

## SUMMARY

### **New Appointments to Endowed Chairs, Professorships, or Fellowships (14)**

**June 11, 2024**

Each college has formal procedures for the nomination and appointment to endowed chairs, professorships, and fellowships that include review by a college honorifics committee or promotion and tenure committee.

After review by the appropriate college committee the college dean makes recommendations for approval by the provost and the Board of Visitors. Such an appointment may continue through the active career of the professor at the university, unless it is relinquished in favor of some other honored or administrative appointment or unless the appointment has specific term limitations that may be renewable.

The following faculty members are recommended for endowed chairs, professorships, or fellowships at Virginia Tech.

#### **College of Engineering (11)**

Arthur Ball	Bradley Faculty Fellowship in Education
Jin-Hee Cho	Stephen and Cherye Tyndall Moore Computer Science Junior Faculty Fellowship
Harpreet Dhillon	W. Martin Johnson Professorship
Kimberly Ellis	W.S. "Pete" White Chair for Innovation in Engineering Education
James Kong	R.H. Bogle, Jr. Professorship in Industrial and Systems Engineering
Brian Lattimer	Nicholas and Rebecca DesChamps Chair in Mechanical Engineering
Christopher McDowell	Joseph H. Collie Professorship
Alan Michaels	Northrop Grumman Senior Faculty Fellowship
Leyla Nazhandali	Bradley Faculty Fellowship in Education
Peter Vikesland	Pryor Professorship of Engineering
Yuhao Zhang	Shirish S. Sathaye Junior Faculty Fellowship in Electrical and Computer Engineering

#### **College of Science (2)**

Stanca Ciupe	Roger H. Moore and Mojdeh Khatam-Moore
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Traian Iliescu

**Pamplin College of Business (1)**

Robert Davidson

Dean's Faculty Fellowship

College of Science Faculty Fellowship

R. B. Pamplin Professorship  
in Accounting and Information Systems

**ENDOWED FACULTY FELLOWSHIP**  
**Bradley Faculty Fellowship of Education**

The Bradley Fellowship of Education was established in 2015 to recognize Electrical and Computer Engineering (ECE) faculty members with an exemplary record of outstanding achievement and innovation in teaching, student mentoring, and curriculum development. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Arthur Ball for the Bradley Faculty Fellowship of Education with the support of the Bradley Department of ECE honorifics committee and the department head of ECE.

Dr. Ball earned the M.S. and Ph.D. degrees from Virginia Tech in 2004 and 2009, respectively, as a graduate research assistant in the Center for Power Electronic Systems under the guidance of Dr. Fred C. Lee. He received a B.S. in mechanical engineering and in electrical engineering from Bluefield State University. He joined the Bradley Department of Electrical and Computer Engineering in 2015 as an instructor and was promoted to collegiate assistant professor in 2021. Prior to his appointment at Virginia Tech, he worked as a design engineer in the aerospace industry for 10 years, affording him a very practical perspective in the classroom.

Dr. Ball has contributed extensively to curriculum development at Virginia Tech. As the course content committee chair for a National Science Foundation Revolutionizing Engineering Departments (NSF RED) grant, he led a group of seven faculty members (which ultimately grew to 24 faculty) to redesign the traditional course materials around threshold concepts and hands-on learning. The original seven base courses were replaced with eight new courses as a result of this grant, and they were launched in fall 2019. Significant improvements have been observed in the quality of student learning outcomes and satisfaction with the courses since their inception. Overall, Dr. Ball has revised several ECE courses and created new labs for all of them.

Dr. Ball is an extraordinary classroom teacher. This is succinctly described in a nomination letter provided to the ECE honorifics committee by an associate professor in the ECE department and the director of instructional labs. In the letter, he notes that “Dr. Ball almost always achieves SPOT scores above 5.0/6, and he routinely scores above 5.5. This puts him in the company of the best teachers in our department. Second, the range of courses he has taught is much larger than that of almost all faculty members, from a freshman-level course to core ECE courses, to a professionalism course, to a service course.” He also notes that “...when a course experiences problems as evidenced by large numbers of student complaints, one of the first suggestions for how to fix it is to send in Arthur. His incredible rapport with students, enthusiasm for the subject matter, and large base of experience in industry and academia allow him to cut to the essence of the material in the course, engage the students, and bring about a successful outcome.”

In addition to Dr. Ball's extraordinary achievements in classroom teaching and course development, he contributes widely to department and university service, with

assignments that range from being a member of the Faculty Senate (three terms) to the chair of the ECE assessment committee. Dr. Ball also advises a large number of student teams and groups. He has been the faculty advisor for ten engineering student teams and engineering-related student clubs. He is currently advising five, including high-profile multi-disciplinary teams such as the BOLT/YAMAHA electric motorcycle team, the US Department of Energy Collegiate Wind Competition Wind Turbine Team, and the Orbital Launch Vehicle team.

**RECOMMENDATION:** That Dr. Arthur Ball be appointed to the Bradley Faculty Fellowship of Education for a three-year term effective August 10, 2024, with a salary supplement as provided by the endowment.

June 11, 2024

**ENDOWED FACULTY FELLOWSHIP****Stephen and Cherye Tyndall Moore Computer Science Junior Faculty Fellowship**

The Stephen and Cherye Tyndall Moore Computer Science Junior Faculty Fellowship was established with a generous gift from Stephen and Cherye Tyndall Moore. The creation of this fellowship enables the Department of Computer Science to recruit, reward, and retain outstanding faculty members at the assistant or associate professor level. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Jin-Hee Cho for this fellowship, concurring with the recommendations of Dr. Cal Ribbens, department head of the Department of Computer Science, and the Department of Computer Science honorifics committee.

Dr. Cho has excelled in research, teaching, and student mentoring in the broad area of cybersecurity. Jin-Hee's work features a transformative approach to uncertainty-aware decision-making that integrates machine learning (ML) with belief/evidence theory. This novel synthesis combines the advanced uncertainty reasoning and quantification capabilities of belief/evidence theory with an ML paradigm, a pathway largely uncharted in contemporary research. Her work addresses pivotal security challenges and significantly advances the research frontier in AI for cybersecurity, making a substantial contribution to the research community.

Dr. Cho's research has been supported by \$5.7M in external funding, including \$1.8M personal share. She has authored 65 journal papers and 96 refereed conference publications and has over 6,600 citations. Six M.S. students and two Ph.D. students have graduated under her mentorship, and she continues to advise an active research group consisting of six Ph.D. students and multiple graduate and undergraduate research students.

Dr. Cho regularly teaches key cyber security and theory courses that are available to graduate students in both Northern Virginia and Blacksburg. She is a member of the editorial boards of three journals and has served on technical program committees for several major conferences in her field. Her many efforts to contribute to community and inclusion at Virginia Tech include workshops for K-12 and community college students and a recent research workshop on "AI for Social Good."

**RECOMMENDATION:**

That Dr. Jin-Hee Cho be appointed to the Stephen and Cherye Tyndall Moore Computer Science Junior Faculty Fellowship for a 5-year non-renewable term effective August 10, 2024, with discretionary funds to support research as provided by the endowed funds of the fellowship.

June 11, 2024

**ENDOWED PROFESSORSHIP**  
**The W. Martin Johnson Professorship**

The W. Martin Johnson Professorship was established in 1983 with a generous gift from the late W. Martin Johnson. The professorship recognizes an outstanding professor in the College of Engineering with no restrictions as to department affiliation. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Harpreet S. Dhillon to hold this professorship, concurring with the recommendations of the Bradley Department of Electrical and Computer Engineering (ECE) honorifics committee, the ECE department head, Luke F. Lester, and the College of Engineering honorifics committee.

Dr. Dhillon earned his Ph.D. in Electrical Engineering from the University of Texas at Austin in 2013. After serving as a Viterbi Postdoctoral Fellow at the University of Southern California for a year, he joined the Bradley Department of ECE at Virginia Tech as an assistant professor in Fall 2014, where he achieved early tenure and promotion to associate professor in Fall 2019 followed by promotion to professor in Fall 2022. At Virginia Tech, he has received numerous honors, including the Outstanding New Assistant Professor Award in 2017, the Steven O. Lane Junior Faculty Fellowship in 2018, the College of Engineering Faculty Fellowship in 2018, the Turner Faculty Fellowship in 2019, and the Dean's Award for Excellence in Research in 2020.

Internationally renowned for his work in wireless communications, particularly in analyzing large-scale wireless systems using stochastic geometry, Dr. Dhillon has authored numerous publications, including three books, two edited volumes, and nearly 250 journal and conference papers. With over 15,000 citations and an h-index of 57 as of March 2024, he has consistently appeared in prestigious lists such as the Clarivate Analytics Highly Cited Researcher List and the AI2000 Most Influential Scholars List. Dr. Dhillon has created a highly successful externally funded program by securing funding from multiple funding sources, including eleven awards from the National Science Foundation, amassing a remarkable \$11.7M in awards since joining Virginia Tech, with Virginia Tech's share reaching \$8.4M, and Dr. Dhillon's share exceeding \$4.0M.

A fellow of the Institute of Electrical and Electronics Engineers (IEEE), Dr. Dhillon has received six best paper awards, including three exceptionally competitive awards from the IEEE Communications Society, namely the IEEE Leonard G. Abraham Prize, the IEEE Communications Society Katherine Johnson Young Author Best Paper Award, and the IEEE Heinrich Hertz Award. His teaching excellence is evidenced by consistent recognition as one of the top instructors in his department, and his mentoring excellence is reflected in his success in advising postdoctoral associates and supporting numerous graduate students to completion.

Dr. Dhillon has also demonstrated exemplary service to his professional society and Virginia Tech through leadership roles on editorial boards of the top journals of his discipline, chairing technical program committees, and organizing dozens of workshops at top conferences. At Virginia Tech, he serves as the associate director of the

Wireless@Virginia Tech research group and oversees undergraduate and graduate curricula in wireless communications as the chair of the communications area and the lead of the wireless communications and signal processing major.

**RECOMMENDATION:**

That Dr. Harpreet S. Dhillon be appointed to the W. Martin Johnson Professorship for a renewable period of 5 years, effective August 10, 2024, with a salary supplement and operating budget as provided by the endowment.

June 11, 2024

## **ENDOWED PROFESSORSHIP**

### **W.S. “Pete” White Chair for Innovation in Engineering Education**

The W. S. "Pete" White Chair for Innovation in Engineering Education was established with a generous gift from American Electric Power. The creation of this chair, in honor of Pete White (EE '48), enables Virginia Tech to generate new interest in the teaching of engineering and in improving the learning process. It is unique in its flexibility—the chair is rotated biennially to a new recipient. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Kimberly Ellis to be appointed to the W.S. “Pete” White Chair for Innovation in Engineering Education in concurrence with recommendations from the College of Engineering honorifics committee and the department head of Industrial and Systems Engineering (ISE).

Dr. Ellis has led extensive teaching innovations into her classes – by integrating interactive in-class problem-solving exercises, culminating experiential simulations, and insights from her industry-informed research and professional experiences – to stimulate curiosity and demonstrate powerful problem-solving approaches.

Dr. Ellis redesigned a required undergraduate (UG) course, ISE 4204 Production Planning and Inventory Control (PPIC) more than 20 years ago and introduced an interactive *Production Planning Game*, affectionately known by students as “The Game.” The Game requires teams of students to assume the roles of various functions in a manufacturing facility (such as President, CFO, Inventory Manager, Production Manager, etc.) and to develop production plans for the assembly of three different products. The Game is perennially the favorite aspect of the course and of our UG program for many students. Several years ago, Dr. Ellis collaborated with another faculty member and a small team of students to digitize The Game. The aims of this effort were to accommodate large classes, accommodate on-line modality as needed, reduce resource requirements to execute The Game, promote higher-level decision-making skills among students, increase student engagement, and increase flexibility of delivery to meet the needs of a diverse student population. Beyond Virginia Tech, the digitized version of The Game has been successfully used at the Norwegian University of Science and Technology and other universities have expressed interest as well.

Dr. Ellis also designed a new graduate course, ISE 5044 Production Systems Analysis. Consistent with her teaching philosophy, she integrated a commercial on-line factory simulation called Littlefield Technologies, as part of the course. Student teams run an on-line factory 24 hours a day for a week to maximize profit for their company while meeting customer service levels. They utilize analytical techniques and insights learned in the course to forecast demand, adjust production capacity, and determine raw material ordering policies. More than 400 ISE M.S. students have benefitted from this experiential learning activity.

Dr. Ellis has also contributed to educational initiatives beyond VT through her involvement in the College-Industry Council on Material Handling Education (CICMHE), which is

sponsored by the Material Handling Industry (MHI), an industry trade association. Membership in CICMHE is by invitation only and consists of faculty from both national and international programs that emphasize material handling. Her roles within CICMHE have included liaison to the MHI Board of Governors, president, and events committee chair. As part of her service to CICMHE, Dr. Ellis chaired the complete redesign of an experiential educational activity, Classroom Day, at MHI Trade Shows. This experiential learning event is targeted at university and community college students and intended to enhance their understanding of the fields related to material handling and logistics. Dr. Ellis also co-developed two design cases for the CICMHE/MHI International Student Design Competition. Student teams analyzed and re-designed distribution facilities to address projections for increased demand. Teams were required to re-design the physical layout and material flow, and to propose solutions and technology to increase capacity. More than 900 students (including students at international universities) have benefitted from these experiential design cases.

Dr. Ellis' teaching contributions and innovations have been recognized with the university level Wine Award in 2021, with a TLOS XCaliber Award in 2022, and with the nationally competitive Innovation in Education Award given by the Institute of Industrial and Systems Engineers (IISE) in 2023.

**RECOMMENDATION:**

That Dr. Kimberly Ellis be appointed to the W.S. "Pete" White Chair for Innovation in Engineering Education for a period of two years, effective August 10, 2024, with a salary supplement and operating budget as provided by the endowment.

June 11, 2024

## ENDOWED PROFESSORSHIP

### R.H. Bogle, Jr. Professorship in Industrial and Systems Engineering

The Ralph H. Bogle, Jr. Professorship in Industrial and Systems Engineering (ISE) was established with a generous gift from the Ralph H. Bogle, Jr. estate in 1979. Although originally intended for Chemical Engineering, this gift was transitioned to a named professorship in the Grado Department of Industrial and Systems Engineering in 1984. This professorship enables the ISE department to attract and retain excellent faculty who contribute to the scholarly and research productivity and external reputation of the department. Dean Julia Ross has nominated Dr. Zhenyu (“James”) Kong to be appointed as the Ralph H. Bogle, Jr. Professor, based on the recommendations of the ISE department head and ISE honorifics committee.

Dr. Kong’s work has made outstanding contributions to the field, to Virginia Tech, to the Commonwealth of Virginia, and to the nation, through the excellence of his scholarship, teaching, and service and outreach to the community.

Dr. Kong has obtained total research funding of \$45.8M, with a personal share of \$5.2M, across 32 distinct external projects. He has averaged \$1.2M in research expenditures in each of the past two years. His research has been funded by many federal agencies and entities. He has published 84 papers in refereed journals and 32 papers in refereed conference proceedings. His work has been cited 3,786 times, with an h-index of 35 (per Google Scholar). The quality of his work has been recognized with numerous best paper awards, and his work has been featured by the Institute of Industrial and Systems Engineers (IISE) in the *ISE Magazine* five times. Dr. Kong’s research and scholarship has been recognized with the Dean’s Award for Excellence in Research, in being named a Fellow of both the American Society of Mechanical Engineers (ASME) and IISE, and in being named one of the 20 Most Influential Academics in Smart Manufacturing by the Society of Manufacturing Engineers’ *Smart Manufacturing* magazine.

Dr. Kong has taught seven unique courses at Virginia Tech and has contributed to VT’s teaching mission at every level – undergraduate required courses, undergraduate elective courses, and graduate elective courses. Two of his new courses cover data analytics, which provide important additions to the curriculum. He has graduated 12 Ph.D. students and four M.S. students, and is currently advising five Ph.D. students. Over 75% of his Ph.D. graduates hold tenure-track faculty positions. He has advised 23 undergraduate research students, including those in the Multi-Cultural Academic Opportunities Program. His graduate advising was recognized with the College of Engineering Outstanding Mentor Award.

Dr. Kong has served on the ISE undergraduate program committee, ISE graduate program committee, ISE Ingersoll-Rand Endowed Lecture Series committee, and multiple faculty search committees, including chairing one. He is currently chair of the ISE promotion & tenure committee. Externally, Dr. Kong has served as program co-chair for the 2016 IISE Annual Conference, associate chair of the scientific committee for the North American Manufacturing Research Institute and conference, president of the IISE Quality

Control and Reliability Engineering Division, and editor for *IIE Transactions (Design and Manufacturing)*.

**RECOMMENDATION:**

That Dr. Zhenyu (“James”) Kong be appointed to the R.H. Bogle, Jr. Professorship in Industrial and Systems Engineering for a renewable period of 5 years, effective August 10, 2024, with a salary supplement and operating budget as provided by the endowment.

June 11, 2024

**ENDOWED CHAIR**  
**Nicholas and Rebecca DesChamps Chair in Mechanical Engineering**

The Nicholas and Rebecca Deschamps Chair in Mechanical Engineering was established in 2017 in honor of Nicholas and Rebecca DesChamps, benefactors of the endowment. This endowment intends to establish a named chair in the department of Mechanical Engineering (ME). This chair will be held continuously by the department head of ME, regardless of who serves in that role. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Brian Lattimer, department head of ME, as the Nicolas and Rebecca Deschamps Chair of Mechanical Engineering on the recommendation of the ME departmental honorifics committee.

Dr. Lattimer has served as the interim head of ME at Virginia Tech since August 2023, and was recently appointed as department head. In this role, he aligns the ME department's activities with Virginia Tech's strategic goals, such as the Virginia Tech Advantage and the Global Distinction priorities. In the short period that he has served in this administrative role, he has had a notable positive impact on the day-to-day affairs and future direction of the department. A few examples include implementing efficient processes to promote fairness in decision-making, updating the curriculum and assessment committee and processes for assigning graduate teaching assistantships, creating seed funding incentives to promote collaborative, interdisciplinary research, initiating graduate student-led travel funds, and strengthening the support of undergraduate teams and groups. His visionary contributions have positioned the department to excel in its growth.

Dr. Lattimer's scholarly work, service, and leadership in his research community have established him as a world-leading fire science expert, bringing significant prestige and research funding to Virginia Tech. His effective mentoring, tireless service, and remarkable leadership within the Virginia Tech community have benefited the students, department, and college tremendously. His contributions make him an ideal candidate for this recognition.

**RECOMMENDATION:**

That Dr. Brian Lattimer be appointed the Nicholas and Rebecca Deschamps Chair in Mechanical Engineering, effective March 10, 2024, with a salary supplement and operating budget as provided by the endowment.

June 11, 2024

**ENDOWED PROFESSORSHIP**  
**Joseph H. Collie Professorship**

The Joseph H. Collie Professorship was established with a generous gift from Joseph H. Collie, a 1950 graduate of Virginia Tech's Department of Chemical Engineering. It is awarded to an individual who has extensive industrial experience and expertise in production, marketing, and sales of chemicals to introduce chemical engineering students to advanced business and marketing concepts in chemical distribution management. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Christopher C. McDowell to the Joseph H. Collie Professorship, in concurrence with the recommendation of the Department of Chemical Engineering honorifics committee and department head Steven Wrenn.

Dr. McDowell has extensive industrial experience in the production and business aspects of chemical and biochemical products since 1998, and he also has significant industrial management experience. Since 2022, he has been the senior global technology manager, microbial production, at Novozymes Biologicals (NZB), leading the technology improvement, integration, and acquisition of Novozymes' world-wide microbial production facilities. Between 2017 to 2022, he was the head of operations, managing MZB's production and business operations in Salem, VA.

Dr. McDowell has devoted a significant amount of his time and resources to helping the Department of Chemical Engineering at Virginia Tech by sponsoring bio-related design projects and serving as the project advisor to nine to 12 graduating seniors every spring semester, teaching a special study course on biochemical engineering to seniors and graduate students, and collaborating with faculty and graduate students on machine learning research applied to industrial bioprocesses.

Dr. McDowell shared his 25 years of manufacturing and business experiences in chemical and biochemical production in teaching a course on business and marketing strategies for the chemical process industries to 18 graduating seniors majoring in chemical engineering and marketing. Dr. McDowell's teaching evaluations were above both department and college averages, demonstrating his skill in teaching the business and marketing aspects of chemical production, which is an essential qualification for appointment to the Collie Professorship. His appointment has also received strong support from top professional leaders.

Dr. McDowell's enthusiasm, people skills and capability clearly came through during his hiring process. Considering his breadth and depth of chemical industry achievements, including technical, business and marketing, the Department of Chemical Engineering is pleased to nominate him for this professorship.

**RECOMMENDATION:**

That Dr. Christopher C. McDowell be appointed to the Joseph H. Collie Professorship, effective August 10, 2024, for a renewable period of five years, with the eminent scholar salary supplement provided by the endowment.

June 11, 2024

**ENDOWED FACULTY FELLOWSHIP**  
**Northrop Grumman Senior Faculty Fellowship**

The Northrop Grumman Senior Faculty Fellowship was established with a generous gift from the company in 2015. The creation of this position enables a Virginia Tech College of Engineering faculty member who is associated with the National Security Institute to enhance their research in areas of interest to the company. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Alan J. Michaels as the Northrop Grumman Senior Faculty Fellow based on the recommendations of the Bradley Department of Electrical and Computer Engineering and its honorifics committee.

Dr. Michaels has excelled at scholarship, teaching, service, and outreach at Virginia Tech. Through his innovative teaching methods, focus on hands-on experiential learning as the university Vertically Integrated Projects site director, advising students in multiple departments, and creation of novel national security-oriented curriculum, he has impacted thousands of students. He has been instrumental in integrating research of the National Security Institute (NSI) across multiple Virginia Tech colleges, mentoring senior capstone design projects, and supporting development of project-based curricula. The NSI student portfolio now engages over 1,000 students per year.

Dr. Michaels has excelled at delivering creative research solutions to problems in secure digital communications and cryptography, accompanied by a distinguished record of patents and scholarship. He has obtained external grants worth over \$181M and has served as principal investigator of joint academic/industry teams, including the ongoing Northrop Grumman/Virginia Tech efforts for Intelligence Advanced Research Projects Activity (IARPA). His work has led to 45 issued U.S. patents, with seven more pending. He also leads a key contingent of faculty researchers, the Spectrum Dominance Division at the NSI. He recently won a dean's award for excellence in research in 2023 and was elected as a Fellow of the National Academy of Inventors in 2021.

Through his research leadership in secure communications and Department of Defense (DoD)/Intelligence Community (IC)-oriented applications of the Radio Frequency (RF) spectrum, Dr. Michaels has made outstanding contributions to Virginia Tech, to the Commonwealth of Virginia and to the nation by his innovation, teaching, his service and outreach to the DoD/IC community, and through his publications.

**RECOMMENDATION:**

That Dr. Alan J. Michaels be appointed to the Northrop Grumman Senior Faculty Fellowship for a renewable period of 5 years, effective August 10, 2024, with a salary supplement and operating budget as provided by the endowment.

June 11, 2024

**ENDOWED FACULTY FELLOWSHIP**  
**Bradley Faculty Fellowship of Education**

The Bradley Fellowship of Education was established in 2015 and funded by the Bradley Endowment to recognize Electrical and Computer Engineering (ECE) faculty members with an exemplary record of outstanding achievement and innovation in teaching, student mentoring, and curriculum development. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Leyla Nazhandali for this fellowship with the support of the ECE honorifics committee and the ECE department head.

Dr. Nazhandali earned M.S. and PhD degrees from the University of Michigan, Ann Arbor in 2002 and 2005, respectively. She joined the Bradley Department of Electrical and Computer Engineering in 2006. She was promoted to associate professor in 2012, and to professor in 2020. She has earned numerous honors while at Virginia Tech, including the prestigious NSF CAREER award in 2006.

Dr. Nazhandali has a ground-breaking record of innovation in teaching over her career at Virginia Tech. Her record and innovation in the ECE curriculum at Virginia Tech is exceptional. She is a highly effective classroom teacher as exemplified by SPOT scores and by the observations of internationally known experts in engineering education. In addition to being a talented classroom teacher, her broad contributions to the ECE department have improved the teaching effectiveness of her colleagues.

Dr. Nazhandali has received feedback from recognized experts in education about her teaching. One of these experts says this about Dr. Nazhandali: “Specifically, Dr. Nazhandali actively engages students in group problem-solving for much of their class time. She employs the most effective strategies for getting students to participate.... In particular, her ‘time to get back on the bus’s strategy’ for bringing students who get lost during a class period back to the discussion at hand is one I still mention to others when discussing good teaching in large, introductory courses. I don’t need to tell you that these large, technical courses can be among the most challenging to teach and help students succeed in. Dr. Nazhandali does this beautifully.”

Dr. Nazhandali has made numerous impactful and creative contributions to the ECE department curriculum and teaching practices. For example, to enhance attendance and participation of the classroom, Dr. Nazhandali pioneered the method “Gamification with Second-Order Incentives,” which is a significant advancement in educational strategies, particularly in addressing the challenges of the post-COVID era. Through this method she has successfully increased class attendance by approximately 30% and noticeably improved the quality of student participation.

Dr. Nazhandali pioneered the department’s use of undergraduate teaching assistants (UTAs). Beginning in Fall 2019 with five UTAs, her initiative rapidly proved its value, and the department expanded the program to other courses. Dr. Nazhandali has made transformational changes to course including Introduction to Computer Architecture (ECE 2500) and Introduction to Embedded Systems (ECE 2564). In ECE 2564, Dr. Nazhandali

introduced a new course structure, new sequenced homework assignments, and a new website that contains relevant review materials for students, as well as step-by-step tutorials and other materials.

Dr. Nazhandali has also been an influential contributor to the National Science Foundation Revolutionizing Engineering Departments (NSF RED) grant, which has resulted in fundamental changes to the structure of ECE curriculum.

**RECOMMENDATION:**

That Dr. Leyla Nazhandali be appointed to the Bradley Faculty Fellowship of Education for a three-year term effective August 10, 2024, with a salary supplement as provided by the endowment.

June 11, 2024

**ENDOWED PROFESSORSHIP**  
**Pryor Professorship of Engineering**

The Pryor Professorship of Engineering was established in 2019 with a generous gift from Charles W. Pryor Jr. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Peter Vikesland for the inaugural appointment to the Pryor Professorship, based on the recommendations of the Charles E. Via Jr. Department of Civil and Environmental Engineering and its honorifics committee.

Dr. Vikesland is recognized as a national and international leader in nanotechnology and in the application of sensors to water quality research. He is a strong contributor to the instruction of undergraduate and graduate students across disciplines at Virginia Tech and provides admirable service contributions to the department, college, and university.

Dr. Vikesland leads large transdisciplinary research teams at Virginia Tech as evidenced by his leadership of several highly competitive and recently awarded grants at Virginia Tech, including a \$8.8M research grant from Flu Lab, and a \$3.6M Partnership in International Research and Education grant from the National Science Foundation. Dr. Vikesland has directed or co-directed nearly \$28M of sponsored research at Virginia Tech to support transdisciplinary and highly impactful research including \$8.2M in external research grants in progress.

Dr. Vikesland is the author or co-author of 146 papers in peer-reviewed scientific journals. His work has been cited in over 12,000 articles in peer-reviewed publications, and his h-index is 61. Dr. Vikesland is a fellow of the Association of Environmental Engineering and Science Professors and has received a number of professional awards in recognized for his contributions.

Dr. Vikesland has made outstanding contributions in scholarship, research, instruction, mentoring, and service that benefit Virginia Tech, the Commonwealth of Virginia, the nation, and the world. His numerous contributions in these areas have improved the visibility and notoriety of Virginia Tech.

**RECOMMENDATION:**

That Dr. Peter Vikesland be appointed to the Pryor Professorship of Engineering for a renewable 5-year appointment, effective August 10, 2024, with a salary supplement and annual operating budget as provided by the endowment.

June 11, 2024

**ENDOWED FACULTY FELLOWSHIP**  
**Shirish S. Sathaye Junior Faculty Fellowship**  
**in Electrical and Computer Engineering**

The Shirish S. Sathaye Junior Faculty Fellowship in Electrical and Computer Engineering was established in 2024, funded by ECE alumnus, entrepreneur, and technology investor Dr. Shirish Sathaye. Dr. Julia Ross, dean of the College of Engineering, has nominated Dr. Yuhao Zhang for the Shirish S. Sathaye Junior Faculty Fellowship in concurrence with the recommendations of the Bradley Department of Electrical and Computer Engineering (ECE) honorifics committee and the ECE department head.

Dr. Zhang earned his M.S. and Ph.D. in Electrical Engineering from Massachusetts Institute of Technology (MIT) in 2013 and 2017, respectively, where he received the MIT Microsystems Technology Laboratory Dissertation Seminar Award in 2017. After postdoctoral training at MIT, he joined ECE at Virginia Tech as an assistant professor in Fall 2018 and was named the Outstanding New Assistant Professor by the Virginia Tech College of Engineering in 2021, and a College of Engineering Faculty Fellow in 2022. He received the Office of Naval Research (ONR) Young Investigator Award in 2023. He also received the prestigious National Science Foundation (NSF) CAREER Award in 2021.

Dr. Zhang has demonstrated a strong record in obtaining research funding and leading large sponsored projects. He has obtained research funding totaling over \$15M with a personal share over \$5M. He is currently leading federal projects with a funding size from \$0.5M-\$1.5M sponsored by NSF and ONR.

Dr. Zhang has shown remarkable research productivity in his career. He has authored over 150 papers and two book chapters and holds 5 granted U.S. patents. According to Google Scholar in March 2024, his work has been cited 7,535 times with a h-index of 45. The venues of his publications are diverse, ranging from applied physics to electron devices, power electronics, and broader field. Yuhao's group is one of the very few (i.e., less than 5) research groups globally that can deliver publications in the very best conferences and journals, in both the *IEEE Electron Device Society* and *IEEE Power Electronics Society*. In the broad field, Yuhao's group at Virginia Tech has published (co-)lead-author papers in *Nature Electronics*, *Nature Communications*, and *Advanced Materials*. His research has been covered by media globally over 80 times (by *Nature Electronics*, *EE Times*, *Semiconductor Today*, *Compound Semiconductor*, *Power Electronics*, etc.). In addition, he has delivered 40 invited talks or short courses in preeminent conferences and seminars.

Dr. Zhang is an enthusiastic teacher and mentor. At Virginia Tech, he has taught three undergraduate courses and one graduate course. He has graduated one postdoctoral associate, four Ph.D. students, and three M.S. students, and their placements cover academia, industry, and government. His Ph.D. student Joseph Kozak received the Best Ph.D. Thesis Talk Award of the IEEE Power Electronics Society and the Graduate Student of the Year of Virginia Tech in 2021.

Finally, Dr. Zhang has served in the leadership roles in professional communities and at Virginia Tech. He is serving on the editorial board of *IEEE Transaction on Power Electronics*, the top journal in the field of power electronics. He has also served as the technical program committee, organization committee, or session chair for nine international conferences as well as a proposal reviewer for four funding agencies in U.S., Europe, and Asia. At Virginia Tech, he co-led the committee to procure a \$3.2M electron beam lithography tool and has led the micro/nano-systems major in the ECE curriculum committee.

**RECOMMENDATION:**

That Dr. Yuhao Zhang be appointed to the Shirish S. Sathaye Junior Faculty Fellowship in Electrical and Computer Engineering, effective August 10, 2024 for a non-renewable 5-year term, with a salary supplement as provided by the endowment.

June 11, 2024

**ENDOWED FACULTY FELLOWSHIP****Roger H. Moore and Mojdeh Khatam-Moore Dean's Faculty Fellowship**

The Roger H. Moore and Mojdeh Khatam-Moore Dean's Faculty Fellowship was established in 2019 with a generous gift from its namesakes to enhance the national and international prominence of the Virginia Tech College of Science. Mr. Roger H. Moore, who earned his bachelor's degree in general science as a 1970 graduate of Virginia Tech, established this fellowship with his wife to recognize faculty dedicated to extraordinary research and teaching; to recruit scholars with exceptional records of achievement; and/or retain high-performing faculty members who make significant contributions to the university's research efforts and beyond. A recipient shall hold the fellowship for a period of three years with possible renewal. Dr. Kevin T. Pitts, Dean of the College of Science, has nominated Dr. Stanca Ciupe, professor of Mathematics, to hold one of these fellowships.

Dr. Ciupe joined the Department of Mathematics in 2011 as an assistant professor and ascended through the academic ranks to professor in 2021. She was named director of the Virginia Tech Center for Mathematics of Biosystems in January 2024. Prior to joining Virginia Tech, she held postdoctoral research positions at Duke University Medical Center and at the Santa Fe Institute and Los Alamos National Laboratory and was a tenure-track assistant professor at the University of Louisiana at Lafayette. While on faculty at Virginia Tech, Dr. Ciupe has been a visiting associate professor at Duke and a visiting researcher at Los Alamos. She earned her Ph.D. in Applied Mathematics from the University of Michigan in 2005.

Dr. Ciupe's highly interdisciplinary research focuses on immune response to viral diseases such as HIV, Hepatitis B, SARS-CoV-2, and Dengue virus infections, using ordinary and delay differential equations to model host-pathogen kinetics. This multi-scale modeling leverages analytical and numerical tools and incorporates quantitative data from biological sciences and medicine.

Dr. Ciupe's scholarship record is exceptional, with 42 publications in peer reviewed journals and over a hundred invited or keynote presentations at professional conferences. Her publications have garnered over 1,400 citations in her career to date.

Her research expertise has been recognized with substantial funding, including grants from the National Science Foundation, the National Institute of General Medical Sciences, the Simons Foundation, and the Arbutus Biopharma Corporation.

**RECOMMENDATION:**

That Stanca Ciupe, Ph.D. be appointed to the Roger H. Moore and Mojdeh Khatam-Moore Dean's Faculty Fellowship for a three-year term, effective August 10, 2024, with operating support as provided by the endowment.

June 11, 2024

**ENDOWED FACULTY FELLOWSHIP**  
**College of Science Faculty Fellowship**

The College of Science Faculty Fellowships were established in 2019 with support from alumni and friends of the College to enhance the national and international prominence of the Virginia Tech College of Science. These fellowships are intended to recognize faculty dedicated to extraordinary research and teaching; to recruit scholars with exceptional records of achievement; and/or retain high-performing faculty members who make significant contributions to the university's research efforts and beyond. A recipient shall hold the fellowship for a period of three years with possible renewal. Dr. Kevin T. Pitts, Dean of the College of Science, has nominated Dr. Traian Iliescu, professor in Mathematics, to hold one of these fellowships.

Dr. Iliescu earned his Ph.D. in Mathematics from the University of Pittsburgh in 2000 and joined Virginia Tech as an assistant professor in 2002 after spending two years as a Wilkinson Fellow at the Argonne National Laboratory. He was promoted to professor in 2013.

Dr. Iliescu's research is concerned with the mathematical modeling, analysis, and simulation of turbulent flows. Currently his research group is focused on Galerkin methods. These methods discretize continuous problems: in the simplest case, a differential equation might be converted to a system of linear equations. In particular, Dr. Iliescu's work has been central in the development of data driven Galerkin (d2G) methods as well as testing these new models in the context of engineering as well as geophysical and biomedical applications.

Dr. Iliescu has an exceptional scholarly record, with over 80 peer-reviewed publications in leading journals, a book, and several book chapters. He has accepted nearly 100 invitations to speak at conferences and delivered dozens of seminars and colloquia at departments around the world. Since coming to Virginia Tech, Dr. Iliescu has been awarded over \$1.6M in external grant funding from the National Science Foundation, the Department of Energy, the Air Force Office of Scientific Research, and other agencies.

**RECOMMENDATION:**

That Traian Iliescu, Ph.D. be appointed to the College of Science Faculty Fellowship for a three-year term, effective August 10, 2024, with operating support as provided by the endowment.

June 11, 2024

## **ENDOWED PROFESSORSHIP**

### **R. B. Pamplin Professorship in Accounting and Information Systems**

The R. B. Pamplin Professorship in Accounting and Information Systems was established in 1992 to attract and retain eminent scholars in the Pamplin College of Business. The Department of Accounting and Information Systems honorifics committee has nominated Dr. Robert Davidson for the R. B. Pamplin Professorship in Accounting and Information Systems, with the support of the Pamplin faculty honorifics and awards committee and Dean Saonee Sarker.

Dr. Robert M. Davidson received his Ph.D. from the University of Chicago Booth School of Business in 2011. After beginning his career at Georgetown University, he joined the Virginia Tech faculty in the Department of Accounting and Information Systems in the Pamplin College of Business faculty as an assistant professor in 2017. He was promoted to associate professor with tenure in 2020 and was later promoted to professor in 2023. He was named head of the Department of Accounting and Information Systems in January of 2022.

Dr. Davidson is a highly productive and impactful scholar. Since 2018, he has had six papers accepted at journals on the Pamplin Elite Journal List; four of those papers have been accepted at journals on the UT Dallas list. He has developed significant expertise in the area of corporate corruption and white-collar crime and has current projects under review at top journals that either directly or indirectly build on his prior work. Several of his projects that are either under review or near submission are coauthored with other VT faculty or former Ph.D. students.

Dr. Davidson is also a very effective classroom instructor, with his most recent teaching evaluations indicating an average instructor rating of 5.69/6 (from Spring 2021). He received an average student score of 5.94/6 for the question, "The instructor fostered an atmosphere of mutual respect" and he is always respectful to our students and colleagues, fostering an environment where students can thrive. Although he teaches less while serving as department head, he will offer a Ph.D. seminar in capital markets next year that has been well received by students in the past.

In short, Dr. Davidson is a strong departmental leader and an outstanding colleague who is fully deserving of appointment to this professorship.

### **RECOMMENDATION:**

That Dr. Robert Davidson be appointed to the R. B. Pamplin Professorship in Accounting and Information Systems, effective June 11, 2024, for a period of five years, with a salary supplement as provided by the endowment.

June 11, 2024