

Physics & Astronomy Alumni Career Panel --- March 9, 2021

A Virtual event via Zoom:

<https://bucknell.zoom.us/j/95235319927?pwd=aWpRcVFCU3U3VlByNFNYc2wxOUJpQT09>

Moderators: Sally Koutsoliotas and Ned Ladd, Professors of Physics

Brendan Burgdorf '13

Medical Physicist, University of Pennsylvania

Brendan Burgdorf is a clinical medical physicist in the Department of Radiation Oncology at the University of Pennsylvania. He specializes in proton radiotherapy and is the lead proton treatment planning physicist. He graduated from Bucknell University in 2013 with a B.S. in Physics, and from the University of Pennsylvania in 2015 with a Masters in Medical Physics. He went on to complete the two-year medical physics residency program at UPenn. Upon graduating from residency, he was then hired as a staff physicist at UPenn where he has been for the past 4 years. Along with overseeing the daily radiation planning and treatment of cancer patients, he is involved in a number of different education and research initiatives within the department.



Julia Resnikoff '16

Management Consultant for Finance Effectiveness, PwC

Julia Resnikoff graduated from Bucknell with a B.A. in Physics in 2016. After graduating, she became a Management Consultant with PricewaterhouseCoopers Finance Effectiveness practice with an industry focus on Technology, Media, and Telecommunications. She has worked on a variety of projects with clients across the US and England including Yahoo (now Oath), Microsoft, Fidelity and IEEE. She has worked extensively within the Procure to Pay and Order to Cash finance cycles with activities including process redesigns, target operating model creation, and system implementations.

CJ Mercado '17

Teacher, Marjory Stoneman Douglas High School

CJ Mercado is a physics teacher at Marjory Stoneman Douglas High School in Parkland, Florida. He has been teaching for almost four years. Before being hired at Stoneman Douglas in the spring of 2018, CJ spent six months teaching abroad in the remote Marshall Islands. Currently, he teaches many levels of physics ranging from Physics I Honors to AP Physics C: Electricity & Magnetism. In addition to teaching, CJ sponsors his school's Science National Honor Society and National Technical Honor Society. He also coaches his school's Science Olympiad team and the Mu Alpha Theta's competition team. CJ earned his B.S. in Physics from Bucknell in 2017. At Bucknell, CJ was a TA for the physics department, and received the Outstanding TA Award for the 2016-2017 school year.



Monica Herzog '13

Lead Field Instructor and Resident Course Director, North Carolina Outward Bound School



Monica Herzog is currently a lead field instructor and a resident course director for the North Carolina Outward Bound School. While at Bucknell, Monica spent her summers completing Astronomy research (both at Bucknell and at Lowell Observatory in Flagstaff, AZ) and working as an astronomy TA during the school year. She also became extremely involved with the outdoor programs at Bucknell. Since graduating, Monica has accrued over 1000 field days instructing and directing leadership development programs taught through wilderness expeditions. She has worked throughout Florida and North Carolina with teenagers, families, school groups, adjudicated youth, veterans, business professionals, and teachers to not only learn outdoor skills, but also interpersonal skills (such as conflict resolution, problem solving, group processes, risk management, and decision making.) In between seasons working for Outward Bound, Monica has also worked in a Pre K- 6th grade Montessori inspired school (teaching engineering and general education classes for the upper elementary class), earned her EMT-B certifications, worked as a ski instructor, and was the wilderness trip director for a summer camp.

Tomek Kott '06

Section Supervisor & Senior Research Scientist, Johns Hopkins Applied Physics Lab

Dr. Tomek Kott is a senior scientist in the Condensed Matter Physics Section in the Computational and Experimental Physics Group at the John Hopkins University Applied Physics Lab. He has led several interdisciplinary teams in projects varying from liquid metal antennas and power generation on Venus to the prediction of qubit system properties and free space optical communication. Most recently, he has switched to data science. He just finished serving as the Secretary for the Mid-Atlantic Section of the American Physical Society. He graduated from Bucknell University in 2006 with a B.S. in Physics, and from the University of Maryland, College Park, in 2012 with a Ph.D. in condensed matter physics. He joined APL as a post-doc and has been there for 8 years. He has previously been a supervisor of nine staff members and has recently moved to Lancaster, PA, where he is working remotely full time. As a University Affiliated Research Center, APL is a nonprofit organization that conducts essential research, development, and systems engineering to support national security needs free from conflicts of interest or competition with commercial industry.

