**GAZI UNIVERSITY**

**LIFE SCIENCES RESEARCH AND APPLICATION CENTER**

**AND**

**GRADUATE SCHOOL OF HEALTH SCIENCES**

**APPLIED BASIC CELL CULTURE TECHNIQUES COURSE**

**19-20-21 September 2022**

**Course Head:**

Prof. Dr. Orhan CANBOLAT

**Course Organizing Committee:**

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| ***Prof. Dr. Orhan CANBOLAT,*** *Director of Life Sciences Application and Research Center*  ***Prof. Dr. Gülçin SAĞDIÇOĞLU CELEP,*** *Director of the Institute of Health Sciences*  ***Assoc. Prof. Dr. Burcu ERTİT TAŞTAN,*** *Vise Manager of Vocational School of Health Services*  ***Assoc. Prof. Dr. Hacer İlke ÖNEN,*** *Faculty of Medicine, Department of Medical Biology*  ***Assoc. Prof. Dr. Handan KAYHAN,*** *Faculty of Medicine, Department of Adult Hematology*  ***Assoc. Prof. Dr. Merve SEYMEN,*** *Faculty of Medicine, Department of Histology and Embryology*  ***Asst. Prof. Dr. Elif Burcu BALİ,*** *Vocational School of Health Services*  ***Asst. Prof. Dr. Tuğba KILIÇ,*** *Vocational School of Health Services*  ***Dr. Şükran YILMAZ,*** *Şap Institute Head of Cell and Virus Bank Department*  ***Instructor Dr. Sevcan MAMUR,*** *Life Sciences Application and Research Center*  ***PhD student Aslıhan DEMİRKAYA,*** *Department of Advanced Technologies* |

**Course Content:** Applied basic cell culture techniques course; It aims to teach the basic cell culture principles theoretically and practically. Cell thawing, passage, development and freezing processes will be demonstrated to the trainees in practice.

**Course Location:** Gazi University, Life Sciences Research and Application Center, 06830, Gölbaşı/ANKARA

**Course Participation Conditions:** All researchers working in the fields of natural, health, basic and engineering sciences can participate in the course.

**Course Fee:** 1500 TL for academic staff, 1200 TL for students(value added tax included).

**Number of Course Participants:** 12 (Limited.)

**Application Deadline:** September 8, 2022

**Application:** Researchers who want to participate in the course must fill in the application form and send it to the address **yasam@gazi.edu.tr** to pre-register. A list of trainees will be created among researchers who have pre-registered until the application deadline. The list of trainees whose registration process has been completed and will attend the course will be published on the web address **http://www.yasam.gazi.edu.tr.** For final registration, the course participation fee must be paid to the IBAN number of the Life Sciences Research and Application Center revolving fund account. In addition, students are required to send their student documents and payment receipts to **yasam@gazi.edu.tr** until 13 September 2022. At the end of the course, the participants will be given a **Certificate of Participation** by Gazi University.

**Contact:** Gazi University, Life Sciences Research and Application Center, 06830, Gölbaşı/ANKARA.

yasam@gazi.edu.tr, Tel: 0 (312) 4846270.

**APPLIED BASIC CELL CULTURE TECHNIQUES COURSE**

**(19-21 September 2022)**

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| 1. **DAY** | | |
| **9:00 - 9:10** | **Inaugural** | Prof. Dr. Musa Yıldız (Rector) |
| 9:10 - 9:20 | Inaugural and presentation of the center | Prof. Dr. Orhan Canbolat (Center Manager) |
| 9:20 - 10:10 | Cell culture and applications | Prof. Dr. Gülçin Sağdıçoğlu Celep |
| 10:10 - 10:50 | Introduction to cell culture - I (Rules to be followed in the laboratory, devices, and materials used, cell thawing, counting, preparation of solutions used in cell culture) | Instructor Dr. Sevcan Mamur |
| **10:50 - 11:00** | **Break** |  |
| 11:00 – 11.30 | Stem cells and their applications | Assoc.Dr. Burcu Ertit Taştan |
| 11:30 - 12:00 | Cell banking and characterization | Dr. Şükran Yılmaz |
| 12:00 - 13:00 | Lunch break |  |
| 13:00 - 16:30 | Practical application - I  (Cell thawing, preparation of solutions used in cell culture, preparation of medium, cell counting) |  |
| 1. **DAY** | | |
| 09:00 - 09:40 | Introduction to cell culture - II (Trypsinization, cell passage and freezing) | Instructor Dr. Sevcan Mamur |
| 09:40- 10:20 | Cell culture applications and viability analyzes | Prof. Dr. Gülçin Sağdıçoğlu Celep |
| **10:20 - 10:30** | **Break** |  |
| 10:30 - 11:15 | Immunocytochemical and immunohistochemical analysis techniques | Assoc. Prof. Dr. Merve Seymen |
| 11:15 - 12:00 | Cell culture and good manufacturing practices (GMP) | Dr. Şükran Yılmaz |
| 12:00 - 13:00 | Lunch break |  |
| 13:00 - 16:30 | Practical Application - II  (Trypsinization, cell passage, freezing) |  |
| 1. **DAY** | | |
| 09:00 - 09:40 | Isolation techniques in cell culture | Assoc. Prof. Dr. Hacer İlke Önen |
| 09:40 - 10:20 | Electrophoretic methods and application areas | Asst. Prof. Dr. Elif Burcu Bali |
| **10.20-10.30** | **Break** |  |
| 10.30 – 11.15 | Conventional PCR and application areas | Assoc. Prof. Dr. Handan Kayhan |
| 11.15 – 12.00 | Real Time PCR ve uygulama alanları | Asst. Prof. Dr. Tuğba Kılıç |
| 12:00-13:00 | Lunch break |  |
| 13:00 – 16:30 | Practical application - III  (RNA Isolation and electrophoresis, PCR) |  |
| **16:30 – 17.00** | **Closing** |  |