#### SUMMARY

#### 2020-21 Faculty Research Leaves (95)

#### May 6, 2020

#### Study Research Leave (24) (one-half salary for up to one year)

College of Agriculture and Life Sciences	2
College of Architecture and Urban Studies	2
College of Engineering	4
College of Liberal Arts and Human Sciences	11
College of Natural Resources and Environment	2
College of Science	2
Pamplin College of Business	1
University Libraries	0
Virginia-Maryland Regional College of Veterinary Medicine	0

#### Research Assignment (71) (full salary for one semester)

College of Agriculture and Life Sciences	5
College of Architecture and Urban Studies	4
College of Engineering	15
College of Liberal Arts and Human Sciences	27
College of Natural Resources and Environment	6
College of Science	10
Pamplin College of Business	4
University Libraries	0
Virginia-Maryland Regional College of Veterinary Medicine	0

#### **RECOMMENDATION:**

That the above study-research and research assignment leaves be approved as requested for all faculty who meet the requirements as described in the Faculty Handbook.

May 6, 2020

#### FACULTY RESEARCH LEAVES

#### 2020-21

Virginia Tech provides tenured faculty, and faculty on continued appointment, with opportunities that include paid leave for research and/or advanced study necessary to enhance the competencies of those faculty members and increase the quality of the individual's professional stature and future contributions to the university.

#### Study-Research Leave

Study-research leave may be granted to faculty members for research and/or advanced study necessary to enhance the competencies of those faculty members to carry out their obligations to the university. (At other universities this program is often called "sabbatical.")

Full-time tenured faculty members with the rank of associate professor or higher, having accrued a minimum of six years of service, are eligible for study-research leave. Following a period of study-research leave, an additional six years of full-time service are necessary before a faculty member is eligible for another leave. Requests may be submitted prior to completion of six years of service, but faculty members must have tenure and have completed the sixth year before the leave period begins.

#### **Research Assignment**

Research assignment is a special category of study-research leave that is awarded to a tenured academic faculty member for one semester of intensive study or research that increases the quality of the individual's professional stature and future contributions to the university. It may be taken in lieu of an ordinary yearlong study-research leave.

Full-time tenured faculty members with the rank of associate professor or higher, having accrued a minimum of six years of service, are eligible for research assignment leave. Following such a leave, an additional six years of full-time service is necessary before a faculty member may be considered for another research assignment. Requests may be submitted prior to completion of six years of service, but faculty members must have completed the sixth year before the leave period begins. Faculty members on calendar year appointments may take research assignment leave for up to six months.

# The following faculty members are requesting <u>study-research leave</u> (one-half salary for up to one year) for the purpose and period of time specified:

#### **College of Agriculture and Life Sciences (2)**

<u>Hanigan, Mark</u>, professor, Dairy Science, academic year 2020-21; to expand work on the regulation of protein synthesis to growing animals, and to leverage mathematical modeling work into precision feeding systems for dairy animals. (Brazil; England)

<u>O'Rourke, Megan</u>, associate professor, School of Plant and Environmental Sciences, academic year 2020-21; to study rearing techniques for parasitoids of the Fall Armyworm insect pest. (Kenya)

# **College of Architecture and Urban Studies (2)**

**Cowell, Margaret,** associate professor, School of Public and International Affairs, academic year 2019-20; to advance work on a book manuscript on urban and rural economic vitality in the Commonwealth of Virginia, and advance research related to the *VT Collaboratory*, and applied research program related to the local impacts of Amazon HQ2 and the Innovation Campus. (Virginia)

**Zellner, Paola,** associate professor, School of Architecture + Design, fall 2020; to complete a co-authored book manuscript titled *Expanding Field. Women in Architecture, Forty Projects Across the Globe* contracted with Lund Humphries, known as the publisher of early classic architecture books, including the Bauhaus books and Frank Lloyd Wright's *Organic Architecture*. (Virginia)

# **College of Engineering (4)**

**Black, Jonathan,** professor, Aerospace and Ocean Engineering, academic year 2020-21; to develop and grow internal collaboration on the research and development related to growing number and size of small satellite and space structures, including how they are developed, tested, manufactured, and flown. (United Kingdom)

<u>**Gracanin, Denis,**</u> associate professor, Computer Science, academic year 2020-21; to conduct research to address challenges of contextualized distributed communication and collaboration among Smart Built Environments (SBE) and Mixed Reality residents, including in the areas of tele-health, collaborative immersive analytics, tele-education and tele-presence. (Virginia; Austria)

**Raghvendra, Sharath,** associate professor, Computer Science, academic year 2020-21; to focus on assessing the real-world impact of software designed for real-time delivery of goods and services, in addition to exploring the computational links between algorithms for partial differential equations and optimal transport. (Virginia)

<u>Xiao, Heng.</u> assistant professor, Aerospace and Ocean Engineering, academic year 2020-21; to apply the data-driven modeling methods developed in current research to ocean engineering (e.g., offshore platforms and marine vessels) to benefit future research in this discipline in addition to providing benefit to the offshore engineering industry. (Singapore)

# **College of Liberal Arts & Human Sciences (11)**

<u>Alexander, Michael David,</u> professor, School of Education, academic year 2020-21; to collaborate with scholars in the US and Chine on the establishment of an Education, Law, Finance and Policy Center at Shaanxi Normal University, in addition to writing several articles. (Illinois; Virginia; China)

<u>Allen, Barbara</u>, professor, Science and Technology in Society, fall 2020; to begin work on a book contracted with Oxford University Press, broadly on the study of the applicability and efficacy of participatory science, and to write and submit at least one application for external funding for this research. (Virginia)

**Gardner, Thomas,** Alumni Distinguished Professor, English, academic year 2020-21; to complete revisions of a new book entitled *Lyric Theology: Milosz, Malick, Robinson, Dillard*, which examines the work of various artists in light of the theological idea commonly known as the doctrine of creation. (Virginia)

<u>Hult, Karen,</u> professor, Political Science, academic year 2020-21; to conduct research focused on presidential staffing and policy making through speech drafting, and advance a book manuscript entitled *Structuring and Governance in Public Organizations*. (Virginia)

<u>Koch, Bettina</u>, associate professor, Political Science, academic year 2020-21; to continue work on a book manuscript exploring the dynamics and interplay between public security discourses and right-wing and Islamist ideologies. (Virginia; Germany)

**Ni, Zhange,** associate professor, Religion and Culture, academic year 2020-21; to serve as a fellow at the Nantes Institute for Advanced Study in France, and draft the manuscript for a book tentatively entitled *The Cult of Fiction in the Age of the Internet: Chinese Religion, Online Fantasy, and Adventures beyond Global Capitalism.* (France)

**Ovink, Sarah,** associate professor, Sociology, academic year 2020-21; to work on three articles and a book manuscript that examine how and why students' college and early career experiences vary intersectionally by gender, racial/ethnic identity, and income status. (Virginia)

**Powell, Katrina,** professor, English, academic year 2020-21; to finalize an edited collected, *Resettled: Beginning (Again) in Appalachia,* and complete a monograph titled, *Tent Cities, Resettlement Housing, and Rhetorical Constructions of Home in Narratives of Displacement.* (Virginia)

**Robbins, Claire,** assistant professor, School of Education, academic year 2020-21; to expand research agenda by analyzing and collecting data from one externally funded project, analyzing data from another funded project and developing manuscripts for publication, and co-editing a book about Explicit Direct Instruction (EDI) in graduate education. (Virginia)

<u>Satterwhite, Emily</u>, associate professor, Religion and Culture, academic year 2020-21; to research the intersections of the local anti-pipeline movement, the broader climate justice movement, and the literature on scholar-activism and disciplinary ways of knowing. (Virginia)

**Zanotti, Laura,** professor, Political Science, academic year 2020-21; to explore the link between quantum thought ethics and political agency in the social sciences, particularly international relations, and develop a forum on these topics. (Switzerland)

# **College of Natural Resources and Environment (2)**

**Coburn, Kelly,** associate professor, Forest Resources and Environmental Conservation, academic year 2020-21; to develop new research collaborations with scientists in the Bureau for Economic Theory and Applications, with a focus on advancing economic methods and policy analysis relevant to forest and water resource management. (France)

<u>Thomas, Robert Quinn</u>, associate professor, Forest Resources and Environmental Conservation, academic year 2020-21; to develop ecological forecasts that compare predictability among ecosystems in Australia's Terrestrial Ecosystem Research Network, the U.S.'s National Ecological Observatory Network, and the international Global Lake Ecological Observatory Network. (Australia)

# College of Science (2)

<u>Carey, Caylen</u>, associate professor, Biological Sciences, academic year 2020-21; to collaborate with a scholar at the University of Western Australia to expand the use of their ecosystem model for freshwater forecasting, allowing scalability from forecasting one reservoir in Roanoke to hundreds across the globe. (Australia)

**Park, Kyungwha,** professor, Physics, academic year 2020-21; to expand current research activities in nanoscale magnetic molecules and hybrid topological materials and explore new systems and platforms optimal for applications to quantum information science. (Germany; Switzerland)

### Pamplin College of Business (1)

<u>May, Frank</u>, associate professor, Marketing, academic year 2020-21; to serve as visiting associate professor at Cheung Kong Graduate School of Business, conducting collaborative research with scholars there on research related to time and self-control. (China)

The following faculty members are requesting <u>research assignments</u> (full salary for one semester) for the purpose and period of time specified:

# **College of Agriculture and Life Sciences (5)**

<u>Mills, Bradford,</u> professor, Agriculture and Applied Economics, fall 2020; to conduct analysis of data on factors influencing young adult participation in groundnut production in the Senegalese Groundnut Basin and of intensive and extensive margin rice production responses to salinity intrusion in the Mekong Delta region of Vietnam. (Senegal; Vietnam)

<u>Moeltner, Klaus</u>, professor, Agriculture and Applied Economics, spring 2021; to study data analytics and machine learning, with a goal of incorporating these methods and tools into ongoing research projects. (Virginia)

**Rudd, Rick,** professor, Agricultural, Leadership, and Community Education, fall 2020; to work with the Virginia Tech Center for International Research, Education and Development to launch a new initiative in Workforce Development and Education and to work on a USAID funded project in Senegal to create and share innovations in technical, vocational and career education. (Virginia; Senegal)

<u>Venkatamarana, Sridhar</u>, associate professor, Biological Systems Engineering, spring 2021; to assess the climate conditions that cause high risks to the agricultural system in terms of water availability and the vulnerability of the system to these conditions, and to evaluate adaptation options and provide alternative adaptation solutions. (India)

<u>Westfall-Rudd, Donna</u>, associate professor, Agricultural, Leadership, and Community Education, fall 2020; to establish a nationally recognized research and teaching focus on inclusion of diverse peoples in agricultural and community education through a newly formed multistate research project proposal, *Teaching for Multicultural Communities and Education in Agriculture*. (North Carolina; Virginia)

### **College of Architecture and Urban Studies (4)**

<u>Ahram, Ariel</u>, associate professor, School of Public and International Affairs, spring 2021; to examine the role and impact of the World Bank, International Monetary Fund (IMF), and other financial intergovernmental institutions (IGOs) on peacebuilding. (Washington, D.C.)

<u>Hankey, Steven</u>, assistant professor, School of Public and International Affairs, spring 2021; to launch a 1 year air pollution monitoring effort that includes mobile and fixed-site sensors in the Washington, D.C. area as part of a funded NSF CAREER proposal. (Washington, D.C.)

**<u>Pittman, Hunter,</u>** associate professor, School of Architecture + Design, spring 2021; to complete analytical studies of the Louis Sullivan small banks in the Midwest that concluded his architectural career, with emphasis on the banks in Sidney, Ohio & Owatonna, Minnesota. (Illinois; Minnesota, Ohio; Virginia)

**<u>Schnoedt</u>**, <u>Heinrich</u></u>, associate professor, School of Architecture + Design, spring 2021; to locate, digitize and assemble the paintings, drawings, and other graphics of Gustav

Weigend which depict post-World War II scenes of architectural conditions of the Northern Upper Palatinate region of Bavaria, Germany, as part of the development of a book manuscript. (Germany)

# **College of Engineering (15)**

<u>Abbott, Amos</u>, professor, Electrical and Computer Engineering, spring 2021; to develop new computer vision and machine learning methods for applications in biometrics, extending current research into a deeper investigation that should lead to new insights in the field. (Virginia)

<u>Achenie, Luke</u>, professor, Chemical Engineering, spring 2021; to conduct collaborative research on natural products as starter components for advanced materials with faculty in the Department of Material Science at the University of Ghana. (Ghana)

**Behkam, Bahareh,** associate professor, Mechanical Engineering, fall 2020; to expand knowledge in cancer immunology and synthetic biology to be able to explore new directions in developing bacteria-based biohybrid microrobotic systems with a focus on cancer immunotherapy. (Pennsylvania)

**<u>Butt, Ali,</u>** professor, Computer Science, spring 2021; to conduct research investigating and improving Cloud Computing models to drive the performance of emerging Deep Learning applications. (Australia)

**Devenport, William,** professor, Aerospace and Ocean Engineering, fall 2020; to begin writing a second edition of the co-authored textbook *Aeroacoustics of Low Mach Number Flows*, the first edition of which was published by Elsevier in 2017. (Virginia)

**Hancock, Kathleen,** associate professor, Civil and Environmental Engineering, spring 2021; to work with the UTC Center for Safety Equity in Transportation at the University of Hawaii, which focuses on highway safety for rural, isolated, tribal and indigenous communities, to develop opportunities to support Virginia Tech's Rural Virginia Initiative. (Hawai'i)

<u>Jin, Ran</u>, associate professor, Industrial and Systems Engineering, spring 2021; to collaborate with a scholar and former collaborator at Tsinghua University, on fundamental research related to statistical process control and variation analysis in manufacturing. (China)

**Koutromanos, Ioannis,** associate professor, Civil and Environmental Engineering, spring 2021; to extend area of expertise to computational simulation of soil-structure systems under extreme loading events (e.g., earthquakes), and parallel computation, with emphasis on distributed-memory systems. (Virginia)

Nain, Amrinder, associate professor, Mechanical Engineering, fall 2020; to learn liver biology in physiological and pathological conditions, leading to development of new

research directions to develop state-of-art drug testing platforms and a novel artificial liver assist device. (Pennsylvania)

<u>Qiao, Rui,</u> professor, Mechanical Engineering, spring 2021; to solidify expertise in the transport phenomena in porous media and initiate research on machine learning in transport phenomena. (New Mexico; Pennsylvania; Saudi Arabia)

**<u>Reid, Kenneth</u>**, associate professor, Engineering Education, fall 2020; to lead an effort to study the standards and current state of engineering in K-12 required for an advanced high school course suitable for college credit in engineering, as part of the E4USA project, which involves design of a curriculum and professional development for teachers for high school engineering. (Virginia)

<u>Stremler, Mark</u>, professor, Biomedical Engineering and Mechanics, spring 2021; to serve as an Otto Monsted Visiting Professor in the Department of Applied Mathematics and Computer Science at the Technical University of Denmark, including being the main contributor to a course on vortex dynamics in wakes, and complete a monograph on vortex dynamics for publication by Cambridge University. (Virginia; Tennessee; Denmark)

**Tarazaga, Pablo,** associate professor, Mechanical Engineering, summer 2020; to strengthen consortium efforts for the proposed Center for Fusion of Analysis, Simulation and Testing, in addition to recruiting new international members while exploring state-of-the-art research in this this field in Europe with a goal of assuring continued relevance. (Netherlands; United Kingdom)

**Westman, Erik,** professor, Mining and Minerals Engineering, fall 2020; to work with Earthquake Mechanics group at Oxford University to improve understanding of the mechanics of both human-induced earthquakes (e.g. through wastewater injection of deep mining) and crustal earthquakes. (United Kingdom)

<u>Wicks, Alfred</u>, associate professor, Mechanical Engineering, fall 2020; to study approaches and curriculums of other universities and organizations to address the 21st century needs of our mechanical engineering students. The goal is to suggest course content, structure and delivery that meets the commercial and intrapreneurial needs of our students. (Virginia)

### **College of Liberal Arts and Human Sciences (27)**

**Bondy, Jennifer**, associate professor, Sociology, spring 2021; to conduct a group case study on how Latina preservice teachers understand immigration and undocumented status, and write a manuscript on data from a new and traditional immigrant destination state on White women's understanding of immigration and undocumented status. (Florida; Virginia)

<u>Bugh, Glenn</u>, associate professor, History, fall 2020; to conduct archival research and prepare a monograph for publication entitled "Fortress Morea: Venetian Defensive Strategy in Peloponnese. (Washington, D.C.; Greece; Italy)

<u>Caña Jiménez, María del Carmen</u>, associate professor, Modern and Classical Languages and Literatures, spring 2021; to complete two chapters of a monograph on television studies in contemporary Hispanic cultural production. (Virginia)

**<u>Carmichael, Katie</u>**, assistant professor, English, spring 2021; to collect data for a National Science Foundation funded grant project on language practices in post-Katrina New Orleans. (Louisiana)

**Dolbin-MacNab, Megan**, associate professor, Human Development and Family Science, fall 2020; to advance the systematic understanding of grandfamilies, or families in which grandparents are raising grandchildren, by disseminating new research findings understanding via publications in peer-refereed journals. (Virginia)

**Doolittle, Peter**, professor, School of Education, fall 2020; to analyzing data and complete two articles addressing multitasking/multimedia learning, develop the Proactive Teaching website (designed to foster higher education teaching proficiency), and complete a book proposal focused on practice teaching in higher education to foster deep and flexible learning. (Virginia)

**<u>Ekirch, Roger</u>**, University Distinguished Professor, History, fall 2020; to continue research and begin writing the manuscript for a book entitled *The Town That Cried Wolf: Louvain, 1914-1940* which will be published by Yale University Press. (Virginia; Belgium)

<u>**Grafsky, Erika</u>**, associate professor, Human Development and Family Science, spring 2021; to build collaborations with colleagues across the country who study sexual and gender minority issues on the submission three manuscripts for publication, and obtain training in social network analysis to extend quantitative research skills. (Arizona; Maryland; Minnesota; Virginia)</u>

<u>Hopkins, Wat</u>, professor, Communication, fall 2020; to examine the way justices on the Supreme Court of the United States define words in First Amendment cases, and how those definitions impact the outcomes of the cases. (Virginia)

**Hwang, Eunju**, associate professor, Apparel, Housing, and Resource Management, fall 2020; to sustain and expand current research collaborations with local and international partners such as Age Friendly Cities and Communities (AFCC), with a goal of submitting manuscripts for publication and external funding. (Virginia)

<u>Johnson, Sharon</u>, associate professor, Modern and Classical Languages and Literatures/Sociology, fall 2020; to finish book entitled *Bodies that Speak: Narrating and Interpreting Rape* and secure a publisher for the manuscript. (Virginia; France)

**Justice, Greg**, associate professor, School of Performing Arts|Music|Theatre|Cinema, fall 2020; to observe and teach courses offered in acting for the camera at The Actor's Place, updating knowledge on how actors audition for film and television in today's market for use in future class offerings. (Virginia)

<u>Kaestle, Christine</u>, professor, Human Development and Family Science, spring 2021; to work with collaborators at the University of North Carolina in Chapel Hill to examine how developmental and societal forces shape sexual health in adolescence and emerging adulthood, and with collaborators at Virginia Commonwealth University in Richmond to examine tobacco use prevention programming among Latinx youth. (North Carolina; Virginia)

**Kuypers, Jim**, professor, Communication, fall 2020; to work on a book manuscript entitled *The Founding Fathers: Development and Destruction of Political Language Patterns* that examine how political ideology was publicly communicated (through ideographs and framing) by the Founders and compare this with how we communicate our shared ideology today. (Virginia)

**Lepczyk, Billie**, professor, School of Performing Arts|Music|Theatre|Cinema, spring 2021; to complete a textbook on the unique creative dance curriculum developed here over the past twenty years, the first such text ever available for university students and teachers. (Virginia)

<u>Milman-Miller, Myusya</u>, associate professor, Modern and Classical Languages and Literatures, fall 2020; to rework selected conference papers, presented at national and international conferences into articles to be submitted for publication to peer-reviewed journals. (Virginia)

<u>Minkova, Yuliya</u>, associate professor, Modern and Classical Languages and Literatures, fall 2020; to develop a book project under the provisional title, *The End of the Line: Margarita Hemlin and the Soviet Jewish Novel*, which will discuss the works of Margarita Remlin, a contemporary Russian-Jewish-Ukrainian writer. (Virginia)

<u>Peguero, Anthony</u>, associate professor, Sociology, fall 2020; to complete a book entitled *Punishing Latina/o Youth*, and to continue to collect data on school safety in California in collaboration with the American Institutes for Research (AIR). (Virginia)

**Sano-Franchini, Jennifer**, associate professor, English, spring 2021; to complete a book manuscript entitled *Instituting Affect: Feeling the Academic Job Market*, exploring how intimacy, time, space, and embodiment inform candidates' affective experience on the academic job search, and the implications of those experiences. (Virginia)

**Scerri, Andy**, associate professor, Political Science, fall 2020; to complete a book manuscript with the working title *Ecological Democratic Republicanism*, which adds an environmental dimension to democratic republican efforts to reform liberal-democracy in light of growing economic inequality and climate change. (Virginia)

<u>Schmitthenner, Peter</u>, associate professor, Religion and Culture, spring 2021; to complete a book manuscript entitled *Arthur Cotton (1803-1899): Hydraulic Engineering and Cultural Construction in South India*, aimed at contributing to the emerging scholarship dealing with the interplay between technology and culture. (Virginia)

<u>Shew, Ashley</u>, assistant professor, Science and Technology in Society, spring 2021; to draft a manuscript of a book entitled *Technoableism: Technology, Enhancement, and Disability*, that will help track and elucidate ableism instantiated through technologies in reflection on literature in philosophy of technology about cyborgs and hybridized bodies. (Virginia)

<u>Sinno, Nadine</u>, associate professor, Modern and Classical Languages and Literatures, spring 2021; to work on a scholarly book project, currently titled *The Battle for Beirut's Visual Culture* that examines graffiti, street art, and political posters in postwar Beirut and to work on a literary translation of an Arabic novel. (Virginia)

<u>Walker, Abby</u>, assistant professor, English, fall 2020; to develop a relatively new research program exploring how long-term multi-dialectal experience shapes language cognition, with a goal of submitting three manuscripts to peer-reviewed journals. (Virginia; Germany; South Korea)

<u>Williams, Thomas</u>, associate professor, School of Education, fall 2020; to update and refine research employing the National Principal and Teacher Survey (NTPS) which is the redesigned replacement survey for the Schools and Staffing Survey, and allows the researcher to perform statistical analyses on large scale data that are representative of the population of all teachers and principals in the United States. (Virginia)

**Wyatt, Ariana**, associate professor, School of Performing Arts|Music|Theatre|Cinema, spring 2021; to direct scenes and an opera in two residencies, and to complete a book entitled *The Young Singers Guide to Song* in collaboration with a colleague. (Georgia; Ohio; Virginia)

<u>Zhu, Haiyan</u>, associate professor, Sociology, fall 2020; to conduct research that will inform policies for sustainable long-term care and support systems in developing countries such as China and other populations that are experiencing rapid aging. (Virginia)

### **College of Natural Resources and Environment (6)**

**Barrett, Scott**, associate professor, Forest Resources and Environmental Conservation, fall 2020; to update Virginia's logger training curriculum and explore potential opportunities for collaboration with other institutions and associations involved in logger training outreach programs. (Virginia)

**<u>Castello, Leandro</u>**, associate professor, Fish and Wildlife Conservation, fall 2020; To work with a Human Ecologist at Federal University of Rio Grande do Norte, Brazil to assess fishers' perceptions of using data based on their own memories of past fishing events to guide decision making in fisheries management processes. (Brazil)

**Copenheaver, Carolyn**, associate professor, Forest Resources and Environmental Conservation, spring 2021; to gather historical data from dendrochronological samples and land survey records to create a baseline of forest composition and structure in the eastern deciduous forest for use as a comparison record to modern forests to assess impacts of climate change, invasive species, and human activities and set realistic conservation goals. (Virginia)

**Jiao, Yang**, professor, Fish and Wildlife Conservation, fall 2020; to conduct research and seek funding for investigating the fish population dynamics in artificial reefs region released in the low oxygen coastal area, and designing and investigating the Lake Winnipeg fisheries stock assessment with industry knowledge included. (Canada; China)

Juran, Luke, associate professor, Geography, fall 2020; to process and analyze quantitative data on access to drinking water after major reconstruction of the water sector, and to engage in time-consuming qualitative fieldwork on how disaster management and reconstruction models consider (or do not consider) water. (Virginia; India)

<u>Kline, Earl</u>, professor, Sustainable Biomaterials, spring 2021; to further develop expertise and broaden network within the circular economy research and teaching community, focusing on studying how natural and bio-based resources might drive new research opportunities toward a more circular and sustainable economy. (Greece)

### College of Science (10)

**Burbey, Thomas,** professor, Geosciences, fall 2020; to work with local academic researchers, governmental water managers, and consultants, to build a numerical model to be able to predict future water levels and land subsidence in the Choshui River alluvial plain based on current and predicted future pumping patterns and rates. (Taiwan)

<u>**Cimini, Daniela,**</u> professor, Biological Sciences, fall 2020; to cultivate new research (esp. terapoidy/genome duplication), explore and/or consolidate new areas of collaboration on cellular scaling, and explore new methodologies such as tilt imaging system, an imaging to study nuclear architecture. (Colorado; North Carolina)

**Hawley, Dana,** professor, Biological Sciences, spring 2021; to develop novel theory and empirical research at the intersection of two traditionally separate subfields of infectious disease ecology (the evolution of virulence, and host behavior during infection. (California; Pennsylvania; Germany)

**House, Leanna,** associate professor, Statistics, spring 2021; to extend research agenda into the areas of decision theory, education psychology, cognitive science, and/or science

communication, with a goal of developing a student-centric, introductory statistics textbook. (Virginia; New York)

**Johnson, Estrella,** assistant professor, Mathematics, spring 2021; to further develop fluency with quantitative methodologies to analyze large data sets gathered as part of three funded National Science Foundation grants and write publications on the results. (Virginia)

<u>Madsen, Louis</u>, professor, Chemistry, spring 2021; to work with collaborators on a jointly funded National Science Foundation grant to accelerate efforts toward larger joint funding and publication in high impact journals. (North Carolina; Pennsylvania)

<u>Sewall, Kendra</u>, associate professor, Biological Sciences, spring 2021; to develop a new molecular technique (methylation capture and next generation sequencing) to understand how early life conditions shape the brain and behavior, with a goal of collaborating with other researchers on grants and publications related to this research. (Virginia; New York; Scotland)

**Spotila, Jim,** professor, Geosciences, fall 2020; to acquire new field, laboratory, and analytical methodologies to amplify research activities in recent geologic hazards, and to. build new collaborations through institutional visits and conferences. (California; North Carolina; Quebec)

<u>Wu, Xiaowei,</u> associate professor, Statistics, fall 2020; to complete publications for several ongoing projects, use preliminary data from these projects to prepare a proposal for external grant, revise and reorganize class materials for teaching, and build research collaborations. (Virginia)

<u>Yue, Pengtao</u>, associate professor, Mathematics, fall 2020; to finish several research papers on moving contact line problems, and transition to new research projects on numerical methods for icing problems and magnetic liquid crystals. (Indiana; South Carolina; Virginia; British Columbia)

### Pamplin College of Business (4)

**Deane, Jason**, associate professor, Business Information Technology, spring 2021; to build on prior efforts to bridge the gap between IT addiction and gamification affordance research streams by using a technological affordance lens to take a close look at the relationship between an individual's efforts to cope with stressful life events (SLEs) and IT addictions. (Virginia)

<u>Markham, Steven</u>, professor, Management, spring 2021; to conduct further research to replicate past research findings showing the power of core teams versus nominal teams, to demonstrate the uniqueness of high agreement leadership dyads in organizations, and

to illustrate the strategic imperative for multi-level analysis techniques for forecasting. (Virginia)

**<u>McGehee, Nancy</u>**, professor, Hospitality and Tourism Management, spring 2021; to reenergize research productivity after serving over six years as department head, including completion of projects for publication in elite journals, and the formulation of a five-year research and publication plan. (Virginia)

<u>Xu, Jin</u>, associate professor, Finance, Insurance, and Business Law, spring 2021; to further research in the areas of institutional investors, CEO turnovers, executive compensation, and capital structure. (Virginia)