SUMMARY

Faculty Research Leaves (65)

2021-22

College	Study-Research	Research Assignment	Total
College of Agriculture and Life Sciences	-	11	11
College of Architecture and Urban Studies	3	1	4
College of Engineering	6	13	19
College of Liberal Arts and Human Sciences	2	14	16
College of Natural Resources and Environment	1	1	2
College of Science	3	4	7
Pamplin College of Business	-	4	4
University Libraries	-	1	1
Virginia-Maryland Regional College of Veterinary Medicine	-	1	1
TOTAL	15	50	65

RECOMMENDATION:

That the above study-research and research assignment leaves be approved as requested.

March 22, 2021

FACULTY RESEARCH LEAVES

2021-22

Virginia Tech provides tenured faculty, and faculty on continued appointment, with opportunities that include paid leave for intensive study or research that advances the individual's profession and 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, or faculty members holding continued appointment with significant responsibility for instruction and scholarly productivity, with the rank of assistant professor or higher, having accrued a minimum of six years of service, are eligible for study-research leaves. 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. 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.

Research Assignment
Research assignment is a special category of study-research leave that is awarded to a tenured or continued-appointment 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, or holding continued appointment with the rank of assistant 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 Architecture and Urban Studies (3)

<u>Bassett, James</u>, associate professor, School of Architecture + Design, academic year 2021-22; to focus on writing and conference proposals developing the idea of poetic measure, between analytical forms of measure and those from design and art practices that are more difficult to describe. (Virginia)

<u>Byron, Hilary</u>, associate professor, School of Architecture + Design, spring semester 2022; to review and map out a hierarchical five-year plan for research interests, revise and pursue publication of two scholarly papers, and evaluate and develop both extant and potential book proposals. (Virginia)

<u>Zellner-Bassett, Paola</u>, associate professor, School of Architecture + Design, fall semester 2021; to develop events for the launch of the book "Expanding Field: Women in Architecture, Forty Projects Across the Globe", including a related exhibit and public presentations, and to begin developing a plan for additional books on women architects. (Virginia)

College of Engineering (6)

<u>Ben-Tzvi, Pinhas</u>, professor, Mechanical Engineering, academic year 2021-22; to apply and expand expertise into growing more research projects in medical robotics, rehabilitation engineering, and assistive technologies. (Israel)

<u>Heaslip, Kevin</u>, professor, Civil and Environmental Engineering, academic year 2021-22; to examine the implementation of advanced technologies in public transportation and in next generation vehicles, working on techniques to secure and deploy these vehicles safely and efficiently. (Australia)

<u>Lau, Nathan</u>, associate professor, Industrial and Systems Engineering, spring semester of 2022 and 2023; to promote the level of human factors research and educational activities in artificial intelligence and national security in collaboration with the Commonwealth Cyber Initiative, the Hume Center, and with international collaborators in Norway (Virginia; Norway)

<u>Lesko, John</u>, professor, Mechanical Engineering, fall 2021 through summer 2022; to re-engage with, and expand research in advanced manufacturing of energy related systems and high-performance/efficiency building envelope design and manufacture after serving as an associate dean in the college. (Colorado; Indiana; United Kingdom)

<u>McNair, Lisa</u>, professor, Engineering Education, spring semester 2022; to complete and publish results from research projects related to Center for Educational Networks and

Impacts, and to begin next research area of focus investigating critique methods that connect students, faculty, and industry partners in transdisciplinary project. (Virginia)

Strom, Kyle, associate professor, Civil and Environmental Engineering, academic year 2021-22; to finish development of ideas and papers associated with the closing of two funded research projects related to a novel approach to modeling fine sediments, and to build additional research connections with domestic and international colleagues. (Virginia; Illinois)

College of Liberal Arts & Human Sciences (2)

Breslau, Daniel, associate professor, Science, Technology, and Society, academic year 2021-22; to complete a book manuscript on the science and politics of electricity market design, and to develop collaborative research with European colleagues on international comparison of changing markets in the transition to renewable energy. (Virginia; Denmark, Scotland)

Wisnioski, Matthew, associate professor, Science, Technology, and Society, academic year 2021-22; to research and begin writing a book that investigates the history of STEM education and science popularization through the Magic School Bus initiative. (Virginia)

College of Natural Resources and Environment (1)

Frimpong, Emmanuel, professor, Fish and Wildlife Conservation, academic year 2021-2022; to take a Fulbright fellowship for teaching and research in Ghana with development of a research program in peri-urban integrated fish and vegetable production (aquaponics). (Ghana)

College of Science (3)

Elgart, Alexander, professor, Mathematics, academic year 2021-2022; to focus on research concerning localization and dynamical behavior of many-body systems in collaboration with faculty at institutions in California. (California; Virginia)

Guo, Feng, professor, Statistics, academic year 2021-22; to develop a state-of-the-art analytics approach for high-frequency, high dimensional telematics data modeling, especially with application in risk prediction and automated driving system safety evaluation. (Virginia)

Horiuchi, Shunsaku, associate professor, Physics, spring semester 2022; to further develop a research program through new collaborations with researchers at international host institutions, and to increase the long-term impacts of research through building communication with future multinational experimental efforts. (Australia, Italy, Japan, The Netherlands)

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 (11)

<u>Abaye, Ozzie</u>, professor, School of Plant & Environmental Sciences, fall semester 2021; to participate in a grant-funded program to assess and encourage farmers groups' ability to provide high quality, nutritious commodities for school feeding programs in Senegal. (Senegal)

<u>Ferreira, Gonzalo</u>, associate professor, Dairy Science, spring semester 2022; to establish a research collaboration and advance knowledge of cell wall chemistry with an international colleague who is an expert in the area. (Ireland)

<u>Friedel, Curtis</u>, associate professor, Agricultural, Leadership, and Community Education, fall semester 2021; to begin work on a book connecting adaption-innovation theory to the study of leadership, science of teams, and management of societal change. (Virginia)

<u>Harden, Samantha</u>, associate professor, Human Nutrition, Foods, and Exercise, spring semester 2022; to advance an international network of health behavior implementation scientists to glean graduate education techniques as well as emergent priorities of the field. (Alaska; California; Colorado; Nebraska)

<u>Krometis, Leigh-Anne</u>, associate professor, Biological Systems Engineering, fall semester 2021; to develop ongoing partnerships to work towards solutions to the drinking water and wastewater challenges that research group has previously identified in the Central Appalachian region. (Virginia)

<u>Marek, Paul</u>, associate professor, Entomology, fall semester 2021; to begin work on a manuscript entitled "Millipedes of the United States", a field guide to millipedes for the general public. (Virginia)

<u>O'Keefe, Sean</u>, professor, Food Science and Technology, fall semester 2021; to co-write an urgently needed textbook to be used in Introductory Food Science and Nutrition courses. (California)

<u>Ponder, Monica</u>, professor, Food Science and Technology, spring semester 2022; to perform NSF-funded research examining the role of food and human food waste in transmission of disease-causing bacteria to humans and wildlife. (Botswana)

<u>Stewart, Amanda</u>, associate professor, Food Science and Technology, spring semester 2022; to build meaningful international research collaborations in applied cocoa fermentation and value-added processing of tropical fruit. (Costa Rica; Puerto Rico; Trinidad & Tobago)

Stewart, Ryan, associate professor, School of Plant & Environmental Sciences, spring semester 2022; to work with collaborators and students at the University of Innsbruck to better understand interactions between water fluxes, soil properties, and plant health in alpine grasslands as part of the Fulbright Program. (Austria)

Tu, Zhijian (Jake), professor, Biochemistry, fall semester 2021; to develop genetic strategies for cost-effective separation of male and female mosquitoes, which is required for large-scale genetic control of mosquito-borne infectious diseases, and to strengthen the collaboration between Virginia Tech and the Insect Pest Control Laboratory, a United Nations Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture. (Austria)

College of Architecture and Urban Studies (1)

Dee, Meaghan, associate professor, School of Visual Arts, fall semester 2021; to develop knowledge of UI/UX design and animation software, with a goal of producing an immersive experience in collaboration with the Cube and other venues. (Virginia)

College of Engineering (13)

Chen, Cheng, associate professor, Mining and Minerals Engineering, spring semester 2022; to develop new research projects and collaborations with academic and industrial collaborators in energy, data sciences, and the interfaces between them. (Colorado; Texas)

Chen, Xi, associate professor, Industrial and Systems Engineering, spring semester 2022; to continue and deepen research on sequential simulation-based optimization and factor screening, launch collaborative research projects in a variety of research areas, and develop new grant proposals. (North Carolina; Virginia)

Eskandarian, Azim, professor, Mechanical Engineering, spring semester 2022; to enhance and improve research capabilities, productivity, and future opportunities in autonomous connected vehicles and vehicular safety systems. (Virginia; Washington D.C.)

Leon, Roberto, professor, Civil and Environmental Engineering, spring semester 2022; to develop a manuscript for a book on composite steel-concrete construction that highlights the contributions of Virginia Tech to this important field in the construction industry. (Australia; Italy; New Zealand)

Luther, Kurt, associate professor, Computer Science, fall semester 2022; to pursue commercialization of research software for historical photo identification, and foster research collaborations in human-computer interaction and digital history. (Washington D.C.)

McCrickard, D. Scott, associate professor, Computer Science, fall semester 2021; to advance the authoring of a book that describes technology use in outdoor settings, particularly on long-distance trails like the Appalachian Trail, providing and accessible

entry point to understanding the technology challenges and opportunities found in the outdoors. (Virginia)

Meng, Na, assistant professor, Computer Science, fall semester 2021; to improve research capabilities, broaden collaboration networks with colleagues internally and external to Virginia Tech, and define new projects for proposal writing and student advising. (Maryland; Virginia)

Pruden, Amy, professor, Civil and Environmental Engineering, spring semester 2022; to work on building new collaborations for large education and training grant efforts, and begin outlining a future book project. (Virginia)

Roberts-Wollmann, Carin, professor, Civil and Environmental Engineering, fall semester 2021; to submit a number of papers in research pipeline, conduct planning for a study abroad class, and develop relationships with potential collaborators in Scotland. (Michigan, Virginia; United Kingdom)

Scales, Wayne, professor, Electrical and Computer Engineering, fall semester 2021; to further develop theory and computational models for both active and passive space experiments in collaboration with several institutions. (Alaska; Nigeria; South Africa)

Srinivasan, Divya, associate professor, Industrial and Systems Engineering, spring semester 2022; to establish an exchange research program with a premier engineering institute in India through engagement with students and research collaborations with leading faculty. (India)

Vick, Brian, associate professor, Mechanical Engineering, spring semester 2022; to complete a revision of a recently published book, begin writing a new book, further develop a set of dynamic and interactive demonstrations software, and submit a number of technical papers. (Virginia)

Zeng, Haibo, associate professor, COE, Electrical and Computer Engineering, spring semester 2022; to advance knowledge of, and further develop collaborations in the area of time-sensitive networking and energy-efficient cyber-physical systems. (Hong Kong)

College of Liberal Arts and Human Sciences (14)

Agmon, Danna, associate professor, History, fall semester 2021; to analyze archival data, write a book chapter, and write a book proposal for a manuscript for a book titled "A World at Court: Nested Legality and French Empire in the Indian Ocean". (Virginia)

Cook, Sam, associate professor, Sociology, spring semester 2022; to engage in advanced research on two interrelated projects, with a goal of producing at least three peer-reviewed articles and a book prospectus. (Virginia)

Copeland, Nicholas, associate professor, Sociology, fall semester 2021; to write up findings from prior ethnographic research on water rights and development politics in

Guatemala, in dialogue with local interlocutors, and to conduct targeted field research. (Guatemala)

Halpin, Dennis, associate professor, History, spring semester 2022; to complete research and begin drafting a manuscript for a book that uses Navassa Island as a lens to examine the history of US-Haitian relations, capitalism, crime, and the coerced labor of African-Americans following the Civil War. (Maryland, Washington D.C., France, Haiti, United Kingdom)

Hopkins, Erin, associate professor, Apparel, Housing, and Resource Management, spring semester 2022; to work on authoring a textbook related to green real estate management, especially ecological sustainability practices in property management, as these types of practices are becoming increasingly common in the industry. (Virginia)

Kiechle, Melanie, associate professor, History, spring semester 2022; to conduct archival research and draft two chapters of a new book project, tentatively titled "Desensitizing Health", that will contribute to a book proposal and subsequent applications for external funding. (Connecticut; New York; Pennsylvania; Virginia)

Kincade, Doris, associate professor, Apparel, Housing, and Resource Management, spring semester 2022; to further current research of documenting textile, apparel, and home furnishings plants in the Southeastern United States (i.e., their physical facilities) and their associated companies including operational strategies. (Virginia)

Lawson, Gerard, professor, School of Education, fall semester 2021; to conduct analysis of data gathered as part of two federal grant-funded projects examining the school to prison pipeline in Virginia, and the use of school resource officers in K-12 schools, and to develop and extend research on three other projects, including one that is externally funded. (Virginia)

Lee, Jung Eun, associate professor, Apparel, Housing, and Resource Management, fall semester 2021; to expand current research area to focus on design elements in online shopping platforms, with a goal of completing at least two manuscripts targeting top-tier marketing journals. (Virginia)

Noirot, Corinne, associate professor, Modern and Classical Languages and Literatures, spring semester 2022; to explore future directions in research following the recent completion of a second book, by completing three journal articles in progress and testing out which line of inquiry might best contribute to the international field of early-modern French literary studies. (Virginia)

Savla, Jyoti, professor, Human Development and Family Science, spring semester 2022; to publish and disseminate the results of two funded research studies from data collected in the beginning of 2020, and to visit research labs at the National Institute of Health to build collaborations. (Maryland; Virginia)

Schmitthenner, Peter, associate professor, Religion and Culture, spring semester 2022; to complete writing a book manuscript entitled "Arthur Cotton (1803-1899): Hydraulic Engineering and Cultural Construction in South India." (Virginia; India)

Stewart, Trevor, associate professor, School of Education, fall semester 2021; to complete data analysis of a five year qualitative study and trends across the study period, with a goal of submitting two articles in top-tier, peer-reviewed journals, and a book proposal. (Virginia)

Thorsett, Brian, associate professor, School of Performing Arts|Music|Theatre|Cinema, fall semester 2021; to record a new operatic work to be released on an international label, perform with nationally and internationally recognized organizations, and conduct masterclasses and presentations showcasing a forthcoming book "Songs of Frank E Tours". (California, Oregon; United Kingdom)

College of Natural Resources and Environment (1)

Castello, Leandro, associate professor, Fish and Wildlife Conservation, fall semester 2021; to execute the field-intensive component of a recently funded research grant involving preparing field logistics and tagging fish. (Brazil)

College of Science (4)

Diana, Rachel, associate professor, Psychology, fall semester 2021; to develop a research paradigm, collect pilot data, and submit a grant proposal on the topic of involuntary memory retrieval. (Virginia)

Liu, Guoliang (Greg), associate professor, Chemistry, spring semester 2022; to tap into a new research field of biomedical research by working with host institution, and to launch a commercial product of world's first graphene-based electrostatic speakers with industry partners. (California)

Norton, Anderson, professor, Mathematics, spring semester 2022; to advance work on three collaborative book projects in partnership with colleagues at other institutions. (Georgia; Indiana; Texas)

Panneton, Robin, associate professor, Psychology, fall semester 2021; to write NIH/NSF grants with colleagues at another institution, and to develop and prepare a new course in careers in psychology. (Florida; Virginia)

Pamplin College of Business (4)

Bagchi, Rajesh, professor, Marketing, spring semester 2022; to enhance knowledge base in core research area, studying the role that numbers play in influencing decision-making in various contexts such as in prediction contexts, loyalty rewards, pricing

contexts, resource use, with a goal of completing several projects in the advanced stages of development for publication. (Virginia)

Chakravarti, Dipankar, professor, Marketing, fall semester 2021; to develop, complete, and submit manuscripts related to ongoing research on human-computer interactions in marketing and consumption contexts. (Virginia)

Nottingham, Quinton, associate professor, Business Information Technology, spring semester 2022; to conduct research on the impact and effectiveness of the medical-legal partnership (MLP) associated with the grant obtained from Ballad Health. (Virginia)

Townsend, David, associate professor, Management, spring semester 2022; to develop new research studies on the role of uncertainty in theories of entrepreneurial action that will be targeted for publication in elite journals. (Virginia)

University Libraries (1)

Purcell, Aaron, professor, University Libraries, fall semester 2021; to complete a book manuscript on the environmental and economic history of Cumberland Fall. (Virginia)

Virginia-Maryland Regional College of Veterinary Medicine (1)

Luo, Xin, associate professor, Biomedical Sciences and Pathobiology, spring semester 2022; to establish new collaboration with scientists in New Zealand to facilitate entry into the research field of inflammatory bowel disease. (New Zealand)