms in Laramie and Rock Springs to help teachers address state science standards, with assessment of impact led by his graduate student. In recognition of his outstanding contributions, Dr. Dillon was 1 of 2 post-tenure faculty in the College of Agriculture, Life Sciences, and Natural Resources awarded a Presidential Scholarly Achievement award. Dr. Dillon is honored to serve as the L. Floyd Clarke Chair and looks forward to expanding its impact in the coming year.

Dr. Donna Harris, (Ph.D. Plant Breeding, Genetics, & Genomics, University of Georgia), *E.A. Whitney Professorship in Agriculture*,

Research in the Harris Lab focuses on plant breeding and genetics where they are working on several relevant crops to Wyoming agriculture including dry beans, field peas, and native grasses. The Wyoming Bean Commission is supporting our breeding program efforts on developing new dry bean cultivars that are high yielding, early maturing, upright in stature, and adapted to Wyoming environments.

In addition, the development of germplasm with abiotic stress tolerance is critical to the overall productivity and sustainability of field crops as drought continues to become more frequent and intensive across many of the environments where row crops are grown in the USA and abroad. It is not sufficient to identify germplasm capable of surviving during drought stress conditions, but rather it is critical that the traits we identify and the underlying genes that control those traits ultimately enhance yield stability in the presence of drought. Through funding from the USDA Pulse Crop Health initiative, and in collaboration with Dr. Jim Heitholt, a crop physiologist located at the University of Wyoming's Powell Research & Extension Center, we have preliminary results that suggest that we have identified field pea germplasm that is able to maintain yield under deficit irrigation. A second year of experiments is currently underway. This is the project of a PhD student in the lab. We are also collaborating with the University of Georgia on a soybean project related to drought tolerance.

Another PhD student in the lab is focused on high-throughput phenotyping of dry beans, field peas, soybeans, and sugar beets through the use of sensors, radar, and cameras that are mounted on drones.

In regard to the native grasses aspect of our research program, we are working in collaboration with Dr. Brian Meador at the University of Wyoming, Sheridan Research & Extension Center as well as with the Wyoming Bureau of Land Management in efforts to enhance rangeland restoration by implementing applied research focused on the improvement and establishment of desirable native plant materials suitable for degraded rangelands in Northeast Wyoming. This project seeks to directly benefit users of both public and private land in our area by providing genetic and species appropriate plant materials for the process of reclaiming disturbed lands, improving wildlife habitat, and providing increased stability of rangeland habitat for livestock grazing.

The lab employs students from Sheridan College during the year to help with research and has several interns from Sheridan College and the University of Wyoming that work in the lab in the summers.

Dr. Harris teaches three courses per year online as she is located at the Sheridan Research & Extension Center. These classes included: PLNT 4520 Plant Breeding, LIFE 3050 Genetics, and PLNT 4050/5050 Plant Biotechnology.

Dr. James K. Pru, (Ph.D. Molecular Reproductive Biology, University of Wyoming) *Curtis and Marian Rochelle Endowed Chair in Animal Science*

Dr. Pru began his faculty appointment at the University of Wyoming (UW) in 2021. He worked during his second year to continue establishing his lab and complete studies that center on three primary areas of research which have application to both domestic animal reproduction and women's reproductive diseases. First, Dr. Pru's lab seeks to understand the unique molecular dialogue that exists between the mother and implanting embryo as pregnancy is first being established. He uses conditional mutagenesis and gene editing to understand gene networks that coordinate maternal: embryo cross-talk. The significance of these studies is that the large majority of failed pregnancies in mammals occur during this time when the embryo first signals its presence to the mother. The overarching goal is to identify evolutionarily conserved pathways that coordinate successful pregnancy in diverse species from livestock to humans. Second, Dr. Pru is interested in elucidating the natural reparative processes that occur in the uterus following birth and at the end of the estrous/menstrual cycle. The uterus harbors arguably the most highly regenerative tissue (*i.e.*, inner lining called the endometrium) of all mammalian tissues. The long-term goal of these studies is to understand the genetic events that coordinate endometrial regeneration under natural conditions with the hope of applying this knowledge to reparative processes in more vital organs such as the heart, liver, and kidney that do not undergo fibrosis-free natural tissue regeneration following injury. Furthermore, faulty uterine involution/regeneration after giving birth is a significant barrier to subsequent long-term fertility in cattle. Third, Dr. Pru has a long-standing interest in the etiology and progression of women's reproductive diseases such as endometrial cancer and endometriosis, as well as in the development of therapeutic strategies to combat these diseases. Such diseases dramatically increase female morbidity and mortality and reduce overall quality of life. Since coming to UW, Dr. Pru's lab has received over \$2M in grant support from the National Institutes of Health (NIH) and the United States Department of Agriculture (USDA) to study non-classical progesterone signaling, endometrial cancer, and for the application of gene editing technologies. Dr. Pru taught LIFE 3050 (Genetics) during the spring 2023 semester and he recently developed a new graduate level course in Animal Science that will be taught in spring 2024. Dr. Pru continues to work with UW leadership to procure a large institutional grant from the NIH to develop a center of biomedical research excellence in the areas of reproductive biology and cellular programming. The basic and translational research conducted in Dr. Pru's

lab has impactful application to both the agricultural and health care sectors within the state of Wyoming and beyond.

Dr. Kerry Sondgeroth, (Doctor of Veterinary Medicine, Colorado State University; Ph.D. Infectious Disease, Washington State University) *Riverbend Ranch Endowed Chair in Wildlife-Livestock Health*

Dr. Sondgeroth is an Associate Professor in the Department of Veterinary Sciences, and the only board certified Veterinary Bacteriologist at the Wyoming State Veterinary Laboratory (WSVL). In 2022-2023, she also served as the Interim Director of WSVL. She is interested in bacterial infectious diseases that affect both wildlife and livestock, with a primary focus on those bacteria that cause pneumonia in cattle, bison, domestic sheep, and wild sheep populations. During the past year, she mentored two undergraduate honor's program students on independent research projects, and both students gave oral presentations at the 2023 Spring UW Undergraduate Research and Inquiry Day. One project focused on characterizing the antimicrobial resistance phenotypes of *E.coli* isolates from livestock and wildlife across the state of Wyoming. The second project focused on validating a PCR assay for genotyping the bacterium, *Clostridium perfringens*, associated with severe enteritis in calves. This assay will be utilized by the Bacteriology section of the WSVL.

Dr. Sondgeroth continues to be the primary mentor for three graduate students. She has one PhD student who is focused on bacteria that is associated with respiratory disease in bighorn sheep. He will be giving an oral presentation on his research project characterizing *Mannheimia* bacteria from BHS at the Wildlife Disease Association Conference in July. One of her Master's students is characterizing strain types of *Mycoplasma ovipneumoniae*, using whole genome sequencing and mass spectrometry; and has performed a longitudinal study on bighorn sheep serum that assesses prior exposure to viruses that cause respiratory disease in Wyoming bighorn sheep herds. Both students are working on summarizing their findings for publication in peer-reviewed manuscripts. A third Master's student is focusing on the prevalence of antimicrobial resistance in *E.coli* from wildlife and livestock across the state of Wyoming. She will be presenting a poster on her research at the Sequencing, Finishing, & Analysis In the Future Meeting in June. She co-mentors a Master's student on a project that evaluated nasal swabbing protocols using short and long swabs in detecting *Mycoplasma bovis* in captive and free-ranging bison. The results were presented at the Winter National Bison Association Conference in January, and will be submitted as a peer-reviewed manuscript in collaboration with the National Park Service and the Turner Bison Ranch Enterprises.

Dr. Sondgeroth's expertise in bacteria, and prior research on *Mycoplasma bovis*, was highlighted during this past winter when another outbreak occurred in pronghorn near the Pinedale area. The information that is known about the disease in pronghorn from outbreaks in 2019 and 2020, was previously published in the journal of Emerging Infectious Diseases. In collaboration with the Wyoming Game & Fish Department, this data will be presented at the Wyoming Disease Association Conference this summer.

This chair position has enabled Dr. Sondgeroth to continue her research passion on bacterial diseases that affect both livestock and wildlife while mentoring the next generation of scientists. She has formed strong collaborations with both state and national animal health agencies, which has helped to make big strides over this past year. The data from her research projects is already helping to inform management decisions on wildlife health and continues to aid in understanding disease transmission at the wildlife-livestock interface.

Vacant – Farm Credit Services of America Ranch Management and Agricultural Leadership Chair

American Heritage Center

Dr. Mary Brown, (Ph.D. History, University of Missouri) *Clara R. Toppan Curator of the Toppan Rare Books Library*

Dr. Brown's position is more archival in nature and her primary responsibility is the oversight and growth of the Toppan Rare Books Library. In the 2022-2023 academic year, Dr. Brown contributed to the growth of the library with the addition of several new sub-collections that tell the story of Wyoming and also highlight Western authors. The Toppan staff grew as well with the addition of a full-time Rare Books Assistant. Dr. Brown saw an increase in class visits throughout the academic year from multiple UW campus departments including History, Visual Arts, English, Religious Studies, Art History, and Communication & Journalism. During the spring semester, Dr. Brown oversaw two Museum Studies interns who successfully completed several projects at the Rare Book Library. These included blog posts examining the illustrations of George Cruikshank, 19th century author and illustrator, and a post that analyzed the true crime genre by looking at how it evolved during the 19th century. They also helped with the installation of a touring book art exhibit juried by the Rocky Mountain Chapter of the Guild of Book Workers. This internship is beneficial for students because it enables them to gain real-world experience and have tangible projects to include in their portfolios and use in their applications for graduate school and employment.

Dr. Brown also worked with UW professors and counterparts from Cardiff University in the preparation and implementing the first phases of a NEH-AHRC grant creating an image database that will feature illustrations from the books in the Toppan Rare Book Library. In addition to the activities in Toppan, Dr. Brown has continued her research on the civil rights activism of World War II student veterans on college campuses across the country. Over the past year, she was invited to present her research on the UW campus and across the country. She participated on a panel on the UW campus about student activism in the 1960s for the Social Justice Research Center, spoke at the Free Speech on Campus conference sponsored by the Center for Constitutional Studies, Utah Valley University, and spoke on a panel for the Middleton Center for Race, Citizenship, and Justice at the University of Missouri. She finished out the academic year as the May speaker for the Little Lecture series hosted by the West Virginia Public Humanities Council.

College of Arts and Sciences

Vacant, *Robert B. Berry Distinguished Chair in Ecology at the University of Wyoming*

Dr. Shane Epping, (Ph.D. Journalism, University of Missouri) *Bobby Model Professorship in Photojournalism*

In his second year, Epping taught courses in photography, photojournalism, entrepreneurship, and qualitative research methods. To connect students with the tools to start their own businesses, Epping began working with local entrepreneurs, including those at the Wyoming Women's Business Center, to facilitate conversations about self-sufficiency and opportunities to participate in micro-finance programs. Recognizing the importance of local professionals, Epping invited an in-person guest lecture by Drew Rush, a *National Geographic* photographer who lives in Laramie, to his photojournalism course. Epping is in the beginning stages of organizing a community-wide event where Mr. Rush will serve as a keynote speaker to talk about photographing wildlife for global audiences. Back by popular demand, Epping continued to curate photography exhibits for his students at Coe Library in the fall of 2022 and the spring of 2023.

In terms of his creative endeavors, Epping won first place in the UW Faculty Division of the 2022 Global Engagement Photo Contest. Selection for juried photo exhibits include: 1) “Spot On #3” exhibit at D’art Gallery (Denver, September 2022), 2) “Composition” exhibit at Blackbox Gallery (Portland, OR, January 2023), 3) “Trial and Error” exhibit at the True/False International Film Festival (Columbia, MO, March 2023), 4) “Seeking Balance: Artists’ Books + Typographic Messages” exhibit (Laramie County Library in Cheyenne, summer 2023), and 5) Life and Death International Smart Online Group Exhibition. He also had a creative research project about the Wyoming landscape accepted at the 37th Visual Communication Conference (Mammoth Lakes, CA) where he will present in June 2023.

In terms of research, Epping continues to focus on the intersection of photography and health care. Specifically, he is currently researching how COVID-19 was documented by photojournalists in a gatekept environment of social distancing with multiples access barriers. A related paper is currently under review for acceptance at the 2023 Association for Education in Journalism and Mass Communication (AEJMC) Conference in Washington, DC.

In the spirit of honoring Bobby Model’s philanthropic endeavors with small community health clinics and rural schools in faraway places, Epping joined two UW students in the Peruvian jungle to document the initial construction of an elementary classroom in July 2022. Epping secured external funding for the students to attend so that their airfare, lodging, and food were covered by private donations. Relatedly, he recently obtained external funding for a separate UW student to participate in documenting the construction of an elementary school in Rwanda in August 2023.

Dr. Nick Crane, (Ph.D. Geography, Ohio State University) *Clarence Seibold Professorship*

During 2022-23, Dr. Crane received the Seibold Professorship, which released him from teaching and facilitated course development, program development, and new directions in Crane’s research program, all of which will generate opportunities for UW students, faculty, and community members. The two new courses Crane has been developing as part of his Seibold Professorship work reflect the focus of his project for the year, on social-political dynamics in Turkey. As a result of Crane’s work on that project, he will begin to offer a course on the “Politics of Turkey” in Spring 2024, and will begin to offer another course on the region— “Cultural Politics in the Contemporary Middle East”—in the academic year 2024-25. These two courses expand course offerings to students interested in the region and fill gaps in the university’s curriculum.

Crane’s contributions to program development have involved organizing and supporting events at UW, with a notable focus on the Arabic and Middle East Studies Program in the School of Politics, Public Affairs, and International Studies but also twinned with other offices, colleges, and academic units. Crane has been aligning with other Turkey and regional specialists at the university and has drawn on experts beyond the university in relation to university-wide internationalization efforts. In 2022, Crane was a participating moderator for the launch of the Middle East and North Africa Speakers Series of the Arabic and Middle East Studies Program. In 2023, he brought an emerging voice in Turkey-focused sociology (Dr. Çağlar Dölek) to UW for busy days of programming that brought together a network of interested community members from across the university, in the College of Arts & Sciences, the College of Education, the College of Engineering, the Global Engagement Office, the Honors College, and the Wyoming Institute for Humanities Research, as well as from the Wyoming Humanities Council. Beyond these events, throughout the Seibold year, Crane maintained a regular schedule of in-person and online meetings with Turks and Turkey-interested academics at UW and internationally, including

in Turkey, where, in Spring 2023, he pursued preliminary fieldwork towards a research project on the politics of economic development in the country.

Crane's new research focuses on urban landscapes, violence, and economic development in Turkey, with a particular focus on the country's third largest city, Izmir, which is relatively neglected in the research literature (compared to Ankara and Istanbul). As part of funding field research in Spring 2024 and supporting the writing and presentation of this work, Crane applied for and received three competitive awards in 2022: 1) for UW's "senior faculty" nomination for the National Endowment for the Humanities Summer Stipend competition (supported by the Wyoming Institute for Humanities Research), 2) a Travel Support award to present an early version of a research article from the project at the American Association of Geographers conference in March 2023 (supported by the College of Arts & Sciences), and 3) for the Faculty Research and Creative Activity Grant (also supported by the College of A&S). The work supported by these awards, and completed through Spring 2023 field research in Izmir, informs the writing of two peer-reviewed articles, one on the geography of the 2023 Turkish general election and the other on the process of "urban transformation" in Turkey. While in Izmir for research in Spring 2023, Crane gave an invited lecture at the Izmir University of Economics as part of the "Ekokent" lecture series related to the latter article. This work, and the networking it involved, will lend momentum to university-wide internationalization efforts in the Eastern Mediterranean (e.g., UW in Jerusalem), but with a focus on the Aegean region of Turkey.

Dr. Amy Navratil, (Ph.D. Biomedical Science, Colorado State University) *Gardner Chair/Professorship in Physiology*

Through the philanthropic kindness of Dr. Hank Gardner and Marilyn Fiske, they established a common vision of enhancing interdisciplinary biomedical teaching and research excellence at the University of Wyoming. In support of this mission, Dr. Navratil is bringing biomedical science to the forefront of the department of Physiology and Zoology. She currently chairs the Physiology Program and has modernized the core Human Physiology classes. She has grown the Physiology Program into the leading pre-professional health major on campus with 200+ majors. For Fall 2022, she revamped Integrative Physiology to include clinical case studies and moved the class to the new Science Initiative's active learning classroom. The innovative program transformation Dr. Navratil led provides a more inclusive learning environment, effectively prepares students for their professional school exams, and provides them experience with real life applications for their UW education. Beyond leading the Physiology major and curriculum, she is also a Presidential Fellow developing an interdisciplinary one-year Plan B Master's program to retain Wyoming students who are in search of gap year training programs prior to professional health school matriculation.

In support of her research excellence, she was invited as a speaker for Cornell University's Reproductive Sciences Center illustrious alumni series in Fall 2022. In Spring 2023, she funded a NIH, National Institute of General Medical Sciences, IdeA Wyoming INBRE "Women's Reproductive Health" supplement grant. The ultimate goal of her research program is to vertically advance the field of reproduction by discovering novel mechanisms that regulate fertility. More specifically, Dr. Navratil's laboratory is providing critical insight into the pathophysiology of impaired reproductive function in women.

Vacant, *Milward Simpson Professorship in Political Science.*

College of Business

Dr. Todd Cherry, (Ph.D., University of Wyoming) *John S. Bugas (Professorship or) Chair of Economics*

During the 2022-23 academic year, Dr. Cherry engaged with students at all levels. As the current Director of Graduate Studies, he mentored the MS and PhD students and served on multiple theses and dissertation committees. At the undergraduate level, he teaches a freshman introductory course and a senior capstone course. At the graduate level, Dr. Cherry teaches a behavioral and experimental economics course. As Director of Graduate Studies, Dr. Cherry continues to expand and strengthen the MS and PhD programs. He followed last year's recruitment of a stellar 2022 cohort with another excellent group of incoming graduate students for Fall 2023. Dr. Cherry continues to mentor and assist graduate students in their studies and employment. Cherry's research addresses policy-relevant challenges, with a particular focus on energy and environmental resources. In the past year, he published multiple journal articles in leading peer-reviewed journals and continues to be ranked among the top economist in his field. Consequently, he recently received an excellence in research award from the College of Business. Much of his work attracts external funding that supports graduate students. Dr. Cherry continued his work as lead investigator on a National Science Foundation (NSF) funded research project that investigates the strategic and governance issues related to the emerging technologies of solar geoengineering. Dr. Cherry collaborated with UW colleagues on a project that received NSF funding to study the potential for behavioral insights to improve the performance of epidemiological models (National Science Foundation). He is a senior investigator on a \$20 million UW project that was recently funded by the NSF Track-1 EPSCoR program. Cherry is on the editorial team of four international journals, including *Resource and Energy Economics* and *Journal of Environmental Economics and Management*. He is a faculty affiliate with the Ostrom Workshop at Indiana University-Bloomington and a Senior Research Fellow in the Climate Policy Program at the Center for International Climate Research in Oslo Norway.

Dr. Eric Johnson, (Ph.D. Accounting, Arizona State University) *The Clara Raab Toppan Distinguished Professorship in Accounting*

Prof. Johnson's ongoing research agenda focuses on manager and auditor psychopathology or "dark" personality traits and their influence in committing (managers) and failing to detect (auditors) financial fraud. For example, Prof. Johnson's paper published in the *Journal of Accounting and Public Policy* in 2021 focuses on the potential for reduced audit quality based on *auditors'* psychopathology. This is a new area of research in accounting and corporate governance, and the results of recently completed working papers indicate the theoretical and practical importance of the age-old expression, "who audits the auditors?" Prof. Johnson is currently pursuing multiple other projects in this area of research with colleagues at UW and other institutions.

As part of Prof. Johnson's research leadership role as the Toppan Professor of Accounting, he is committed to mentoring junior Accounting faculty so that they have a good chance for successful promotion to Associate Professor and tenure. Prof. Johnson is currently working on promising research projects with all three of Assistant Professors of Accounting as follows:

3. Following up on a project from last year's report, UW Assistant Professor Mac Festa is revising a manuscript which experimentally examines the influence of abusive supervision, mentor support, and accounting firm culture on accounting interns' intentions to accept a job with an accounting firm upon graduation. The paper was submitted in Fall 2022 to *Accounting, Organizations, and Society*. While the paper was not accepted for publication, the authors received helpful comments which will guide reorientation of the paper to improve its

publication chances at another journal. The paper is on track for submission to the *Journal of Accounting and Public Policy*, a highly ranked Accounting journal, later in 2023.

4. As originally reported last year, Prof. Johnson's project with UW Assistant Professor Ta-Tung (Stephanie) Cheng on the influence of employee narcissism on their advice-seeking behavior in a performance evaluation context is progressing. Prof. Cheng presented the paper at a prestigious accounting research conference in January of this year, receiving valuable feedback from the paper's discussant and conference participants. The project is currently on track for submission to a highly ranked Accounting journal later this year.
5. Prof. Johnson also has a new project with Prof. Cheng which examines how supervisor narcissism (self-focus) is related to the undermining or "sabotage" of subordinates' career progression. Current expectations are to have a first draft of this paper ready for presentation later this year.
6. Following up on last year's report, the project with Assistant Professor Patrick Witz which studies "spillover effects" of auditor technology is progressing. The authors expect to further refine the study to ensure that the experimental design and results are strong enough to justify submitting the paper to a top-ranked Accounting journal in late 2023 or early 2024.

As Prof. Johnson's term as the Clara R. Toppan Distinguished Professor of Accounting ends with his retirement from UW in August 2023, he would like once again to express appreciation for the generous support provided through the UW Foundation in establishing and funding his research.

Dr. Patrick M. Kreiser, (Ph.D., University of Alabama) *Rile Chair of Leadership & Entrepreneurship*

During the 2022-2023 academic year, Dr. Kreiser was the lead nominator for the United States Association of Small Business and Entrepreneurship (USASBE) Award submission on behalf of the University of Wyoming. UW was chosen as a finalist, and during the annual USASBE Conference in January 2023, the University of Wyoming won the award for #1 Model Emerging Entrepreneurship Program in the United States. He also served as the faculty lead for the John P. Ellbogen \$50K Entrepreneurship Competition; continued to serve in a leadership role related to the revised cross-campus Entrepreneurship Minor and new COB Entrepreneurship Major; served as a champion and thought leader representing Entrepreneurship within the College of Business, across the University of Wyoming, and throughout the state of Wyoming; mentored and advised multiple student start-ups; served on the Editorial Review Board for *Journal of Business Venturing* and *Entrepreneurship Theory and Practice* (recognized as the top two journals in Entrepreneurship); taught ENTR 4750 (Theories of Entrepreneurship), which serves as the required capstone course for the new Entrepreneurship Major; served as the co-chair of the search for the Assistant Professor in Management position (ENTR/Strategy); and served on the College of Business Tenure and Promotion Committee. Dr. Kreiser has twice received the "COB Belt Buckle Research Award" for research productivity from the College of Business and also received a COB merit-based research award for his research publications during Summer 2022. He was promoted to Professor of Management effective Fall 2021. During the past three years, Dr. Kreiser has had five peer-reviewed research publications, as well as an edited book. He had a first-authored paper published in *Entrepreneurship Theory and Practice* (5-year impact factor=10.075), which is one of the top two journals in Entrepreneurship; and a first- authored paper published in *Small Business Economics* (5-year impact factor=8.164), which is one of the most recognized journals in the field of management. He had nine hundred fourteen (914) citations of his research during 2022-2023 according to Google Scholar as of May 15, 2023. His overall citation count is 5,998.

Dr. Mark Leach, (Ph.D. Marketing, Georgia State University) *Mendicino Chair in Sales and Salesmanship*.

Dr. Leach's research is in business-to-business marketing and sales. More specifically, his research focuses on understanding buyer and seller relationships, leveraging the sales function to manage relationships with profitable customers, and providing effective sales training. Mark has published articles in *the Journal of Business Research*, *Journal of Personal Selling & Sales Management*, *Industrial Marketing Management*, *Journal of Applied Social Psychology*, and other leading academic journals. Mark is a member of the editorial review board of the *Journal of Marketing Theory and Practice*, and the *Journal of Business and Industrial Marketing*. Prior to joining the University of Wyoming in 2017, Dr. Leach was a member of the faculty at Loyola Marymount University and Purdue University. He has also been a behavioral research scientist at the Centers for Disease Control and Prevention. During the 2022-2023 academic year, Dr. Leach has published research examining how buyer emotions can be leveraged by sales organizations during reacquisition efforts in the journal *Industrial Marketing Management*. Additionally, his work examining management systems that help and hinder salesperson resourcefulness was published in the *Journal of Personal Selling and Sales Management*. Furthermore, he continues to develop and refine curriculum and recruitment strategies for UW's major and minor in Professional Selling. Likewise, Dr. Leach continues to develop and expand the UW Center for Professional Selling and has brought together a team of faculty, staff, and sales practitioners to effectively deliver classes and establish the Center as a hub for sales thought-leadership.

Dr. Charles Mason, (Ph.D. Economics, University of California, Berkeley) *H.A. (Dave) True Jr. Chair in Petroleum and Natural Gas Economics*

During the past fiscal year, Dr. Mason taught one graduate class (Advanced Microeconomics II – Economics of Uncertainty and Game Theory; ECON 5120) and one undergraduate class (Energy Economics, ECON 4340). He directed one (1) doctoral student and participated in the graduate committees for several students. He has multiple papers under review, a few of which are close to acceptance; and gave a variety of presentations, both virtually and in person. He continues to serve as the Editor-in-Chief for Economics of Energy and Environmental Policy, a key publication produced by the International Association of Energy Economists. His research program is largely centered on studying oil and gas markets, including studies of oil and gas prices, motives to hold oil inventories, and the incentives for deployment of infrastructure, such as pipelines, and the implications of constrained infrastructure upon energy markets. These topics have clear relevance to the energy sector of the state, and policy relevance to the nation. Dr. Mason's research agenda also provides valuable input that allows regular updating of the undergraduate oil and gas class, which he teaches most years (and is scheduled to teach next spring), enhancing the educational value and relevance of the class. He has several projects underway, many of which directly relate to oil or natural gas markets; one of these is based on a recently awarded grant from the Sloan Foundation (shared with colleagues at the University of Texas – Austin) to study the economics of carbon capture, utilization and storage. Students in his undergraduate class obtain a deep understanding of the recent history of oil and gas markets, and how that informs current events. Students in his graduate class gained important skills that modern micro-economists use regularly in their professional work. His approach to this class encourages students to speak up, and he capped the class off with a round of zoom presentations by the students. Material he discusses in that class is also amenable to public presentations, which provides visibility for the University and helps lay people better understand these markets.

Dr. Ali Nejadmalayeri, (Ph.D. Finance, University of Arizona) *John A. Guthrie Distinguished Professor of Banking and Financial Services*.

Since joining UW in August 2018, Dr. Nejadmalayeri has taught four classes (Bank Management; Bank Policy; Fixed Income Securities; Secular Stock Cycles; Blockchain and Digital Financial Services). His broad research agenda concerns the intersection of corporate finance and capital market. Most recently, he has been engaged in projects on network economics: bondholder networks and decentralized networks. Currently, he co-chairs Decentralized Treasury Working Group of Blockchain Governance Initiative Network (BGIN). Along with BGIN colleagues, which include world-renowned cyber security and supercomputing experts, he has built, administered, and moderated three conferences in Zurich (Switzerland), Vancouver (Canada), and Bol (Croatia). Dr. Nejadmalayeri was a panelist at Mountain West Innovation Summit of Council for Competitiveness giving a talk on the “Future of Finance”. Dr. Nejadmalayeri worked as a field expert on UW’s NSF Innovation Engine proposal dubbed as SHIFTR—Sustainable/Scalable High-Plains Innovation for Transforming Rural America. He was invited by world experts in cryptography and supercomputing in Georgetown and Norte Dame University to join CyberSmart Center. During 2022-2023, Dr. Nejadmalayeri published two papers: (1) “Real Asset Liquidity, Cash Holdings, and the Cost of Corporate Debt” at *Global Finance Journal* and (2) “Distressed Acquirers and the Bright Side of Financial Distress” at *International Review of Financial Analysis*. Dr. Nejadmalayeri is additionally collaborating with the junior faculty and former doctoral students on six (6) other projects concerning corporate taxation, debt covenants, corporate disclosures, corporate bond ownership, and municipal bonds. Dr. Nejadmalayeri teaches a unique, globally recognized course in Blockchain and Digital Financial Services. The course is an in-depth and broad coverage of payment systems, applications of distributed ledger technologies in payments, central bank digital currencies, decentralized finance applications, smart contracting, and non-fungible tokens. Dr. Nejadmalayeri is also awarded to be the John and Esther Clay Honors College Faculty Fellow for which he teaches a course titled Secular Stock Cycles; a *tour de force* of the conceptual foundations of secular stock market cycles. The course starts with pioneering business cycle theory of Schumpeter and examines the enduring impacts of demography and technology in the last 200 years of U.S. stock market cycles. Dr. Nejadmalayeri’s research in network economics and bondholding intimately compliments his teaching in banking, digital financial services and fixed income securities. Through scholar speaker series, Dr. Nejadmalayeri has continued to bring luminaries of accounting and finance which this year include: Hank Bessembinder from Arizona State University, Shiva Rajgopal from Columbia University, and Ioannis Ioannou from London Business School.

Dr. Chase Thiel, (Ph.D. Industrial and Organizational Psychology, University of Oklahoma) *Bill Daniels Chair of Business Ethics*

Dr. Chase Thiel became the Bill Daniels Chair of Business Ethics in Academic Year (AY) 2023 after serving on the management faculty in the College of Business (COB) for the previous six years. Dr. Thiel made an immediate impact by co-founding the [Center for Principle-Based Leadership and Ethics](#) (CPLE), which aims to contribute to a broad foundation of ethical leadership in Wyoming and the broader Rocky Mountain region. Under the academic leadership of Dr. Thiel, PBLE hosted the inaugural [Ethical Leadership Showcase](#), graduated its first cohort of students enrolled in the Leadership Minor, managed the 2023 UW [SparkTank](#) competition—which resulted in over \$125,000 being distributed to Albany County non-profits [Climb Wyoming](#), [Family Promise](#), [Feeding Laramie Valley](#), and [Unaccompanied Student Initiative](#), and hosted the third annual [Wyoming Collegiate Business Ethics Case Competition](#). Dr. Thiel was very active in regional outreach efforts as a representative of PBLE, and delivered keynote addresses at the Jackson Leadership Conference, the Future of Business Ethics Conference, and the Rocky Mountain Diabetes and Nutrition Conference. Dr. Thiel also delivered workshops to

the Laramie Chamber Alliance, the Casper Chamber of Commerce, Wyoming Future Business Leaders of America, and UW Athletics. Dr. Thiel also developed an executive-level leadership certificate, the Cowboy Leadership Certificate, which will host its inaugural cohort in May 2023. Another important aspect of PBLE is experiential student learning. In AY 2023, Dr. Thiel taught two sections of Principle-Based Ethics with an average student evaluation of instruction rating of 4.73 (out of 5), as well as one section of Future of Business Ethics—a capstone experience for exceptional COB students during which they compete in the Daniels Fund Business Ethics Case Competition. For the second year in a row, this undergraduate team advised by Dr. Thiel [took 1st place in the competition](#).

Dr. Thiel continued to develop an internationally recognized research program in AY 2023. He published or had accepted four articles—most in leading management journals including the *Journal of Management*, *Personnel Psychology*, *Human Resource Management Journal*, and *Human Performance*. Of note, Dr. Thiel’s research on employee monitoring was translated for an [article](#) in the world’s leading management practitioner journal, the Harvard Business Review. This research also received widespread media attention, being cited thus far in thirteen reports in leading outlets such as [BBC](#), [CNBC](#), and [Fortune](#). Dr. Thiel has also been interviewed by several media outlets for his expertise on employee monitoring, including a guest appearance on NBC’s [Today](#) show.

Dr. Linda Price, (Ph.D. Business Administration, University of Texas at Austin) *W. Richard Scarlett III and Margaret W. Scarlett Chair of Business Administration*.

Linda L. Price is the Dick and Maggie Scarlett Chair of Business Administration and Professor of Marketing. She is globally acclaimed as a top educator, researcher, and doctoral student mentor in marketing and consumer behavior. For example, she is one of only a handful of scholars world-wide to be named a fellow for lifetime scholarly contributions in the American Marketing Association, Association for Consumer Research, Academy of Marketing Science Association, and this year the Society for Marketing Advances. Because of her preeminent, global stature as an educator and researcher she has many opportunities each year to enhance the visibility and quality of marketing scholarship at University of Wyoming. This year she served in several critical roles that bring global visibility to the University of Wyoming. For example, this year she was invited to join the advisory board for Better Marketing for a Better World. She serves on the advisory board for the major philanthropic foundation in marketing (the Sheth Foundation) and she served on the committee for multiple awards central to the marketing field including a critical initiative to promote responsible research in business and management through awards to publications that have positive societal impact. Representing University of Wyoming, she continued her service on the editorial boards of several of the top journals in the marketing field and represented University of Wyoming in several invitation only research and education forums to which Wyoming faculty have never previously been invited. For example, Professor Price represented University of Wyoming at the AMA/Sheth Doctoral consortium, an invitation that is extended only to top faculty world-wide. She has been in regular attendance for many years. She also represented the University of Wyoming as a plenary speaker in multiple conferences throughout the year. Of course, she continued to publish timely and important research in top ranked marketing journals. One of her publications this year, in the top marketing journal, was also named to the Responsible Research in Business and Management Honor Role.

Closer to home, Professor Price is a distinguished alumnus of the College of Business and takes her teaching, research and service responsibilities in the College and University of Wyoming very seriously. She serves as co-director of research in the college, with responsibility for assessing research funding requests, recommending research awards, and facilitating a stronger research culture. This year she also served on the College of Business SOAR strategic planning effort initiated by Dean Beaulier. Professor Price also serves on the University

Reappointment, Tenure and Promotion committee charged with retaining, supporting and gatekeeping excellence in teaching, service, and research at University of Wyoming. Her most significant and personally rewarding service role is as Director of the Marketing PhD program which includes service on the University Graduate Council. Other than Economics, this is the only PhD program in the College of Business and functions within the ecosystem as a key species—that helps hold the system together. It is a relatively young program, and requires extensive energy to recruit, guide, and place students. As the Dick and Maggie Scarlett chair, during the 2022/2023 academic year Professor Price was able to support their development as teachers and scholars in myriad ways, helping them attend and present their work at conferences, participate in doctoral symposiums and consortiums, and host several distinguished marketing scholars to present their research at University of Wyoming. Finally, as a first-generation college graduate from the University of Wyoming, Professor Price loves offering support and guidance while teaching undergraduate students in the College of Business. She views this as a special opportunity to inspire curiosity, innovation, and critical thinking. Professor Price wants each of them to leave her class with pride and confidence in what a University of Wyoming degree can do for them.

Dr. Jason Shogren, (Ph.D. Economics, University of Wyoming) *Stroock Chair of Natural Resource Conservation and Management.*

Returning to his alma mater, Dr. Shogren has been the Stroock Chair of Natural Resource Conservation and Management now for 29 years. For the academic year 2022-23, Shogren continued to work on teaching, research, service, and outreach. Shogren taught a course on Environmental and Natural Resource Economics for the graduate students. He also taught Evolution of Economic Ideas, the capstone course for undergraduate economics students. He chaired or co-chaired the Ph.D. committees for several PhD students. He also advises numerous recent graduates to help them with their research program. He also serves on the committees of several Ph.D. and MS candidates, both inside and outside the Department. IN 2021, Shogren went through his five-year review last year, and was recommended for reappointment.

Dr. Shogren published numerous research articles over the past two years. According to Google Scholar, his work has been cited over 8,300 times during the five-year evaluation period (since 2018) and has been cited over 29,200 times over his career. He published numerous peer-reviewed papers in top general journals like *Science*, *Nature*, and *PNAS* and top economics journals like the *American Economic Review*, *Journal of Political Economy*, and was awarded several COB Belt Buckle Research Awards. Shogren is on the editorial board of two international journals, he is a foreign member of the Royal Swedish Academy of Sciences, he is a fellow of the Association of Environmental and Resource Economics, the Association of Applied and Agricultural Economics, he is a fellow of the Beijer Institute of Ecological Economics, the Ecological Society of America, US Steering Committee for Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), and he is serving on board for the Laramie Plains Civic Center and was re-appointed to the Wyoming Arts Council by Governor Mark Gordon. He has received his two Honorary Doctorate degrees, one from Aix-Marseille University in France and the other from the Swedish University of Agriculture Sciences (SLU). Dr. Shogren also talked with numerous media outlets about economics throughout the year.

Endowed chairs at the University of Wyoming benefit the people in Wyoming in three specific ways: (1) help attract world- class economists to Wyoming to continue to provide effective and timely policy advice to local businesses, non- profit organizations, and local government; (2) provide a sound structure to understand better the economics of environmental, resource, and energy challenges; (3) to attract extremely talented undergraduate and graduate students to UW economics department. UW economics alumni now work to keep the cycle going— UW produces good students, who become business leaders, academics, and policy makers who continue to send

us their top students. The main contribution of the Stroock chair has been through the students. Dr. Shogren enjoys working with graduate students on their ideas and helping them find their own voice. Other contributions include working with government agencies at the State, Federal, and international level; working with scholars from other disciplines (e.g., ecology, biology, psychology) to understand better how they approach a problem. Dr. Shogren's current work has focused on the economics of controlling the COVID-19 pandemic, biodiversity protection, climate change policy, water compacts and the integration of economics with the natural and life sciences.

College of Education

New-Vacant will begin reporting in FY24, *John P. Ellbogen Foundation Professorship in Early Childhood Education.*

New-Vacant will begin reporting in FY24, *Fisher Fund for the Advancement of Literacy.*

Dr. Tiffany Hunt, (Ph.D. Special Education, University of Northern Colorado) *Everett D. and Elizabeth M. Lantz Distinguished Professorship in Education.*

Provided the funding and support of the *Everett D. and Elizabeth M. Lantz Distinguished Professorship in Education*, Dr. Hunt made significant growth in her research, content development, and state outreach. Not only has Dr. Hunt created special education course specific flash briefings for graduate students, she has also partnered with faculty in the College of Education (CoE) to create and publish flash briefings for graduate students in the Educational Leadership Program. Additionally, she has collaborated with the Director of Student Teaching and a UW CoE Student Teaching Supervisor to develop and publish flash briefings specifically designed to support and train student teaching mentors and student teachers from across the state. This flash briefing incorporated a daily theme and reviewed a variety of best practices from the field. While targeted to mentor and student teachers, this flash briefing is beneficial to all educators in the state who are interested in accessing quick tips and strategies aligned to educational research.

Over the past year, Dr. Hunt and her colleagues have presented this work at two peer reviewed conferences, the *National Association for Professional Development Schools* and the *National Field Experience Conference*. Both presentations were well attended and received positive feedback from attendees. Several attendees expressed a desire to create flash briefings to present accessible course content and provide regular messaging to undergraduate and graduate students, as well as partner districts. In addition to presenting at conferences, Dr. Hunt is leading a team of CoE faculty in closely researching the use of flash briefings to share content, best practices, and build connections. This study has been approved by the UW Institutional Review Board and preliminary survey results indicate that students view flash briefings as an effective means to access content. One student shared, "*I found the flash briefing to be beneficial. And I didn't mind listening once a week for 10 minutes. It was easy to work into my schedule. I also liked the audio option instead of having to log on to the course a read.*" Another student wrote, "*...I appreciate this way of learning rather than from a fire hose. It was easy to do, and I always found that I accessed them when I had down time to listen. I thought it was very innovative and I really enjoyed it...*" The research team will be conducting one-on-one semi-structured interviews this summer to better understand the perspective of students and teachers in utilizing this modality to share information, course content, and best practices. This research team has also started drafting a manuscript that will be submitted for publication after research results have been analyzed and interviews have been coded.

One additional activity this project funded was the drafting of daily flash briefings specifically focused on literacy. These flash briefings were designed in collaboration with the Wyoming Department of Education (WDE) and are intended to support the WDE's literacy initiative by providing research-based literacy strategies and supports to Wyoming educators. Unfortunately, an unexpected health issue prevented the graduate assistant hired to draft these flash briefings from completing each script. Dr. Hunt is planning to partner with the UW Literacy Center this fall to finish drafting these flash briefings and will subsequently seek feedback from the WDE before publication.

Dr. Scott Thomas, (Ph.D. Education Policy, Leadership and Research Methods, University of California, Santa Barbara) *John P. "Jack" Ellbogen College of Education Deanship Fund*

John P. "Jack" Ellbogen Dean Scott L. Thomas led the UW College of Education in its work to strengthen support of the state's in-service teachers and school leaders. Over the last year, the College of Education reported to Wyoming's Joint Education Committee on drivers of the state's teacher shortage. That reporting included an analysis pointing to teacher attrition as the primary policy-relevant driver of the labor market challenges facing many areas of the state. Supporting that conclusion were longitudinal data on open positions, sources of new teachers, and survey results from teachers themselves.

To address these challenges, the College committed to several programs to support education professionals in the field. These programs include the very successful Wyoming Teacher Mentor Corps and the Master Educator Competency Program – efforts supported by the University of Wyoming Board of Trustees and private gifts. Efforts like these have shifted our focus from graduating more new teachers (UW graduates between 200 and 250 new teachers annually) to more systematically supporting the more than 7,000 in-service teachers in the state as a part of our approach to initial preparation and professional support across the arc of the professional educator's career.

The College's work, under Dean Thomas's leadership, has also resulted in a nationally unique focus on student-centered learning in K-12 public schools in Wyoming. This partnership builds on UW's competency-based Master Educator Competency Program, the State Board of Education's Profile of a Graduate, and recommendations from Governor Gordon's Reimagining and Innovating the Delivery of Education advisory group.

College of Engineering and Applied Science

Dr. Mike Borowczak, (Ph.D. Computer Science, VLSI Design Automation for Hardware Security, University of Cincinnati) *Templeton Associate Professor of Electrical Engineering and Computer Science*

In the 2022/2023 academic year Dr. Mike Borowczak taught four courses to over 200+ students). He was actively involved in research and outreach funded by the National Science Foundation, the National Security Agency, Department of Energy (through Idaho National Laboratory), as well as several industry partners (IOHK, Kraken, MilliporeSigma). His outreach work included developing and running three week-long federally supported professional developments for over 250 Wyoming K-12 educators, students, and state librarians through a collaboration known as the WyCSHub (uwyo.edu/WyCS).

His current labs, the Cybersecurity Education and Research Center (Director) and Wyoming Advanced Blockchain Lab (Co-Director) support one (1) Post-Doctoral researcher, nine (9) PhD students, three (3) MS student, and another 20+ undergraduate students as well as multiple external researchers. Through summer 2023

his research lab alumni will grow to three Ph.D. and eight MS students The Nell Olsen Templeton Engineering Endowment has enabled him to support students in ways that go beyond what federal agencies would typically support.

Dr. Borowczak leveraged the Nell Olsen Templeton Engineering Endowment to support student and faculty, the local Wyoming community of K-12 computing educators, and the broader Computing-focused engineering educator international community. Specifically, the Templeton Endowment supported student and researcher conference travel and professional registrations, the continued maintenance of the ASEE Computers in Education open access journal (coed.asee.org), and a communication (Slack) platform for the Electrical Engineering and Computer Science Department's students, faculty and alumni. The Templeton Endowment also supported the hosting of the 2nd annual CEDAR Symposium, where 16 research projects from over 30 student researchers (mostly undergraduates) showcased their summer research to peers, faculty, and external community and stakeholder participants (<https://www.uwyo.edu/cedar/events/2022/cedar-symposium.html>).

Additionally, the endowment has provided crucial support in terms of access to tools and resources that are not readily available through other means. This access has been instrumental in empowering students and researchers to explore cutting-edge technologies, conduct innovative experiments, and push the boundaries of knowledge in their respective domains. Finally, in addition to these contributions, the endowment funds were also used to continue to support relatively new student organization (Women in Cybersecurity – WiCyS) and an Electrical Engineering capstone team project.

Dr. Borowczak's interdisciplinary work is rooted in partnerships – he continues to utilize his Nell Olsen Templeton Associate professorship to bring people together to create and support positive change in our Wyoming communities.

Vacant, Loy and Edith Harris Assistant Professor

Dr. Jonathan Brant, (Ph.D., University of Nevada, Reno) *Vincent O. Smith Professorship in Engineering.*

Collectively, Dr. Brant's projects aim to reduce the energy consumption of desalination processes to make them more viable for rural communities and industries. Further, by making "smarter" membrane materials he aims to create selective separation processes capable of recovering strategic minerals and metals from Wyoming's waters. The benefits of Dr. Brant's work to Wyoming include the expansion of our ability to successfully utilize our state's resources, diversification of our water resources, and environmental protection. Diversifying our water resources is particularly needed considering the ongoing drought in the Rocky Mountain Region. His research is currently developing pilot skids to evaluate advanced water treatment systems, some utilizing Wyoming coal products, at the city of Laramie's wastewater treatment plant. Our goal is to demonstrate to water managers from across Wyoming how existing and new treatment technologies may be implemented to improve our access to safe drinking water and enhancing environmental protections.

During the 2022-23 academic year Dr. Brant was on sabbatical from his appointments at the University and therefore did not teach any courses. This involved travelling to Sydney, Australia to present results from his research and to build research collaborations with faculty from the University of New South Wales. He continued advising 2 doctoral students and supervising 3 post-doctoral researchers at the University of Wyoming. He was the Principal Investigator on 4 active research grants related to technology development for treating oil and gas produced waters and extraction of critical minerals, like lithium and rare earth elements, from brines. Funding

agencies for these projects included the Department of Energy (DOE), Wyoming Energy Authority (WEA), and the National Science Foundation (NSF). He also authored as PI 5 research proposals that were submitted to the DOE, US Bureau of Reclamation and private companies aimed at developing new water treatment and resource recovery technologies. Dr. Brant has built a spin-off company – Wyoming Water Innovations – that is focused on commercializing a novel magnetic system for improving the performance of membrane systems and increasing the efficiency of hydrogen production during electrolysis. Research products from the 2022-23 academic year include 3 peer-reviewed publications, 3 invited presentations to nationally recognized engineering firms and water boards, and an invited presentation at the International Desalination Association’s World Congress in Sydney Australia.

Dr. Daniel Dale, (Ph.D. Physics, Cornell University) *Professor Harry C. Vaughan Professorship in Astronomy*

In his administrative role as Associate Dean, Professor Dale spent much of his time during the 2022-2023 academic year assisting with the transition of four departments that were formerly in the College of Arts & Sciences—Mathematics & Statistics, Geology & Geophysics, Chemistry, and Physics & Astronomy—into the new College of Engineering & Physical Sciences. His favorite aspect of this work was meeting with and serving as a mentor for all first-year faculty in the College. Additional administrative work included serving as a campus leader in our new collaboration with Shorelight to enhance our recruitment of international students. In his role as teacher, Professor Dale taught PHYS1220. This is a calculus-based introductory physics course for engineering and science majors. Professor Dale endeavors to continually work on improving the course and finding new ways to challenge his students. In this course he and the students experimented with incorporating AI (in this case ChatGPT) into the process of writing lab reports.

Professor Dale’s research focuses on star-forming galaxies. He gathers astronomical data from the *Wyoming Infrared Observatory* and both of NASA’s *Hubble* and *James Webb Space Telescopes*. He aims to understand how galaxies convert gas clouds into stars and how the life cycles of those stars impact the formation of the next generation of stars. He published 22 refereed publications in the 2022 calendar year and oversaw a research group of three graduate students and eight undergraduate students. He has averaged 12 refereed publications per year for the 22 years that he has been on the faculty at UW. In 2022 Professor Dale oversaw 6 extramural grants that brought \$678K to UW. One of these federal grants involves Professor Dale directing a summer internship program for astronomy undergraduates. A critical aspect to Professor Dale’s work is the career preparation that student interns receive as they carry out research in his group. Students learn marketable skills in computer programming, public speaking, and technical writing in addition to gaining teamwork and leadership experience. Professor Dale also served as the director of the *UW Harry C. Vaughan Planetarium*, as Director of *Astro Camp* for middle school students, and as head coach of the UW Women’s hockey team (for the 14th consecutive year!).

Vacant, *H.T. Person Professorship of Engineering*.

Dr. Maohong Fan, (Ph.D. Iowa State University; Ph.D. Osaka University) *Carrell Family Energy and Petroleum Professorship in the College of Engineering* (see SER Professor of Chemical and Petroleum Engineering).

Dr. Lamia Goual, (Ph.D., Imperial College in London, UK) *Castagne Endowment for Mechanical, Petroleum Engineering and Computer.*

Dr. Goual has been instrumental to the success of graduate education in Petroleum Engineering at UW. She is the graduate coordinator of the department of Energy and Petroleum Engineering and has recently co-led the creation of a new Master of Engineering (MEng) in Energy and Petroleum Engineering. With four specialization areas (Energy Engineering, Advanced Drilling Engineering, Data Analytics, and Blockchain Technology), the new degree program educates qualified engineers in these disciplines to serve the State's industry section by helping its economy diversification and growth and to develop future technologies for the energy transition. Dr. Goual continued to manage the shared instrumentation in the Hydrocarbons Laboratory located in the Engineering Education and Research Building. In response to the 2023 Engineering Initiative one-time funding opportunity, she received \$50,000 to renew preventive maintenance plans and repair coverages of some of the shared equipment whose warranties have expired. Those instruments provide world-class research and educational tools to the department and the College of Engineering and Physical Science community. They are currently being used for research and to support graduate and undergraduate courses. In the 2022-23 academic year, Dr. Goual has taught PETE 5080 (Interfacial Phenomena), PETE 5100 (Wetting Phenomena), and PETE 3100 (Rock and Fluids Laboratory). She was the advisor of 3 PhD candidates, 2 MS students, and 1 undergraduate researcher, and has graduated 1 PhD during this time period. She has also served on the graduate committee of 4 PhD students in the same department. Dr. Goual has been leveraging her expertise to various energy areas to help the State increase its revenue. As co-principal investigator in the Wyoming Gas Injection Initiative, she has contributed to the development of Requests For Proposals (RFPs) for oil producers to develop and de-risk new technologies for the beneficial use of greenhouse gases in the recovery of oil from mature assets in Wyoming. She has also performed fundamental research on petroleum colloid and interface science funded by Hess Corporation and successfully applied graphene quantum dots extracted from Wyoming coal as foam stabilizers to enhance oil recovery from unconventional resources as part of a project funded by the U.S. Department of Energy (DOE). Her work has led to the publication of seven peer-reviewed papers (three of which were recently submitted) and a conference presentation. In Spring 2023 she was closely involved with the preparation of two multi-institutional research preapplications funded by the DOE: (i) Multiscale Analysis, Modeling, and Computation for Advancing Blue Hydrogen Production, Transport, and Storage (led by the City College of New York - CCNY), and (ii) Characterization, Monitoring and Optimization of Multiscale Chemo-poro-mechanical Processes for Long-Term, Large-Scale Geological Carbon Storage (led by Texas A&M University). Dr. Goual continued to serve as an Associate Editor for Energy & Fuels journal and an advisory board member of an NSF PIRE award led by CCNY.

Vacant, A.J. Castagne Professorship in the College of Engineering and Applied Science.

Dr. John Pierre, (Ph.D. Electrical Engineering, University of Minnesota) *G.J. Guthrie Nicholson Professorship in Electrical Engineering.*

Dr. Pierre has received numerous honors and awards, include being named as a Fellow in the electrical engineering professional society IEEE in 2013 for development of signal processing methods for estimation of power-system stability. The G.J. Guthrie Nicholson Chaired Professor of Power Engineering is specific to the field of electric energy. Dr. Pierre was appointed to the position effective July 2022, and he has been a faculty member at UW for over 30 years. His expertise is in the area of monitoring the reliability, resilience, and stability of power grids using a newer measurement technology. This technology takes high data rate power system measurements that are time synchronized from all throughout a power grid. Dr. Pierre's research has led to application software used in control centers to detect undesired oscillations in the power flowing on the grid. He

teaches both undergraduate and graduate courses that support this research. Dr. Pierre's research is important to the state and nation. The western US power system operates as one large, interconnected grid which is arguably one of the largest, most complex, and geographically dispersed man-made systems in the world. Wyoming is a major exporter of electricity; much of which travels great distances to its end use. Reliable operation of that Grid is essential to the daily lives of Wyoming citizens and to the companies producing, transmitting, and distributing the power.

In the Fall of 2022, Dr. Pierre and UW hosted a small conference in Laramie on signal processing for power system applications. Participants came from all over the US including a number of researchers from Pacific Northwest and Sandia National Laboratories. Two special seminars were presented at UW by two of the national laboratory researchers. In the Spring of 2023, he and colleague Dr. Dongliang Duan were co-chairs of a special session on power grids during UW's National Laboratory Day. Over the 2022/2023 academic year, Dr. Pierre and his research team published multiple research papers. In 2022, Dr. Pierre was selected for UW's Faculty Senate Speaker Series Award and presented a campus wide talk titled "Improving the Reliability of the World's Largest Interconnected machine: The U.S. Electric Power Grid." He is currently working with Sandia National Laboratory on a grant investigating power grid small signal stability analysis and estimation. Also, a new grant started with DOE in the Fall of 2022 where Dr. Pierre is a Co-PI. Moreover, he led a team of UW researchers to join with a group of universities from around the continent to form The Resilient Electric Grid Consortium of North America (RECON). The newly formed consortium submitted a twenty-million-dollar proposal to the US Department of Energy. Dr. Pierre joined his UW colleagues in submitting another proposal to the National Science Foundation. Dr. Pierre currently serves on the Oscillation Analysis Work Group for the Western Electricity Coordinating Council (WECC). He also serves on the organizing committee for the Power Track at the HICSS annual conference.

Dr. Mohammad Piri, (Ph.D. Petroleum Engineering, Imperial College London) *Thomas and Shelley Botts Endowed Chair in Unconventional Reservoirs in the College of Engineering and Applied Sciences* (See WY Excellence Endowment Report)

Dr. Mohammad Piri, (Ph.D. Petroleum Engineering, Imperial College London) *Alchemy Sciences Petroleum Engineering Chair* (See WY Excellence Endowment Report)

Vacant, *E.G. Meyer Family Visiting Industry Professorship*

Dr. Cameron Wright, (Ph.D. Electrical and Computer Engineering, University of Texas at Austin) *Carrell Family College of Engineering and Physical Sciences Deanship*

Dean Wright has over 40 years of experience in electrical and computer engineering, and served in various leadership positions in research and development units of the Department of Defense during his 30-year military career prior to joining the faculty of the University of Wyoming in 2003. His previous academic appointment prior to UW was as Professor and Deputy Department Head of the Electrical Engineering Department at the U.S. Air Force Academy. He has held a Professional Engineer license for 33 years, and is the author or co-author of over 260 publications including a best-selling textbook on real-time digital signal processing. He has served as an expert witness in federal court for technology-related intellectual property cases. Dr. Wright has served as Dean since 2019, and in August of 2022 was appointed as the inaugural Carrell Family Dean of the College of Engineering and Physical Sciences.

In 2023, Dean Wright led the reorganization of the college as it transformed from the College of Engineering and Applied Science to the College of Engineering and Physical Sciences. This involved bringing four new departments into the college (Mathematics & Statistics, Chemistry, Physics & Astronomy, and Geology & Geophysics), as well as a merger of the former Department of Electrical & Computer Engineering with the Department of Computer Science to form the Department of Electrical Engineering and Computer Science. The new college is comprised of 10 academic departments, along with the School of Computing and the Susan McCormack Student Success Center. Due to the reorganization, the number of faculty and staff members is approximately double the previous number, and the college is now the second largest college by enrollment at UW.

Dr. Francois Jacobs, (Ph.D. Education Human Resources Studies in Construction Management, Colorado State University) *Roy L and Caryl L Cline Distinguished Professor in Engineering.*

Dr. Francois Jacobs has been named the inaugural Roy L. and Caryl L. Cline Distinguished Professor in Engineering, an endowed professorship administered by the University of Wyoming's College of Engineering and Physical Sciences. Dr. Jacobs is an associate professor in the Department of Civil and Architectural Engineering and Construction Management, he teaches and performs research that focuses on Construction Workforce Development, Business Dynamics in family-owned corporations, Assessment, and integrated teaching platforms in Construction Education. Dr. Jacobs joined UW's faculty in 2019 to develop and steer the new College of Engineering and Physical Sciences' Construction Management Program, which has received full National Accreditation status by the American Council for Construction Education in August 2022. Under Jacobs' leadership, the Construction Management Program has further extended its reach to working professionals in the construction industry through a workforce training program as well as a high school construction training program across the State of Wyoming. Jacobs also has launched a university startup company, the Assessment Institute, through IMPACT 307, a UW business incubator.

Dr. Haibo Zhai, (Ph.D. Environmental Engineering, North Carolina State University) *Roy L and Caryl L Cline Distinguished Chair in Engineering.*

Dr. Haibo Zhai is an associate professor in the Department of Civil & Architectural Engineering and Construction Management at the University of Wyoming (UW). Dr. Zhai is also adjunct faculty in the School of Energy Resources and the School of Computing at UW and in the Department of Engineering and Public Policy at Carnegie Mellon University (CMU). In addition, Dr. Zhai is the director for the development of the Integrated Environmental Control Model (IECM), a power plant modeling tool developed for the U.S. Department of Energy's National Energy Technology Laboratory (DOE/NETL). The IECM has been used worldwide in about 90 countries. At UW, Dr. Zhai has developed an interdisciplinary program of research and education in low-carbon energy and environmental sustainability. Dr. Zhai offers two interdisciplinary courses for both undergraduate and graduate students: CE4920/5700 Carbon Capture & Storage and CE4920/5700 Water for Energy. His research program addresses technical, economic and policy issues related to energy and the environment. His research interests mainly include low-carbon energy systems, carbon capture and storage, hydrogen production, negative emissions technologies, and the energy-water nexus under carbon constraints for climate change mitigation. Dr. Zhai's research program has sponsored two PhD students, five postdoctoral research associates, and one staff member since August 2020. He just recruited two new graduate students and is recruiting another three postdoctoral research associates. In the past year (2022-2023), Dr. Zhai received five research grants from the DOE/NETL via KeyLogic Systems, Inc., the School of Energy Resources (SER), and the Wyoming Innovation Partnership program. To provide strategic planning support for the DOE/NETL's water

program, Dr. Zhai conducted systems research on reuse of non-traditional water sources for thermoelectric power plant cooling. Dr. Zhai continued his collaboration with the National Renewable Energy Laboratory on an Advanced Research Projects Agency–Energy project on flexible carbon capture technologies. Dr. Zhai published nine articles in high-profile journals, such as *Nature Water*, *Applied Energy*, and *Environmental Science & Technology* and had two journal manuscripts under peer review. Dr. Zhai is working on another seven journal manuscripts now. Regarding professional and public services, Dr. Zhai serves as a member on the graduate student committee and the ABET committee in the home department and on the UW Faculty Senate Committee’s Research Advisory Subcommittee. From October 2022 to May 2023, Dr. Zhai also served as a member of President Ed Seidel’s CHIPS and Science Act Working Group. In addition, Dr. Zhai is a guest editor of *Energies*, a journal of the Multidisciplinary Digital Publishing Institute, and serves on the advisory board of *iScience*, an interdisciplinary journal of Cell Press.

Dr. Varnegh Rasouli (Ph.D. Rock Mechanics, Imperial College London) - ***Le Norman Endowed Leadership Chair in Petroleum Engineering***

Over the past year, the LeNorman Endowed fund supported two research faculty positions as well as 10 Ph.D. students, who worked closely with two of the tenured faculty members of the Department of Energy and Petroleum Engineering. This large research team worked on two funded projects by the School of Energy Resources (SER), published over 20 conference proceedings and journal papers and submitted several research and industry proposals. The faculty supported through this fund delivered 3 courses over 2 semesters for Undergraduate students and the Teaching Assistant support by Ph.D. students provided enhanced the learning of the undergraduate students. It is expected that the fund will be used along the same direction over the next academic year.

Vacant – Williams, J. Richard & Hjalma Person Engineering Dean’s Excellence Fund

New-Vacant will begin reporting in FY24 – Gene Humphrey Professorship

Interdisciplinary

Dr. Drew Bennett, (Ph.D. Geography, Oregon State University) ***Whitney MacMillan Program in Private Lands Management in the West***

Dr. Bennett leads the MacMillan Private Lands Stewardship Program which has grown to include ten members including research scientists, post doctoral research fellows, graduate students, and undergraduates working on a range of outreach, engagement, and research projects relevant to the stewardship of private lands in Wyoming and the West. In his teaching role, Dr. Drew Bennett developed and taught a new course, “Social Science Research Methods”, to support graduate students in the development of their own research projects. He also continues to teach “Conservation Entrepreneurship”, a course that applies an entrepreneurial mindset to environmental conservation and trains students in business concepts with the aim of inspiring innovation in the environmental sector. During 2022-23 academic year, Dr. Bennett authored or co-authored three peer-reviewed journal articles and two book chapters. Under Dr. Bennett’s mentorship, graduate students were lead authors on two of the publications, which will serve to differentiate these students as they launch their careers. Dr. Bennett also worked with partner organizations outside the University to create paid internships for two students to gain practical experience with pressing environmental challenges. Through his outreach program, Dr. Bennett organized a 2-day workshop with leaders in the U.S. Department of Agriculture’s (USDA) Natural Resource Conservation

Service and regional land trusts to identify strategies to increase the pace and scale of the USDA's conservation easement program to support landowners in the region. Participants shared outcomes from the workshop with USDA leadership and other partners to support adoption of the workshop insights. Dr. Bennett and other MacMillan Program team members are also conducting research on the implementation of a collaborative effort between the State of Wyoming and USDA to conserve big game on private working lands in the state. The MacMillan team, in collaboration with agricultural partners, completed a survey of agricultural water users in six states in the Colorado River Basin to understand their perspectives and preferences for addressing water shortages in the Basin. These collective efforts support the stewardship of private lands in Wyoming and the West.

Dr. Steven Smutko, (Ph.D. Economics, Auburn University) *Eldon & Beverly Spicer Chair in Environmental and Natural Resources (See WY Excellence Endowment Report).*

Dr. John Koprowski, (Ph.D. Biology (Systematics and Ecology), University of Kansas) *International Wildlife Conservation Chair (See WY Excellence Endowment Report).*

Dr. Jacob Hochard, (Ph.D. Economics, University of Wyoming) *Knobloch Chair/Professorship in Conservation Economics.*

Dr. Hochard educated undergraduate students from the Haub School of Environment and Natural Resources, teaching "Approaches to ENR Problem Solving" and "Sustainable Ecotourism," a course located in Tenerife, Canary Islands, Spain. The Knobloch Conservation Economics Program under his leadership saw all its post-doctoral researchers secure high-ranking positions at prestigious institutions including the University of New Hampshire, University of Wyoming, and the New Mexico Institute of Mining and Technology. Further expansion of the research group included the appointment of a new Haub School undergraduate research assistant and two MS Environment, Natural Resources and Society students, plus the funded Ph.D. economics students who provided support to the program. The Knobloch Conservation Economics program partnered with the WYldlife Fund in a special beer collaboration to benefit conservation across the state, under the auspices of the WYldlife for Tomorrow Summer Ambassadors program. Throughout the 2022-2023 academic year, Dr. Hochard managed nearly \$2 million in funds from various external, internal, and foundation sources, while also submitting new proposals for continued financial backing. He actively participated in several workshops across academic and government organizations in Miami (Association of Environmental and Natural Resource Economists), Rimini (European Association of Environmental and Resource Economists), Stockholm (Wolves Across Borders), and Houston (Southern Economic Association). He also presented his ongoing work virtually to the U.S. Environmental Protection Agency. The White House's Office of Science Technology and Policy nominated Dr. Hochard to serve as a lead author on the IPBES's methodological evaluation of the impact and dependence of business on biodiversity and people's contributions from nature (business and biodiversity assessment). Dr. Hochard continues his significant role in building Wyoming's natural wealth accounts, nearing completion of a comprehensive account of the state's elk population's economic value and planning to expand this to include mule deer and pronghorn, contingent on additional funding. Dr. Hochard also made significant contributions to the field of conservation economics through his scholarly work, with three influential publications in *Nature Communications*, *Science of the Total Environment*, and *Climate Risk Management* and secured internal funding to host a scoping workshop to plan an interdisciplinary and international wildlife management conference at the University of Wyoming in September 2023.

School of Energy Resources

Dr. Caleb Hill, (Ph.D. Chemistry, University of Alabama) *J.E. Warren Chair of Energy and the Environment*.

Dr. Hill teaches in the Department of Chemistry at UW and is an internationally recognized scholar working in the fields of electrochemistry and separations. His group's work aims to generate new fundamental insights into energy conversion and storage, sensing, and chemical separations relevant to critical materials recovery and the nuclear fuel cycle. Dr. Hill also serves as co-Director of the Nuclear Energy Research Center (NERC) within the School of Energy Resources which works to develop new nuclear-focused research programs at UW to support the state's burgeoning nuclear industry. In addition to his academic roles at UW, Dr. Hill is Chief Technology Officer and Co-Founder of Wyonics LLC, a Laramie-based scientific startup whose mission is to develop sustainable technologies to address economic and environmental challenges within Wyoming. Dr. Hill's work has been recognized through numerous honors and awards, including a prestigious CAREER Award from the National Science Foundation.

In 2022, Dr. Hill served as Principal Investigator (PI) on more than \$2.4 M in external grants and contracts to UW from sources such as the National Science Foundation, Department of Energy, and the Nuclear Regulatory Commission. These funds support the work of 7 graduate students and 8 undergraduate students in Dr. Hill's lab at UW. In addition, Wyonics was awarded a \$1.15 M Phase II Small Business Innovation Research grant from the Department of Energy to commercialize analytical instrumentation with applications in nuclear forensics. This project, led by Dr. Kristin R. Di Bona, as well as other financial support raised over the previous year, has enabled Wyonics to hire 5 employees, most current UW students or recent graduates. Together, Dr. Hill's group's work resulted in 6 peer-reviewed publications in 2022 and numerous presentations and seminars at national scientific meetings and universities across the U.S. His work as co-Director of NERC has focused on facilitating connections between UW researchers and scientists at national labs, organizing the Research Explorations in Nuclear Energy for Wyoming (RENEW) symposium at UW, and writing numerous proposals to secure external support for the further development of nuclear science and engineering at UW.

Dr. John Kaszuba, (Ph.D. Geochemistry, Colorado School of Mines) *John and Jane Wold Chair of Energy* (See SER Associate Professor of Geology and Geophysics).

Dr. Tara Righetti - *Occidental Petroleum Corporation Chair in Energy and Environmental Policies (OPCCEEP)* (See SER Associate Professor of Law).

Dr. Saman Aryana, (Ph.D. Energy Resources Engineering, Stanford University) *Occidental Petroleum Corporation Chair in Energy and Environmental Technologies (OPECCEET)*.

He will assume the role of Head of the Department starting summer 2023. Dr. Aryana serves as a Lead Scientist in CMC-UF (Center for Mechanistic Control of Unconventional Formations), an Energy Frontier Research Center funded by the US Department of Energy (DOE). His research lab integrates experimental, theoretical, and computational modeling to investigate complex subsurface systems, focusing on extreme geological environments such as shales and tight rocks that play a crucial role in subsurface fluid storage. A significant aspect of Dr. Aryana's work involves studying the Mowry shale and its response to reservoir stimulation, aiming to develop predictive models for the physical processes governing flow and mass transport within its multiscale pore space. Additionally, his lab examines the thermophysics of hydrogen in the context of its potential critical role in the nation's future energy mix. The research group disseminates their findings through scientific journals and international conferences. Dr. Aryana recently co-organized and co-chaired a session at the International

Conference on Porous Media in Edinburgh, Scotland, served on a DOE EFRC review panel, and gave an invited talk on “*On-site, at scale hydrogen storage*” at the US DOE ARPA-E (Advanced Research Projects Agency–Energy). Within the UW community, Dr. Aryana serves as the chair of the UW Graduate Council, a standing committee of the faculty senate. He also concludes his seven years of service on the Faculty Advisory Committee of the UW Advanced Research Computing Center (ARCC) and five years as the Graduate Coordinator and Chair of the Graduate Committee of CBE this year.

University Libraries/Honors College

Janice Grover-Roosa, (M.L.S. Library Science, Emporia State University; MA, University of Wyoming) *Carol J. McMurry Endowed Librarian for Academic Excellence*.

During the academic year 2022-2023, Ms. Grover-Roosa provided information literacy instruction for undergraduate and graduate students. She also taught undergraduate courses, Colloquium I & II, for the UW Honors College. She and her colleagues in the Research and Instruction department at William Robertson Coe Library concluded their research on information literacy competencies in transfer students, and will begin the process of analyzing the data in the upcoming year. Additionally, Ms. Grover-Roosa’s research on library rhetorics was accepted into the Association of College and Research Libraries conference where she presented to an audience of academic librarians from around the country. Ms. Grover-Roosa received one award in this academic year—Honors Award for Service.

College of Health Sciences

Doug Petersen, (Ph.D. Disability Disciplines with an emphasis in Speech-Language Pathology, Utah State University), *Maggie and Dick Scarlet Chair in Speech-Language Pathology*.

This is Dr. Petersen’s first year as the Maggie & Dick Scarlett Chair in Speech-Language Pathology. This past year Dr. Petersen has been able to further validate innovative assessment approaches that can accurately identify children who have dyslexia and language disorder. Dr. Petersen also conducted research which focused on intervention approaches that specifically addressed the needs of children who have dyslexia, developmental language disorder, and reading comprehension difficulty. The results of those research studies have significantly affected the way in which school districts in Wyoming and across the world identify children who have specific language and literacy needs and have helped shape the way intervention is provided. Specifically, Dr. Petersen completed a major revision of his universal screening and progress monitoring assessment, which is available to download without cost. This assessment is currently used by thousands of speech-language pathologists and other educators in many school districts across Wyoming, in every state in the U.S., and in over 30 countries. Additionally, Dr. Petersen was the principal investigator on two Institute of Education Sciences (IES) grant proposals and is in the processes of finalizing a proposal for NIH. He published several peer-reviewed publications and is actively engaged in the peer review process for several tier-1 journals. Dr. Petersen spent a great deal of time in his first year at the University of Wyoming building collaborative relationships with other researchers and educators across the state of Wyoming and across the world.

College of Law

Jacquelyn Bridgeman, (J.D. Law, University of Chicago), *Kepler Distinguished Professorship of Law*.

In FY 2023, Ms. Bridgeman continued to provide service to both the College of Law and the College of Arts and Sciences through her continued work as the Director of the School of Culture, Gender, and Social Justice. In November 2022, Professor Bridgeman was elected to the prestigious American Law Institute, where she looks forward to working with leading lawyers, judges, and academics throughout the country to improve the law and the legal system. Along those same lines, Professor Bridgeman continued serving as the magistrate judge for the Albany County Integrated Juvenile Treatment Program (juvenile drug court). In addition to her regular judge duties, Professor Bridgeman also continued work with the drug court team and other community stakeholders in further developing two pilot programs created in the past year. The only programs of their kind in the country, Professor Bridgeman and the team with which she works, hopes these programs will help better meet unmet needs of Albany County youth and their families, and serve as a model for similar courts around the country, particularly those operating in rural spaces. Professor Bridgeman was appointed to the Wyoming statewide Treatment Court Committee and continued her work on the Access to Justice 2.0 statewide committee as well. She was invited to be a featured speaker at the National Sports Law Institute's 33rd Annual Fall Conference at Marquette University and published an article, *Crossing the Finish Line: Positive Equality as a Tool to Achieve Title IX's Purpose*, in the Marquette Sports Law Review. Professor Bridgeman again taught courses on Race, Gender, and the Law, and Social Justice and the Law, which was offered to students throughout UW and she taught Sports and Entertainment Law, which was offered to law students only. She and her co-authors continued work on their book aimed at helping students from underrepresented populations to be successful in college. They anticipate that book will be published within the next year. Additionally, Professor Bridgeman was awarded a sabbatical for the upcoming year to work on a book focused on equality as well.

Stephen M. Feldman, (J.S.M. Law, Stanford University, J.D. Law, Oregon State University), *Jerry W. Housel/Carl F. Arnold Distinguished Professor of Law*.

Professor Feldman has been the Jerry W. Housel/Carl F. Arnold Distinguished Professor of Law and Adjunct Professor of Political Science since 2002. His recent publications include the following: *White Christian Nationalism Enters the Political Mainstream: Implications for the Roberts Court and Religious Freedom*, 53 *Seton Hall L. Rev.* 667 (2023) (abstracted on the website *Race, Racism, and the Law*); *Overcome a Reactionary Court*, Tikkun.org (August 5, 2022); *The Roberts Court's Transformative Religious Freedom Cases: The Doctrine and the Politics of Grievance*, 28 *Cardozo J. of Equal Rights & Social Justice* 507 (2022). He also published *Pack the Court! A Defense of Supreme Court Expansion* (Temple University Press, 2021). As he does regularly, Professor Feldman taught Constitutional Law I, Constitutional Law II, and Jurisprudence. His research and writing projects emphasize national concerns and are of national interest. As such, they benefit the University of Wyoming, the state of Wyoming, and Wyoming residents. His articles and essays consistently rank in SSRN's Top Ten Percent Total New Downloads List as well as SSRN's Top Ten Percent Total All-Time Downloads List. He is the faculty adviser for the American Constitution Society Wyoming student Chapter.

James Delaney, (J.D. Law, Gonzaga School of Law, LL.M University of Florida School of Law), *Carl M. Williams Centennial Distinguished Professor*.

Professor James Delaney (J.D., Gonzaga University School of Law, LL.M University of Florida School of Law), was appointed as the Centennial Distinguished Professor of Law at the beginning of the 2020-2021 academic year

and he is now finishing his third year in that capacity. The College of Law committee appointed Professor Delaney based upon his successful teaching record, scholarly publication achievements, active involvement in the work of the Tax Section of the American Bar Association, his numerous presentations at tax conferences which are both national and regional, and his membership in both the American College of Tax Counsel and the American College of Trust & Estate Counsel. During the 2022-2023 academic year, Prof. Delaney co-authored an article, *Recent Developments in Federal Taxation: The Year 2021*, accepted for publication in *The Tax Lawyer*, Summer 2022. Professor Delaney taught Contracts 1, Business Entities Taxation (corporate and partnership taxation), Federal Income Taxation, and Estate & Gift Taxation during the 2022-2023 academic year. In March of this year, Professor Delaney was selected by the graduating class of 2023 as the Most Outstanding Professor at the College of Law. Being selected as Most Outstanding Professor is a teaching award that comes with the privilege of delivering a commencement speech to graduating students, dignitaries, and families in attendance at the College of Law Commencement ceremony. The award further comes with the privilege of hooding graduating students on stage during the graduation ceremony. Professor Delaney's teaching efforts at the College of Law reflect his dedication to teaching law students who largely practice law in Wyoming and other states in the Mountain West. His scholarly endeavors emphasize both local and national interests. As such, his publications benefit the University of Wyoming, the state of Wyoming, and Wyoming residents. For example, his books on Federal Income and Estate & Gift Taxation Serve to educate students here at the University of Wyoming College of Law, other Colleges of Law throughout the Mountain West, and abroad. Professor Delaney would like to thank the University of Wyoming and Dean Klint Alexander, Dean of the College of Law, for the support he has received over the past year.

Alan Romero (J.D. Law, Harvard University), *Carl M. Williams Professor of Law & Social Responsibility*.

Professor Romero is the founding Director of the University of Wyoming Rural Law Center. In this capacity, Professor Romero continued his work with the Wyoming State Bar to address the need for rural lawyers in Wyoming. Along with state bar representatives, Professor Romero testified before the Joint Judiciary Committee in support of a proposal to provide financial support to new rural attorneys, which would significantly help address the need for resident rural lawyers in Wyoming. In collaboration with the state bar, Professor Romero organized and co-hosted a conference about rural, small, and solo practice at the College of Law on April 13 and 14, 2023, with over 330 people attending in person and online. The conference included a well-attended evening reception that gave rural practitioners from around the state an opportunity to connect with each other and with law students. Such connections can be especially important for small and solo practitioners in rural communities. The Rural Law Center includes a Legislative Research Service, which offers student legislative research and drafting on rural policy issues to local governments and public-interest groups in Wyoming. These projects give students unique experience researching and writing about current public policy issues in the state. During the 2022-2023 academic year, Professor Romero and the students he supervised completed a substantial expansion and revision of a legal guide for Wyoming conservation districts and the public, which is now proceeding to publication. The guide explains how to formalize and incorporate irrigation companies and how to form irrigation and watershed improvement districts in Wyoming, filling a need for such guidance at the request of the Wyoming Association of Conservation Districts.

During the academic year, Professor Romero also published *Law in Place: Reflections on Urban and Rural Legal Paradigms*, a co-authored lead article in an issue of the *Fordham Urban Law Journal* devoted to the themes discussed in the article: how place characteristics are and should be relevant to law and its application, and how rural and urban scholars can and should learn from each other. Professor Romero taught Property I and Property II, required courses for all first-year law students; Real Estate Finance, which covers subjects tested on the bar

exam; and Agricultural Law. He also supervised a student writing a paper for independent study credit about crossing corners where public and private land meet, an issue of substantial current interest in the state.

Sam Kalen, (J.D. Law, Washington University), *William T. Schwartz Professor of Law*.

Sam Kalen is the William T. Schwartz Distinguished Professor of Law and teaches and is the Associate Dean at the College of Law. Professor Kalen is a nationally recognized energy, environmental, public land, and natural resources professor. He co-authored one (1) of the most comprehensive histories of the nation's energy policies, *Energy Follies* (published by Cambridge University Press) along with his co-author who was one of most renowned energy experts in the nation. He is a co-author of one (1) of the principal natural resources casebooks used in law schools across the country. He also is a co-author of one of the principal practice books, published by the American Bar Association, on the Endangered Species Act. He is routinely asked by and quoted in the national news on matters related to energy and public lands and has testified twice before the U.S. Congress on critical minerals. During the last two (2) decadal anniversaries of the National Environmental Policy Act, he has written or spoken at principal celebratory events, and is in the final stages of completing the most comprehensive manuscript on the evolution of ecology and its connection with the development of that Act. Professor Kalen also has authored numerous scholarly articles and book chapters, including publishing in such highly regarded legal law reviews as the *Maryland Law Review*, *Florida Law Review*, *Colorado Law Review*, *Marquette Law Review*, *Rutgers Law Review*, *Env't. Law Reporter*, *Ecology Law Quarterly*, *NYU Environmental Law Journal*, and *Duke Environmental Law and Policy*. Indeed, one of his early articles was cited and quoted in a U.S. Supreme Court opinion. He has had one article published in early 2023, and another article is expected to be published in June of 2023, and he co-authored a chapter on natural resources and climate change that appeared in a widely circulated book during the first quarter of 2023. And he has collaborated with others on chapters in the international realm, which chapters are expected to be published shortly.

Mr. Kalen's activities and teaching continue to have a direct and relevant benefit to the State of Wyoming. He lectures and speaks on topics ranging from the future of our electric grid to resource development on public lands. He recently appeared at an energy law professors' conference and spoke about natural gas. And he is chairing the Public Land Section for the 2024 Annual Meeting of the Foundation for Natural Resources and Energy Law (FNREL) (formerly the Rocky Mountain Mineral Law Foundation). Professor Kalen founded and is now the co-Director of the Center for Law and Energy Resources in the Rockies and helps organize the annual CLERR Landscape Discussion on Energy Law and Policy. While serving as the Associate Dean this past academic year, he taught Administrative Law and Environmental Law, as well as Public Lands, and Energy Law & Climate Law & Policy. These are all matters of acute interest to Wyoming. He serves as the College of Law's trustee to, and chairs a committee for, FNREL, and he serves on the book publishing board for the American Bar Association's Section on Environment, Energy & Resources (for which he was a past chair).

Noah Novogrodsky, (J.D. Law, Yale Law University), *Carl M. Williams Professor of Law & Ethics*.

During the 2022-23 academic year, Professor Novogrodsky taught Civil Procedure and International Law, as well as two study abroad courses: European Law and Human Rights at Cambridge, England (July-August 2022) and Natural Resources and Human Rights in the Inter-American System at UAI in Santiago, Chile (January 2023). As part of his civil procedure course, the attorneys and litigants in an antitrust case playing out in federal court in Cheyenne came to Laramie and shared their perspectives with the first-year class.

Professor Novogrodsky was on sabbatical visiting at Berkeley Law's Human Rights Center during the 2023 term. In that time, his article "Of Looting, Land and Loss: The New International Law of Takings" was accepted for publication. Professor Novogrodsky is also at work on two articles, "The Many Deaths of Jamal Khashoggi," and "Farcical Fascism." Professor Novogrodsky presented the former work at Berkeley Law and the later at SELA, a conference of Latin American jurists and professors, held this year in Bogota, Colombia. Professor Novogrodsky also served as an expert witness in several immigration cases and as a commentator on the international water law case of *Chile v. Bolivia* decided by the International Court of Justice in December 2022.

Vacant, *Winston S. Howard Distinguished Professor of Law.*

Vacant, *E. George Rudolph Distinguished Visiting Chair.*

Vacant, *Greg Dyekman Endowed Clinical Professor.*