Bredesen Center 101

How you can partner with UT-ORII to train PhD students

Brynn H. Voy, UT-ORII Education and Bredesen Center Director
University of Tennessee – Oak Ridge Innovation Institute (UT-ORII)

UT-ORII’s mission: elevate the reputation of UT and ORNL through joint research and education programs (see utorii.com)
UT-ORII will…

- Enhance UT System and ORNL’s reputations
- Combine expertise to drive research advances
- **Elevate UT’s PhD programs**
- Recruit and retain top-level STEM talent
- Contribute to Tennessee’s sustained economic development
- Drive K-12 outreach in TN
- Strengthen UT’s core academic units & ORNL’s existing groups
- Provide hub for UT-ORNL interactions
UT-ORII’s Education Goal

• Provide support, using state investment, that enables ~ 500 PhD students/year to conduct dissertation research at ORNL

• Currently ~ 150 students

• Two main sources of growth:
  • Bredesen Center PhD programs
  • Departmental students working with ORNL staff
  • GATE fellowships from Science Alliance are an additional route
Bredesen Center PhD Programs

Data Science and Engineering
Encompasses AI, machine learning, statistical modelling, big data analytics

Energy Science and Engineering
Spans from basic engineering science to translational applications

Genome Science and Technology
Includes ‘omics, genetics, structural and computational biology
Processes and Updates

• Recruiting
  • Timothy Guthrie – Dedicated Bredesen recruiter
  • Attends grad school fairs and select research conferences
  • Holds monthly webinars
  • Targeted recruiting of students who participate in an internship at ORNL or another national lab

• Admissions
  • Early decision, early offer – Nov 15/ Dec 1
  • Early (ahead of offer decision) mentor-student matching
  • Offers extended ahead of “recruiting” visit (March 6-8)
  • Visit is to elicit commitment
  • Offers extended: 31 GST/27 ESE/ 24 DSE
  • Opportunity to meet visiting students in SU, March 7, 12:15 – if interested, e-mail Allie Burns (aburns@utk.edu)

• Offers
  • Stipend increase to $34K

• Orientation and mentor training
  • Set students and mentors up for success by focusing on clear communication of expectations
  • “Enforce” milestone expectations
UT-ORII support of departmental students

- UT-ORII is committed to help match students in UT’s disciplinary PhD programs with ORNL mentors for some or all of their thesis work.

- Intent of the MOU
  - Help departments grow their own graduate enrollment
  - Expand the pathways to grow the population of UT PhD students doing research at ORNL.

- UT-ORII will provide same one year of funding support to departmental PhD students who work with ORNL advisor for some or all of their dissertation research.

- MOU is in place with EECS.

- No strings attached, except information needed for our reporting.

- Financial support is up to ORNL advisor (or collaborator in EECS) after that point.
Executing the MOU

• Process of identifying students who meet the criteria – i.e., who will conduct dissertation research at ORNL – is up to the department

• Advising privileges: An OGA/JFO/UT-ORII JRF may not serve as Chair unless approved by a vote of the EECS tenure-track faculty but can serve as a committee member

• Bredesen Center will obtain the needed information for processing financial support and recording needed student information via a shared folder
Key Bredesen Center Personnel

Allie Burns
Academic Program Manager

Rachel Roberts
Student Services Coordinator

Timothy Guthrie
Recruiter

Rebecca Christ
Business Manager

Locations:
Bredesen Center staff – Ferris Hall, 3rd floor, UTK UT-ORII Offices and Bredesen student space – 5100

Program Directors

Albrecht Von Arnim
GST

Russell Zaretski
DSE

Zhili Zhang
ESE

https://bredesencenter.utk.edu/
bhvoy@utk.edu