



## PROFESSIONAL PROFILE



Dr. Ismail joined [MedQuest College](#) in 2017 to help develop the [Biomedical Equipment Technology Program](#), she has been serving as the director ever since. She has over 15 years of experience in electronics, medical equipment, and mathematical pedagogies. Mathematical pedagogy is a method of education for mathematics. Dr. Ismail also has over a decade of instructional experience teaching college-level biomedical courses at schools such as Sullivan University, Brown Mackie College and the University of Louisville. She holds a Bachelors and Masters Degree in Biomedical Engineering from Cairo University in Egypt, and a PhD in Electrical and Computer Engineering from the University of Louisville.

Dr. Ismail has also been a consultant for several hospital organizations overseas by assisting with facility layout and equipment installation. She also oversaw the maintenance and repair of medical equipment used in the delivery of care in healthcare facilities. In addition, she has vast experience in software languages and assisting with the development of those programs.

Her passion is helping students succeed and being the best they can be and her beliefs motivate her to strive for perfection. As Program Director, Dr. Ismail knows exactly what students need to be successful in the technology-driven Kentucky healthcare landscape. The ideal student for the Biomedical Equipment Technology program at MedQuest has an interest in, “repairing stuff and playing with equipment to see how it works as well as information technology” said Dr. Ismail. “It is very important for students to have the basics of electronics” she goes on to say. 40% of this program deals with hands-on training, because Dr. Ismail along with MedQuest College understands student needs and the demands of rapidly changing technologies impacting healthcare nationally.

Emerging technology is increasing demand for healthcare technology specialists. “The medical field is vastly growing, especially here in Louisville. This increases the demand for Biomedical Equipment Technicians. When I speak with collaborators, they mention they are always seeking skilled and qualified Biomedical Technicians.” Dr. Ismail’s experience, intellect and overall contribution to the Biomedical industry has contributed her reputation amongst her peers.

During her professional career, Dr. Ismail has collaborated on many projects and has over 40 published articles in the medical imaging field. Her contribution and influence in many scientific articles and journals along with her experience and intellect is what earned Dr. Ismail the reputation she has gained amongst her peers in the Biomedical field. Many employers are seeking out the students who are under the direction of Dr. Ismail knowing the skills taught and knowledge gained will be top-notch. She looks forward to sparking a passion for the profession with her students.

You can read Dr. Ismail’s research and published work below:

### PROJECTS

- [Early detection of autism from MRI scans](#)
- [Signal Processing for Biomedical Applications](#)
- [Retina Diagnosing](#)
- [Temporal analysis of pseudoprogession and brain tumor recurrences on routine MRI](#)
- [Colon Cancer Diagnosis](#)

### PUBLISHED WORK

- PLOS | ONE: [A fast stochastic framework for automatic MR brain images segmentation](#)
- American Association of Physicists in Medicine: [A computer-aided diagnostic system for detecting diabetic retinopathy in optical coherence tomography images](#)
- American Psychological Association: [Studying autism spectrum disorder with structural and diffusion magnetic resonance imaging: A survey.](#)

### PUBLISHED ARTICLES (Google Scholar)

- <https://scholar.google.com/citations?user=MmhEaf0AAAAJ&hl=en>