

Texas A&M University Core Facilities, Division of Research

Core facilities are an essential part of Texas A&M University's research infrastructure providing critical resources for groundbreaking research. Ensuring more efficient resource utilization, shared research facilities are a cost-effective way to leverage research expertise and specialized instruments. Core facilities provide dedicated space and specialized scientific equipment. Additionally, staff scientists provide field-specific expertise, research services, technical support, and training of graduate students and research staff. Core facilities primarily serve Texas A&M researchers, though many facilities welcome outside users from the broader scientific and industrial community. Texas A&M offers more than 50 core facilities that can be generally categorized into the five thematic areas described below:

Microscopy and Imaging

Cores in this area focus on advanced imaging techniques including light microscopy, electron microscopy, and other modalities spanning the spectrum of scale from visualization of proteins to whole animal imaging.

- College of Dentistry Research Core-Dallas, TX
- IBT Pre-Clinical Imaging Core-Houston, TX
- IBT-Center for Advanced Imaging, Houston, TX
- Image Analysis Laboratory-veterinary Medicine & Biomedical Sciences
- Integrated Microscopy and Imaging Laboratory
- Microscopy and Imaging Center

Data Informatics and Computation

Cores in this area focus on empowering research and discoveries by providing access to computational hardware, software, and application expertise across the spectrum of data sciences.

- Crop Genome Editing Laboratory
- Genomics and Bioinformatics Service
- IBT Rigor & Reproducibility Core
- Laboratory for Molecular Simulation
- Smart Grid Control Room Lab
- TIGSS Bioinformatics Core

Integrated Biological and Medical Translational

Cores in this area focus on advanced equipment and techniques associated with human, animal, and plant biological and medical research.

- AgriGenomics Laboratory
- Animal Genetics Laboratory
- College of Medicine Cell Analysis Facility-Texas A&M Health Science Center
- Comparative Medicine Program
- Flow Cytometry Facility-Veterinary Medicine & Biomedical Sciences
- Human Clinical Research Facility
- IBT Antibody & Biopharmaceuticals Core-Houston, TX
- IBT Flow Cytometry and Cell Sorting Core-Houston, TX
- IBT High Throughput Research and Screening Center-Houston, TX
- IBT Protein Production, Characterization, and Molecular Interaction Core-Houston, TX
- Integrated Metabolomics Analysis Core
- Molecular Cytogenetics Laboratory
- Multi-Crop Transformation Facility
- Systems and Synthetic Biology Innovations Hub
- Texas A&M Institute for Genomic Medicine
- TIGSS: Experimental Genomics Core

Materials and Fabrication

Core facilities in this area focus on synthesis and fabrication of different materials, including polymers, metals, ceramics and composites and on characterization of their structural and physical properties using a wide range of different characterization methods.

- Aggiefab Nanofabrication Facility
- Biomedical Engineering Shared Laboratories
- IODP XRF Core Scanning Facility
- Materials Characterization Facility
- Materials Development and Characterization Center
- National Center for Therapeutics Manufacturing
- National Corrosion and Materials Reliability
- Soft Matter Facility
- SQUID Magnetometer
- X-Ray Diffraction Laboratory

Chemical Science Technologies

Cores in this area focus on state-of-the-art sample collection and chemical analysis using resources including a mobile environmental sampling van, high volume size-resolved particle samplers, mass spectroscopy, Raman spectroscopy, and other analytical techniques.

- Biomolecular NMR Laboratory
- Center for Atmospheric Chemistry and the Environment
- Chemistry Mass Spectrometry Facility
- Elemental Analysis Laboratory
- Geochemical and Environmental Research Group
- ILSB Mass Spectrometry Lab (ILSB-MSL)
- NMR/ESR Facility of the Chemistry Department
- Nuclear Engineering and Science Center
- Radiation Effects Facility
- Stable Isotope Geosciences Facility

Contact Us

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<https://vpr.tamu.edu/research-resources/core-facilities/>

Graduate Recruitment, Enhancement, And Travel (GREAT) Program

The **Graduate Recruitment, Enhancement, and Travel (GREAT) Program** provides supplemental funding to eligible: (i) nationally competitive external fellowships awarded to students, (ii) federal training grant fellowships awarded to faculty or departments, and (iii) federal research grant supplements awarded to faculty to promote diversity. Also, the **GREAT program provides travel awards** for faculty to bring high-achieving prospective doctoral students to campus who may have received or would be competitive for nationally competitive external fellowships. The goal of this program is to elevate Texas A&M's national competitiveness in attracting high achieving students.

GRADUATE SUPPLEMENTS

Doctoral students, faculty, and graduate programs are strongly encouraged to seek funding from sources external to Texas A&M University. Annual graduate "top-off" supplements will be provided to encourage this activity and amplify its impact. The goal of the supplements is to provide a full funding package for eligible nationally competitive dissertation and multi-year external fellowships, federal training grants, and federal research grant supplements promoting diversity. A full funding package annually includes a monthly stipend of at least \$3,000 per month or up to the monthly amount of the fellowship/training grant stipend if greater than \$3,000 per month, funding for full tuition and required university and college fees, 12 months of student health insurance, and a \$1,500 scholarship for professional development opportunities, conference travel, research travel, books, etc.

Doctoral Student Expectations:

Doctoral students receiving the supplements must participate in research leadership (e.g., Aggie Research Program) and mentoring (e.g., TAMU Graduate Mentoring Academy) development programs.

Faculty/ Research Advisor Expectations:

Faculty / Research advisors will be strongly encouraged to participate in the TAMU Graduate Mentoring Academy or the TAMU Faculty Mentoring Academy program.

Category I: Supplements for external fellowships awarded directly to individual students

When Texas A&M doctoral students compete successfully for highly competitive external fellowships like the National Science Foundation Graduate Research Fellowship (GRFP), National Institutes of Health F31 Predoctoral Fellowship, and Ford Foundation Dissertation Fellowship, the graduate supplements will provide full funding packages for up to five years.

Supplements will fund **external fellowships** as described below:

- Is a nationally competitive, prestigious fellowship which is open to students in multiple fields or a single field of study.
- Dissertation fellowships – one to two years, significant funding (at least \$2,000/month)
- Other fellowships – typically multi-year, significant funding (at least \$2,000/month)

View the list of eligible fellowships on the [GREAT Program](#) webpage. Please note that the listing of external fellowships is not comprehensive. Contact the Texas A&M University Graduate and Professional School to discuss possible eligibility of an external fellowship that is not included on the list.

Funding conditions:

- For external fellowships with five years of stipend funding, the supplements will top off fellowship funding to ensure the fellowship recipient receives a full funding package for up to five years.
- For multi-year external fellowships with less than five years of stipend funding, the supplements will top off fellowship funding in years of active fellowship funding, and faculty, department, or college assistantship or fellowship funding in other years to ensure the fellowship recipient receives a full funding package for up to five years.

- For one- to two-year dissertation fellowships, the supplements will top off fellowship funding to ensure the fellowship recipient receives a full funding package for the duration of the fellowship tenure.

Category II: Supplements for federal training grants awarded to faculty or graduate programs

When faculty or graduate programs compete successfully for federal training grants like National Institutes of Health (NIH) T32 predoctoral training grant, Department of Education (DoE) Graduate Assistance in Areas of National Need (GAANN) grant, USDA National Needs Graduate Fellowship (NNF), or National Science Foundation Research Traineeship (NRT), the graduate supplements will ensure the doctoral trainees receive full funding packages for up to five years.

Supplements will top off training grant funding in year(s) of active training grant stipend funding, and faculty, department, or college assistantship or fellowship funding in other years to ensure the training grant recipient receives a full funding package for up to five years.

Category III: Supplements for federal research grants awarded to faculty to promote diversity

When faculty secure research supplements for federal research grants to promote diversity like the National Institutes of Health (NIH) Research Supplements to Promote Diversity in Health-Related Research (Admin Supp), National Science Foundation MPS Alliances for Graduate Education and the Professoriate: Graduate Research Supplements (AGEP-GRS), or National Science Foundation MPS Graduate Research Supplement for Veterans (MPS-GRSV), the graduate supplements will top off the federal research grant supplement funding to ensure the doctoral recipient receives a full funding package during the years that the student receives the federal research grant supplement funding.

RECRUITMENT TRAVEL AWARDS

To actively recruit prospective doctoral students who have received external fellowships or prospective doctoral students who would be great candidates for nationally competitive external fellowships, the **GREAT program provides** \$1,000 travel awards for faculty to bring such students for campus visits. The prospective doctoral students should be in their last year of undergraduate studies or master's studies.

GREAT PROGRAM WEBSITE

Visit the [GREAT program](#) web page for additional information.