

BIOE4197 BIOENGINEERING GRADUATION PROJECTS (2022-2023)

| Project ID | Supervisor | Project title | Students | |
|------------|------------|---------------------------------------|---|---|
| 1 | AAU1 | Prof. Ahu Altinkut Uncuoğlu | Plant tissue culture applications in agricultural nanotechnology | Fatmanur Deniz, Beria Şenlik, Gizem Nur Karahan, Bahadır Şarlıgil |
| 2 | AAU2 | Prof. Ahu Altinkut Uncuoğlu | Extended photoperiod application in plant speed breeding | Selim Gürsoy, Şimal Erva Yeşilöz |
| 3 | BM1 | Prof. Bülent Mertoğlu | Investigation of the toxic effects of nanoplastics on <i>Saccharomyces cerevisiae</i> using CRISPR method | Seher Ayça Deniz, Hande Aleyna Meteoğlu, Fikri Bilgin |
| 4 | BM2 | Prof. Bülent Mertoğlu | Hydrazine (rocket fuel) production by anammox bacteria I | Nurefşan Kurtuluş, Misliyna Hamurcu, Şevval Güllüpinar |
| 5 | BM3 | Prof. Bülent Mertoğlu | Hydrazine (rocket fuel) production by anammox bacteria II | Artun Burma, Berkay Koçak, Burak Batuhan Koçak |
| 6 | BSA1 | Prof. Berna Sarıyar Akbulut | Optimization of microbial production of a pharmaceutical | Alperen Yasin Şenol |
| 7 | BSA2 | Prof. Berna Sarıyar Akbulut | Evaluation of methanol as a carbon source for circular economy | Yaşir Vatan, Elif Candak, Tutku Çam |
| 8 | BSA3 | Prof. Berna Sarıyar Akbulut | | Mete Sancar, Onat Utku |
| 9 | BT1 | Assist. Prof. Beste Turanlı | Elucidation of potential dysbiotic microbiota in Type 2 diabetes through host-pathogen protein-protein interactions | Tuba Aras |
| 10 | BT2 | Assist. Prof. Beste Turanlı | Investigation of blood-based signatures in obesity and diabetes mellitus | Muhammet Fatih Tamer, Ceyda Ergül |
| 11 | CB1 | Assist. Prof. Ceyhun Bereketoğlu | Toxicity assessment of an environmental pollutant - procymidone | Ahmet Efe Nalbant, Göktürk Kaan Gümüšoğlu |
| 12 | CB2 | Assist. Prof. Ceyhun Bereketoğlu | Investigating the effects of pyraclostrobin on yeast | Buse Tek, Tuana Nur Çangır |
| 13 | CK1 | Assist. Prof. Ceyda Kasavi | Systems biomedicine approach on atherosclerosis | Zeynep Akpak |
| 14 | CK2 | Assist. Prof. Ceyda Kasavi | Prediction of system-based biomarkers in cardiomyopathy | Sefa Çalışkan |
| 15 | DK1 | Prof. Dilek Kazan | Characterization of cellulase enzyme produced from cotton waste | Bünyamin Furkan Hacıoğlu, Ece Aleyna Aktay, Çağdaş Bayıklı |
| 16 | DK2 | Prof. Dilek Kazan | Importance of probiotics in the treatment of celiac diseases | İrem Ergüven |
| 17 | ETO1 | Prof. Ebru Toksoy Öner | Levan hydrogels for Biomedical applications | Onur Fıçıcı, Sena Pepe, Fatma Doğa Kutay |
| 18 | ETO2 | Prof. Ebru Toksoy Öner | Fructans in functional foods | Aleyna Duman, Zeynep Öykü Aydın |
| 19 | ETO3 | Prof. Ebru Toksoy Öner | Microalgal omega-3 encapsulation to integrate into alternative meat products | Hazal Evecen, Nurgül Türker |
| 20 | ETO4 | Prof. Ebru Toksoy Öner | Levan hydrogels for Biotech | Baran Sözeri, Çağatay Çevik |
| 21 | KYA1 | Prof. Kazım Yalçın Arğa | Development of an mRNA-based biomarker panel for early diagnosis of lung cancers | Berkay Özçelik, Yasin Karaçelebi |
| 22 | KYA2 | Prof. Kazım Yalçın Arğa | A combined therapy approach in lung adenocarcinoma cell line | Özge Karaçay, Fatma Sude Göktuğ |
| 23 | KYA3 | Prof. Kazım Yalçın Arğa | Cell culture studies associated with personalized therapy of cancer patients | Melisa Aral, Zeynep Kirit |
| 24 | KYA4 | Prof. Kazım Yalçın Arğa | Development of a clinical decision support system for personalized cancer therapy | Özlem Sağıroğlu |
| 25 | MSO1 | Assist. Prof. Mehmet Saadeddin Öztürk | Optical characterization of cancer cells in a blood volume | Doğa Sivrikaya, Elif Rana Usta |
| 26 | MSO2 | Assist. Prof. Mehmet Saadeddin Öztürk | Classification of biological tissues through diffuse reflectance measurement analysis | Bilal Gürçan |
| 27 | NAS1 | Assoc. Prof. N. Alpogu Sayar | Techno-economic investigation of the practical applicability of circular bioeconomy concepts to Turkey | Murat Kuter Sabrioğlu |
| 28 | NAS2 | Assoc. Prof. N. Alpogu Sayar | Life-cycle assessment of a bioprocess | |
| 29 | POS1 | Assoc. Prof. Pemra Özbek Sarıca | Computational discovery of natural-based drugs targeting bacterial virulence for meningococcal disease | Kerem Yalkut |
| 30 | POS2 | Assoc. Prof. Pemra Özbek Sarıca | Docking based inhibitor discovery for OXA enzymes | Ayten Sude Gülsay, Remziye Kurt |