**Facilities**

University of Tennessee, Knoxville: The EEB department has office space and equipment for the Program Coordinator. Students coming to EEB through an NRT award will be allocated offices in shared student spaces and conduct reseach in their advisor’s lab space. Research facilities in EEB/Division of Biology are state-of-the-art and include high performance computing clusters, a genomics core facility (including Sanger sequencing, SNP/fragment analysis, and Next Generation DNA Sequencing using Illumina's MiSeq platform), the Advanced Microscopy and Imaging Center (including Optical, Transmission Electron, Scanning Electron, Focused Ion Beam, and Atomic Force Microscopy), HPLC and total carbon analyzers, reseach greenhouse and growth chamber facilities associated with Hesler and Senter Halls, a field station in the Smoky Mountains, and research boats. Currenly, EEB, NIMBioS, the College of Arts and Sciences, and Dept of Geography are creating a new Spatial Analysis Lab that will feature an unmanned aerial system (a drone) with multispectral and LiDAR capabilities, a terrestrial laser scanner, key software, and more.

EEB is home to two significant research collections. The nationally-recognized University of Tennessee Herbarium (TENN) resides in EEB and houses over 600,000 accessioned specimens of vascular plants (ferns, cone-bearing, and flowering plants), bryophytes (mosses and liverworts), and fungi (including lichens).  Our collection is the primary repository of the native and naturalized plants and fungi of Tennessee.  It is the largest collection from the southern Appalachians and has a strong emphasis on the eastern US, Mexico, and Central America. The Etnier Ichthyological Collection houses over 450,000 specimens of fishes. The collection is the primary repository of the native fishes of Tennessee and houses the most important collection in the world of fishes from the southern Appalachians, and has a strong emphasis on collections from the eastern U. S., Mexico, and Central America.

University of Tennessee Institute of Agriculture (UTIA): The FWF and EPP departments will offer students office and laboratory space. Students will have access to a number of UTIA facilities. The 1500 square-foot UTIA Genomics Hub, located in the Plant Biotechnology Building, houses equipment needed for DNA isolation, amplification, and purifications. The UTIA Genomics Hub has computers with software that can assemble data (de novo and template) from Illumina and other NGS platforms. The University of TN Insect Museum is a regional repository of chiefly voucher and other non-primary type specimens that are representative of the southeastern U.S. and, more particularly, the Appalachian fauna. The UTIA Greenhouses comprise three large, state-of-the-art greenhouse facilities on the UTIA campus. A total of 22,000 square feet is dedicated to growing space. The UTIA greenhouse space is designed for the containment of pathogens, has an automated watering system and a Priva environmental system for temperature and light control. The greenhouse is maintained using only biological control agents as pesticides. EPP’s microscope facility contains modern microscopy capabilities. In addition, UTIA has 10 research and education centers located across the state of Tennessee, ranging from managed forests to agricultural fields.