

Science & Technology and Bioengineering Theses Defenses 2025

2nd of June (Monday)			
#	Time	Student's Name	The Topic of The Thesis
1	09:30 - 10:00	Violetta Tyrán	Pilot <i>in vitro</i> study of dexamethasone-induced immunomodulation in murine splenic T cells
2	10:00 - 10:30	Laman Mehraliyeva	Characterization of microbial community present on communal surfaces with antimicrobial coatings
3	10:30 - 11:00	Mariia Vorontsova	Effects of disruption of genes with unknown function in the C1-fixing gene cluster on a gas-fermenting acetogen
4	11:00 - 11:30	Chaitanya Mathur (ONLINE)	Co-expression analysis of Sigma-1 Receptor and tetraspanins: Insights into the biogenesis of Sigma-1 Receptor-enriched extracellular vesicles
11:30 - 12:30		Lunch Break	
5	12:30 - 13:00	Yehudit Morozovsky (CLOSED SESSION)	Fragment-based design of the potential AlkBH5 inhibitors
6	13:00 - 13:30	Ulyana Chuduk	Review of PF14 analogs: Cell-Penetrating Peptides for nucleic acid delivery
7	13:30 - 14:00	Omar Huseynli	ROS integration for the Semubot robot
8	14:00 - 14:30	Robina Zvirgzdina	Development of an Autonomous Open-Source Inventory Performance Robot for the University of Tartu Library
9	14:30 - 15:00	Lizi Enageli	The Effect of Distant Structural Fragments on Long Lifetime Photoluminescence Properties of ARC-Lum Probes
10	15:00 - 15:30	Sviatoslav-Oleh Savchak	Identifying microproteins with genetic association data
11	15:30 - 16:10	Stepan Strelchenko	Genetic and environment interactions in human obesity

3rd of June (Tuesday)			
#	Time	Student's Name	The Topic of The Thesis
1	09:30 - 10:00	Sahib Mammadov	Robotic Vision of Social Humanoid Robot SemuBot
2	10:00 - 10:30	Habeeb Olatunbosun Agbomeji	Bismuth as a desalination electrode material.
3	10:30 - 11:00	Sergei Tolbin	Investigation of the Atomic Layer Deposition principles: Effects of growth parameters on SiO ₂ thin films using hexakis(ethylamino)disilane (AHEAD) as a silicon precursor
4	11:00 - 11:30	Aleksander Roosimaa	k-mer based GWAS for identification of resistance markers in bacterial genomes
5	11:30 - 12:00	Roza Rostam Nejad	Impact of Archaic Introgression on the Abundance of Circulating Inflammatory Proteins in Modern Humans
12:00 - 13:00		Lunch Break	
6	13:00 - 13:30	Vitor Meira Chaves Barbalho	Iron and nitrogen doped hierarchical porous lignin- derived carbons as oxygen reduction reaction electrocatalysts
7	13:30 - 14:00	Elfi Aliyeva	Characterising a novel HNH-domain containing bacterial immunity system from <i>Escherichia coli</i>
8	14:00 - 14:30	Sára Babincová	The effect of elevated temperature on stomatal development in Arabidopsis thaliana
9	14:30 - 15:00	Margaret Pütsepp	SpheraSense: A Software Tool to Automate and Standardize the Analysis of Cancer Spheroid Microscopy Images
10	15:00 - 15:30	Dmitrii Kliaus (ONLINE)	Evaluation of Bacterial Viability in Photocrosslinked Hydrogels: Effects of Photoinitiator and UV Exposure on <i>E. Coli</i>
11	15:30 - 16:00	Zhanel Khazhmuratova	Brain atrophy and neuron loss in the 5xFAD mouse model of Alzheimer's disease

4th of June (Wednesday)			
#	Time	Student's Name	The Topic of The Thesis
1	09:00 - 09:40	Iris Robyn Talgre	Peptide-lipid nanoparticle platform for Cas9 mediated gene editing
2	09:40 - 10:10	Anna Rutmane	A Comparative Study of Mayaro Virus TRVL and BeAr Strains
3	10:10 - 10:50	Ana Shahpazir	Development of a Novel Claudin 6-targeting CAR-T Cell Therapy
4	10:50 - 11:30	Oleksii Yadlos	Exploring the role of the HT1-MPK12 module in guard cell CO ₂ sensing
5	11:30 - 12:00	Oleksandr Mazur	Cell-Penetrating Peptide Nanoparticles for Delivery of Splicing-Correction Oligonucleotides and DNA Origami
12:00 - 13:10		Lunch Break	
6	13:10 - 13:50	Krista Mehanikova	Interactions between <i>Saccharomyces cerevisiae</i> YEATS domain-containing Yaf9 and Swc4 proteins
7	13:50 - 14:30	Sofiya Babok	The role of the viral E1 and E2 proteins in the stable replication of human papillomavirus type 5 genome
8	14:30 - 15:10	Ilze Polekauskaitė	Validating three anti-phage defense systems in <i>Pseudomonas putida</i>
9	15:10 - 15:50	Normunds Berzinš	Characterization of antibacterial drugs against non-growing bacteria

5th of June (Thursday)			
#	Time	Student's Name	The Topic of The Thesis
1	10:00 - 10:30	Elene Kochiashvili	Experimental setup to measure the rate of oxygen production from cyanobacteria
2	10:30 - 11:00	Noah Jabis Dey	Combinatorial effect of histone H3 and H4 mutations with deletion of YEATS domain protein Sas5 in <i>Saccharomyces cerevisiae</i>
3	11:00 - 11:30	Mironshoh Rakhimov	Annotation pipeline for antibiotic resistance genes in clinical isolates
4	11:30 - 12:00	Usman Ali Khan	Graphical programming interface for ROBOTONT, an open-source educational robot
5	12:00 - 12:30	Ekaterina Pozdnyakova (ONLINE)	Pyrolytic Metamorphosis of Zn-TAL MOF into Highly Active Nitrogen-Doped Carbon Catalyst for Oxygen Reduction Reaction
6	12:30 - 13:00	Rufat Abdullayev	The Comparison of three Reconstruction methods (Straight line, Point of the closest approach (POCA), Maximum likelihood expectation maximization (MLEM))