Dr. Kyle Lambert will be joining the Department of Chemistry and Biochemistry at Old Dominion University in the summer of 2020. He joins the department following his studies as an NIH Postdoctoral Fellow at Baylor University in Prof. John Wood’s Laboratory. His research exploring the area of natural product total synthesis involved the development of a ring-expansion strategy to access diketopiperazine and alkaloid natural products, such as haenamindole and phyllantidine, which contain labile nitrogen-oxygen bonds. Prior to his postdoctoral studies, he obtained a PhD in Chemistry from the University of Connecticut in 2017 under the guidance of Prof. William Bailey, and his doctoral work focused the development of selective oxidations using oxoammonium salts and investigations into the role of electrostatic interactions in the conformational equilibria of saturated heterocycles. Kyle also holds two Bachelor of Science degrees in Chemistry and Forensic Science from the University of New Haven, where he was first introduced to organic synthesis while doing undergraduate research under the tutelage of Prof. Pier Cirillo. He was also a pole vaulter and University Scholar Athlete on the varsity track and field team at New Haven, and went on to coach high school track and field during his spare time during graduate school, leading two separate teams to state runner-up titles. Aside from coaching his other hobby is enjoying the outdoors and fishing.

Kyle’s research program within the Department of Chemistry and Biochemistry at Old Dominion University will focus on the development of novel synthetic methods and the total synthesis of biologically relevant natural products in the following areas of interest:

(1) the development of sustainable catalytic methodologies to access biologically relevant targets (borrowing hydrogen catalysis, photoredox catalysis, nitroxide-mediated processes);
(2) the total synthesis of complex natural products that could serve as lead compounds for further biological or medicinal chemistry studies;
(3) the development of readily accessible chiral nitroxides for use as oxidants, biological probes, organic batteries, and novel therapeutics;
(4) the use of strained ring systems for the preparation of sulfur heterocycles with applications for the modification of cysteine residues in peptides.

If there are any students interested in pursuing graduate studies in the area of organic chemistry within your department, and they would like more information, they can reach Dr. Lambert at the following email address: kmlamber@odu.edu

Additional information on the Department of Chemistry and Biochemistry at Old Dominion University can be found on the department’s website: https://www.odu.edu/chemistry

A couple representative publications are included below, and a full list of Kyle’s publications can be accessed from Google Scholar: https://scholar.google.com/citations?user=DybNI8MAAAAJ&hl=en