

## DEPARTMENT OF HISTOLOGY AND EMBRYOLOGY

GRADUATE PROGRAMS
2025



## **HISTORY**

- Our department was established in October 1998 with the appointment of its first faculty member. The first research assistants were recruited to our department in April 1999 through the Medical Specialization Examination (MSE). The master's program began in 1999 and the doctoral program in 2002 within the Institute of Health Sciences. 15 master's and 9 doctoral students have graduated from our department.
- Our faculty and university conduct numerous scientific research and thesis projects. Additionally, tissue and organ biopsy materials from numerous patients are examined and reported using a transmission electron microscope. Diagnostic analyses of biopsy samples taken from various human tissues have been conducted in our electron microscope laboratory since 2005. This service, which is performed at only a few centers in our country, also receives patient tissue samples from external centers.
- Our department organized the 7th National Congress of Histology and Embryology (May 18-21, 2004), the Advanced Applied Light Microscopy Techniques Course (October 18-19, 2008), and the 21st National (International Participation) Electron Microscopy Congress (May 28-31, 2013).
- Currently, four faculty members, one teaching assistant, and one research assistant are working in our department. Theoretical and practical courses are offered at the undergraduate level to the Faculty of Medicine, Faculty of Dentistry, and Faculty of Science, and at the master's and doctoral levels to the Institute of Health Sciences, continuing undergraduate and graduate academic activities.



## **ACADEMIC STAFF**

- The Department of Histology and Embryology has four faculty members, one teaching assistant, one research assistant, and eight medical residency students.
- Faculty Members
  - Prof. Banu Coşkun Yılmaz, (MD)
  - Prof. Ebru Balli, (MD) (Head of Department)
  - Prof. Ş. Necat Yılmaz, (MD/PhD)
  - Prof. Savaş Aktaş, (MD)
- Teaching Assistant
  - Ayla BATU ÖZTÜRK, (PhD)
- Research Assistant
  - Hatice ORUÇ DEMİRBAĞ, (PhD)
- Medical Residency Students
  - Bora VURAL, (MD)
  - Şerife Küpeli, (MD)
  - Şilan KIVRAK, (MD)
  - İsmail Hakkı KURT, (MD)
  - Mustafa Emre BENLİ, (MD)
  - Pinar ALP, (MD)
  - Ekrem Can YAYLIM, (MD)
  - Büşra APAYDIN, (MD)



#### **FILEDS OF RESEARCH**

- Histology and Embryology is a fundamental field of biological science that defines the functions of different cell types in relation to their microscopic, molecular, and physiological structures, as well as the developmental processes of the embryo and the causes of congenital anomalies that may occur during these processes.
- While cell structure, stem cell and cancer biology, cell genetics, and biochemistry form the basis of multidisciplinary research, clinical research and treatment methods are also being applied for diagnostic and research purposes using electron microscopic examinations and in vitro fertilization (IVF) techniques in assisted reproduction centers.



## PROGRAM COMPETENCIES

- The Master's Degree Program in Histology and Embryology, conducted under the Institute of Health Sciences at Mersin University, trains students to become specialists with up-to-date knowledge of general histology and embryology, basic laboratory skills, and the qualifications necessary to work in the field of health sciences. For students beginning their master's education in our department, the necessary physical working environments are provided, and their education is continued through an educational program that provides sufficient academic knowledge (theoretical and practical courses, seminars, and article presentation training). Additionally, students are encouraged to participate in research projects to contribute to their academic development. Students who successfully complete the course period are provided with the necessary academic and physical infrastructure support to plan and successfully complete their theses.
- The Histology and Embryology Doctoral Education Program aims to train scientists who are knowledgeable in the field of histology and embryology and have the knowledge and skills to carry out laboratory responsibilities. While providing the necessary physical working environment for students who have started their doctoral education in the department, their education is continued with an intensive education program that includes theoretical and practical courses, seminars, and article presentations to provide them with the necessary academic knowledge. Students who actively participate in research projects during their education can increase their experience, knowledge, and skills in planning, conducting, and completing scientific studies, thereby gaining the qualities of independent researchers. After successfully completing the course period and the doctoral qualification exam, students are able to plan and successfully complete their theses with the academic and physical infrastructure support provided by our department. Graduates who successfully complete the doctoral education program receive a Doctorate degree (PhD) and a diploma that is valid worldwide.
- Our students gain research experience by participating in multidisciplinary studies with other medical and surgical departments within the faculty of medicine, as well as the faculties of dentistry and pharmacy, and the departments of biotechnology and biology throughout their master's and doctoral education. In addition, our students conduct scientific research and thesis projects using the facilities of the Animal Research Laboratory and the Mersin University Advanced Technology Education, Research, and Application Center, which is equipped with state-of-the-art devices and equipment.



# EMPLOYMENT OPPORTUNITIES

• The graduates of the master's programs in Histology and Embryology conducted under the Institute of Health Sciences can continue their academic studies by enrolling in doctoral programs at university faculty of medicine, veterinary medicine, dentistry, and biology department. In addition, those who graduate from both the master's and doctoral programs can work in *in-vitro* fertilization and andrology centers by receiving Assisted Reproductive Technology (ART) training from the Ministry of Health. Furthermore, graduates can work as researchers or specialists in private or public laboratories, R&D centers, TÜBİTAK, university research centers, and private research institutions in the fields of stem cells, tissue engineering, and regenerative medicine.



## **CONTACT**

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