

About the Authors



Youngwoo Kim

Youngwoo Kim is a high school junior who is currently attending the Gatton Academy of Mathematics & Science, a residential STEM program for gifted and talented high school juniors and seniors who have a passion in STEM fields. He works as a student researcher at the University of Kentucky biology lab under the guidance of Dr. Robin L. Cooper, studying membrane potential effects through computational simulations. He loves playing tennis and chess during his free time, and his dream is to build a fully function Iron Man suit one day.



Jiwoo Kim

Jiwoo Kim is a class of 2027 high school student who is currently a sophomore at Model Laboratory School and a rising junior at The Gatton Academy of Mathematics & Science. She works as a student researcher in Dr. Robin Cooper's neurobiology lab in the T. H. Morgan Building at the University of Kentucky. Her past research projects have focused on the sensory and motor systems of *Drosophila* larvae and crayfish, as well as other topics like membrane potential. In her free time, she enjoys reading, writing, and playing sports.



Elizabeth Womack

Elizabeth Womack is a freshman attending the University of Kentucky majoring in honors pre-medical neuroscience, minoring in psychology, and obtaining a certificate in medical behavioral sciences. In addition, she is a part of the Lewis Honors College, Singletary Scholars 2028 Cohort, HealthCare Cats, and Vice President of Recruitment in the Kentucky Rural Health Association. She works as a student researcher in Dr. Robin Cooper's neurobiology lab in the T. H. Morgan Building at the university. She is from Flemingsburg, Kentucky and enjoys traveling, new experiences, baking, and spending time with loved ones.



Robin L. Cooper

Dr. Robin L. Cooper obtained a dual B.S. in Chemistry and Zoology from Texas Tech University in 1983 and a Ph.D. in 1989 in Physiology from the School of Medicine, and postdoctoral training (1989-1992) at the University of Basel, School of Medicine, Basel, Switzerland. His second postdoctoral stint (1992-1996) was at the Department of Physiology, University of Toronto, School of Medicine, Toronto, Canada. In 1996, he joined the Department of Biology at the University of Kentucky and is now a Professor. He also obtained a BSN in nursing in 2012 and practiced as an RN from 2011 to 2017. He has received several teaching awards and continues to mentor students in research based activities and publishing for peer review. In his spare time, he Facetimes with his first grandchild, Rose, and cycles the backroads of Kentucky.



Dr. Josh Titlow

Dr. Josh Titlow earned a B.S. in Chemistry from Marshall University. His Ph.D in Biology at University of Kentucky was advised by Professor Robin Cooper. After a postdoctoral fellowship in the University of Oxford Biochemistry Department, Dr. Titlow became a Technical Advisor and Program Coordinator for Delta Tissue, a \$55M Wellcome Leap Program that developed pivotal spatial proteomics technologies and human tissue profiling datasets in Triple Negative Breast Cancer, Glioblastoma, and Tuberculosis. He is currently the Sr. Director of Substance Use Disorder and Crisis Divisions at Westbrook Health Services, and has published over 20 articles in neuroscience, advanced microscopy and RNA biology. Born and raised in the Appalachian Mountains, Josh is also active in the outdoors and in bluegrass music communities.