

Imaging Science and Informatics Fellowship Program

The overarching theme of this program is to train comprehensive imaging scientists in the skills necessary to identify clinically relevant problems. Topics include: developing instrumentation, sensors, and contrast agents to form images appropriate for the problem; and analyzing the resulting imaging data using signal processing, mathematical modeling, visualizations, and informatics techniques to improve the prevention, detection, diagnosis, and treatment of human diseases. If you are interested in applying to this program, contact the BME Graduate Coordinator.

- [Portfolio in Imaging Science](#)
- [Fellowships](#)
- [Professional Development Opportunities](#)
- [Contact](#)

Portfolio in Imaging Science

The basic requirement to complete this portfolio program is 12 hours of coursework (4 courses), which provide the requisite core knowledge for an imaging scientist. [Learn more about portfolio programs at The University of Texas at Austin Graduate School.](#)

Required Courses for Portfolio Completion (12 credit hours)

1. BME 381J.3 Biomedical Imaging Modalities (3 credit hours)
2. Course in Image Processing (3 credit hours)
3. Course in Modeling and Visualization (3 credit hours)
4. Course in Data Mining and Informatics (3 credit hours)

Some, but not necessarily all, of these courses [may count toward your doctoral degree requirements](#) as well. Additionally, optional coursework, seminars, and externship opportunities are available to portfolio students.

Students not pursuing a BME or ECE graduate degree who are interested in completing the portfolio should apply by (a) submitting a brief statement of interest and their CV to the BME Graduate Coordinator and mia.markey@utexas.edu, and (b) by making an [advising appointment with Dr. Markey](#).

Students who have completed all of the courses required for the portfolio must submit a signed Portfolio Completion Form to the Graduate School. [Access the form in DocuSign here.](#)

Fellowships

The Department of Biomedical Engineering was awarded a [Ruth L. Kirschstein National Research Service Award \(NRSA\)](#) training grant from the [National Institute of Biomedical Imaging and Bioengineering \(NIBIB\)](#), an Institute within the [National Institutes of Health \(NIH\)](#) (T32 EB007507). This grant includes competitive fellowships to support selected biomedical engineering doctoral students in the Imaging Science and Informatics Portfolio Program. The prestigious one-year fellowship includes a stipend, funds for educational and research supplies, and two semesters of tuition.

To be eligible for the fellowship, one must be an admitted doctoral student in Biomedical Engineering at The University of Texas at Austin. After admissions to the BME doctoral program, candidates will have the opportunity to request consideration for the fellowship.

This very prestigious fellowship supports interdisciplinary training through an extended support network of faculty and clinical mentors, toward the goal of becoming a comprehensive imaging scientist. Students with research interests outside of imaging sciences and informatics have been successful at diversifying their training through this program, while having the honor of being a Ruth L. Kirschstein Fellow.

Additional Required Courses for Fellowship Recipients (6 credit hours; 2 courses):

In addition to the 12 credit hours (4 courses) required to complete the Portfolio listed above, Kirschstein Fellowship Recipients must complete the following additional 8 credit hours (2 courses + 2 seminar courses):

1. BME 381J.8 Functional Imaging Lab (3 credit hours)
2. BME 385J Imaging Clinical Immersion (3 credit hours)
3. BME 197E Professional Responsibilities Seminar (1 credit hour)
4. BME 197P Professional Development Seminar (1 credit hour)

Fellowship recipients complete a total of 20 credit hours (6 courses + 2 seminar courses) as described above for the Portfolio Program and Fellowship. Again, some or all of these courses may count toward your doctoral degree requirements as well. The program directors and the Graduate Advisor are available to help students select their elective coursework. Discuss with the Graduate Advisor and Graduate Program Coordinator.

Fellows can use this suggested curriculum sequence that illustrates the totality of requirements for both the portfolio and the fellowship program.

Professional Development Opportunities

There are several professional development opportunities provided in the program that are [required for fellowship recipients](#) and recommended for portfolio students:

- Summer Externship Experience between first and second year
- Co-supervision and recommendations for committee structure

- Professional Responsibilities in Imaging (BME 197E)
- Graduate Professional Development Seminar (BME 197P)

Contact

Professor [H. Grady Rylander](#), Training Program Co-Director
[E-mail Dr. Rylander](#)

Professor [Mia K. Markey](#), Training Program Co-Director
[E-mail Dr. Markey](#)