SUMMARY

<u>New Appointments</u> to Endowed Chairs, Professorships, or Fellowships (4)

November 6, 2017

College of Agriculture and Life Sciences

John McDowell	J.B. Stroobants Professorship of Biotechnology
College of Science	
Lara Anderson	Luther and Alice Hamlett Junior Faculty Fellowship
Marc Michel	Luther and Alice Hamlett Junior Faculty Fellowship
John Morris	Dr. A.C. Lilly, Jr., Faculty Fellowship of Nanoscience

ENDOWED PROFESSORSHIP J. B. Stroobants Professorship of Biotechnology

The J. B. Stroobants Professorship was established in 1986 by a gift from Alphonese and Maria Stroobants of Bedford County, Va., in memory of Alphonese Stroobant's father, J.B. Stroobants. The endowed funds are directed towards support of a researcher in the College of Agriculture and Life Sciences who is advancing knowledge and discoveries in biotechnology. On the recommendation of the College of Agriculture and Life Sciences honorifics committee, Dean Alan Grant nominates Dr. John McDowell for appointment to the J. B. Stroobants Professorship.

Dr. McDowell is currently a faculty member in the Plant Pathology, Physiology, and Weed Science (PPWS) Department. He received his Ph.D. from the University of Georgia in 1995. Dr. McDowell's research focuses on the fundamental biological principles that govern whether a plant is susceptible to disease or produces a defense response that deters the pathogen. This work has important applications in the development/engineering of crops that can stop pathogen development and increase yield with less dependence on agrichemicals.

Dr. McDowell has an excellent international reputation and is widely recognized as a world leader in his field of study. He has published over 40 peer-reviewed journal articles, including papers in high impact journals such as *Science* and *Proceedings of the National Academy of Sciences*. His papers have been cited over 4,700 times. Besides giving numerous invited talks, he has been invited many times to serve on grant review panels by the U.S. Department of Agriculture, the National Science Foundation, and the French National Research Agency. He has also been elected as associate and senior editor for several journals and is currently the editor in chief of one of the highest impact plant pathology journals, *Molecular Plant-Microbe Interactions*.

Dr. McDowell is an outstanding instructor and advises undergraduate students, master's and Ph.D. students, and post-doctoral scientists with total research funding of \$17M, with over \$10M of those funds being under the direction of Dr. McDowell.

Dr. McDowell has been a prominent force for biotechnology in the life sciences, and plant sciences in particular, at Virginia Tech. His work is characterized by a strong sense of teamwork and unselfish contributions to the good of students, staff and faculty. Dr. McDowell has a long track record of leadership. He was the PPWS interim department head from July to December 2010 and has led the Translational Plant Sciences IGEP (Interdisciplinary Research and Training Program) since 2011. He has also served as the acting principal scientist for Latham Hall since 2011, and, in 2013, he took on an even more prominent leadership role serving as associate scientific director of the Fralin Life Science Institute.

RECOMMENDATION:

That John McDowell, Ph.D. be appointed as the J. B. Stroobants Professor of Biotechnology in the College of Agriculture and Life Sciences for a five year term through December 31, 2022, with a salary supplement as provided by the endowment and, if available, with funds from the eminent scholars match program.

ENDOWED FACULTY FELLOWSHIP Luther and Alice Hamlett Junior Faculty Fellowship

The Luther and Alice Hamlett Junior Faculty Fellowships were established in the College of Science through a generous bequest from the estate of the late Dr. Luther J. Hamlett. Dr. Hamlett, who earned his bachelor's degree in biology as a 1945 graduate of Virginia Tech, established these fellowships to provide support for outstanding faculty members who hold the rank of assistant or associate professor, and whose work supports the missions of the college's Academy of Integrated Science. A recipient shall hold the Fellowship for a period of three years with possible renewal.

Dr. Sally C. Morton, Dean of the College of Science, has nominated Dr. Lara Anderson, assistant professor of physics, to hold one of these endowed fellowships, concurring with the recommendation of the College of Science Honorifics Committee.

Dr. Anderson was awarded a Rhodes Scholar appointment upon completing her undergraduate degree at Utah State University, and went on to earn a Ph.D. in Mathematical Physics from Oxford University in 2008. She then completed postdoctoral fellowships in theoretical physics at the University of Pennsylvania and Harvard prior to joining Virginia Tech's Department of Physics in 2013 as an assistant professor. She has held visiting positions or fellowships with the Kavli Institute for Theoretical Physics, the Isaac Newton Institute for Mathematical Sciences, and the Simons Center for Geometry and Physics.

Dr. Anderson has been a key member of the faculty team that delivers and continues to develop the Integrated Science Curriculum, a two-year program in cross-disciplinary science fundamentals within the Academy of Integrated Science. She has earned a sterling reputation as a teacher, including a Favorite Faculty award from the Division of Student Affairs. She has mentored four undergraduate research projects related to mathematical aspects of her work in string theory, no small feat given the highly technical and abstract nature of that work. Since joining Virginia Tech she has taken part in numerous efforts to increase the numbers of women and other underrepresented groups in the sciences.

Dr. Anderson has established herself as a world leader in string theory research. She has published in excess of 35 scholarly papers, gathering over 1,100 citations, and has delivered nearly 50 invited conference talks and nearly 70 invited seminars and colloquia. She has been organizer or co-organizer of eleven professional meetings. Her research proclivity has been recognized with numerous National Science Foundation awards, including a current \$200K project on *String Compactifications: From Geometry to Effective Field Theory*.

RECOMMENDATION:

That Lara Anderson, Ph.D. be appointed a Luther and Alice Hamlett Junior Faculty Fellow for a three-year term, effective August 10, 2017, with operating support as provided by the endowment and the eminent scholar match, if available.

ENDOWED FACULTY FELLOWSHIP Luther and Alice Hamlett Junior Faculty Fellowship

The Luther and Alice Hamlett Junior Faculty Fellowships were established in the College of Science through a generous bequest from the estate of the late Dr. Luther J. Hamlett. Dr. Hamlett, who earned his bachelor's degree in biology as a 1945 graduate of Virginia Tech, established these fellowships to provide support for outstanding faculty members who hold the rank of assistant or associate professor, and whose work supports the missions of the college's Academy of Integrated Science. A recipient shall hold the Fellowship for a period of three years with possible renewal.

Dr. Sally C. Morton, Dean of the College of Science, has nominated Dr. Marc Michel, assistant professor of geosciences, to hold one of these endowed fellowships, concurring with the recommendation of the College of Science Honorifics Committee.

Dr. Michel joined the Department of Geosciences in 2012 as an assistant professor. He previously spent five years at Stanford, with three years as a postdoctoral scholar in Geological and Environmental Sciences, then as a research associate with the SLAC National Accelerator Laboratory for two years. He earned his Ph.D. in Geosciences from Stony Brook University in 2007.

Dr. Michel is a core member of the Academy of Integrated Science's Nanoscience degree program. He teaches Nanoscience and Environment, Mineralogy and Advanced Topics in Mineralogy, all of which are central to the nanoscience program. Notably, he has been strongly committed to mentoring undergraduate research, having already guided 16 undergraduate students on research projects in his five years at Virginia Tech.

Dr. Michel's scholarship record is very strong, with over 40 publications in nanoscience and geoscience journals, five book chapters, and over 25 invited or keynote presentations at professional conferences. His publications have garnered almost 2,000 citations since joining Virginia Tech alone.

Dr. Michel's research expertise has been recognized with funding from the highest levels. He began work in June of this year on a prestigious National Science Foundation (NSF) CAREER Award for *Mineral Growth by Nanoparticle Aggregation: Aluminosilicate Minerals*. He is co-PI on a \$2.5M NSF award to establish the Virginia Tech National Center for Earth and Environmental Nanotechnology Infrastructure. Another NSF-funded project, extending through July of 2018, is *Mineral Formation By Cluster Self-Assembly: Schwertmannite as a Partially Crystallized Nanomineral.* Dr. Michel is co-PI on yet another continuing project, *Center for Environmental Implications of Nanotechnology (CEINT)*, a multi-university collaborative funded by NSF and the Environmental Protection Agency in excess of \$24M.

RECOMMENDATION:

That Marc Michel, Ph.D. be appointed a Luther and Alice Hamlett Junior Faculty Fellow for a three-year term, effective August 10, 2017, with operating support as provided by the endowment and the eminent scholar match, if available.

ENDOWED FACULTY FELLOWSHIP Dr. A.C. Lilly, Jr., Faculty Fellowship of Nanoscience

The Dr. A.C. Lilly, Jr., Faculty Fellowship was established in the College of Science through an endowment by Dr. A.C. Lilly, Jr., a former professor of the Physics Department. Dr. Lilly established the Faculty Fellowship Endowment in Nanoscience to provide support for an outstanding faculty member in the field of nanoscience. A recipient shall hold the fellowship for a period of three years with possible renewal.

Dr. Sally C. Morton, Dean of the College of Science, has nominated Dr. John Morris, professor of chemistry, to this endowed fellowship, concurring with the recommendation of the College of Science Honorifics Committee.

Dr. Morris joined the Department of Chemistry in 1999 as an assistant professor and rose through the ranks to full professor in 2008. Prior to Virginia Tech he held a postdoctoral position at the University of Wisconsin-Madison for the 1997-1999 period, having earned his Ph.D. from Notre Dame University in 1996.

Dr. Morris develops nanoscience approaches that can be used to build new catalysts and to provide insight into how the unique properties of small-scale materials affect the environment. He first constructs a basic understanding for how nanoscale materials catalyze chemical transformations, and then applies that understanding to the development of next generation systems that are more efficient and environmentally friendly. As one example, Dr. Morris is the lead scientist on a multi-institution, \$2.7M grant from the Defense Threat Reduction Agency, developing catalysts able to decompose dangerous gasses on contact, with applications including air filters, gas masks, and related detoxification products.

Dr. Morris has authored in excess of 80 professional publications, of which about 70 concentrate on the development and understanding of nanomaterials. He is a National Science Foundation CAREER Awardee and has been elected as a National Academy of Sciences Kavli Fellow. He has delivered over 60 conference presentations and over 40 invited seminars. He currently has seven funded projects, in excess of \$4M, in progress.

Dr. Morris has further excelled as an educator. He has directed 23 completed graduate theses with another 13 now in progress, and has mentored the research of over 20 undergraduate students. He has won both teaching and service awards, and currently serves as the Department of Chemistry's graduate program director. He is emblematic of the complete university citizen.

RECOMMENDATION:

That Dr. John Morris be appointed the Dr. A.C. Lilly, Jr., Faculty Fellow for a three-year term, effective August 10, 2017, with operating support as provided by the endowment and the eminent scholar match, if available.