



Department of Philosophy of Faculty of Humanities and Social Sciences University of Rijeka Rijeka, Croatia

Summer School in the Philosophy of the Life Sciences: Molecular Biology and Evolution



ThUMB

Theoretical Underpinnings of Molecular Biology (HRZZ Project IP-2018-02-3378)

July 15 – 18, 2019

Department of Philosophy, University of Rijeka (Room 401)

DAY 1 (Monday, July 15)	
10.00 – 11.00	Agnes Bolinska (University of Cambridge) "Determining the Structure of Biological Macromolecules: Theory, Models, and Data"
11.00 – 11.30	Coffee Break
11.30 – 12.00	Michal Hubalek (University of Hradec Králové) "Plots, Past and Puzzles of Human Evolution"
12.00 – 12.30	Mia Biturajac (University of Rijeka) "The Role of Biological (Dys)function in Mental Disorders"
12.30 – 14.00	Lunch Break
14.00 – 15.00	Agnes Bolinska (University of Cambridge), Julie-Anne Gandier (Aalto University) "Understanding Function through Multiple Models of Protein Structure: Barriers to Integration?"
15.00 – 15.30	Antonio Danese (University of Padova) "Philosophical Challenges Imposed by Genetic Editing"
15.30 – 16.00	Coffee Break
16.00 – 16.30	Zvonimir Anić (University of Rijeka) "Mechanisms in Health Sciences: A Desirable Goal but a Bad Methodology?"
16.30 – 17.00	Predrag Šustar Presentation of the ThUMB project (Croatian Science Foundation IP-2018-01-3378)
19:00 – 21.00	Welcome reception

DAY 2 (Tuesday, July 16)	
10.00 – 11.00	Sahotra Sarkar (University Texas at Austin) "Philosophy and Molecular Biology: The Classical Problems"
11.00 – 11.30	Coffee Break

11.30 – 12.00	Ozan Altan Altinok (Westfälische Wilhelms-Universität Münster) “Omics Revolution in Molecular Biology and Evolution: From DNA’s “Causal Bottleneck” to Evolutionary Processes, What to do When there is no Unified Scheme?”
12.00 – 12.30	Laurenz Casser (University of Texas at Austin) “Pain Modulation and Sensory Inhibition”
12.30 – 14.00	Lunch Break
14.00 – 15.00	Sahotra Sarkar (University of Texas at Austin) “A CRISPR Philosophy”
15:00 – 16:00	Tudor Baetu (University of Quebec in Trois-Rivieres) “Mechanisms in Molecular Biology”
16.00 – 16.30	Coffee Break
16.30 – 17.30	Tudor Baetu (University of Quebec in Trois-Rivieres) “How do Mechanisms and Phenomena relate to One Another?”
18.00	Visit to Trsat castle (optional)

DAY 3 (Wednesday, July 17)

10.00 – 11.00	James DiFrisco (Centre for Logic and Philosophy of Science (CLPS) KU Leuven) “Modeling the Genotype-Phenotype Map: from Networks to Dynamics”
11.00 – 11.30	Coffee Break
11.30 – 12.00	Vito Balorda (University of Rijeka) “Explanation in Molecular Biology: Explanatory Force of the Details”
12.00 – 12.30	Gregor Greslehner (University of Bordeaux) “Two Dogmas of Molecular Biology: What is the Explanatory Role of the Sequence-Structure-Function Relationship?”
12.30 – 14.00	Lunch Break
14.00 – 15.00	James DiFrisco (Centre for Logic and Philosophy of Science (CLPS) KU Leuven) “Developmental Homology and the De-Coupling of Levels of Organization”
15.00 – 15.30	Riccardo Mona (University of Milan) “Evo-Devo and Evolutionary Change”
15.30 – 16.00	Coffee Break
16.00 – 17.00	Round table: Croatian Science Foundation Research Projects in Molecular Evolutionary Biology (Tomislav Domazet-Lošo, Institute Ruđer Bošković, Igor Jurak, University of Rijeka, Department of biotechnology)

DAY 4 (Thursday, July 18)

10.00 – 11.00	Dan Nicholson (KLI Klosterneuburg) “On Being the Right Size, Revisited: The Problem with Engineering Metaphors in Molecular Biology”
11.00 – 11.30	Coffee Break
11.30 – 12.00	Urška Martinc (University of Maribor) “The Ontological Status of Species”
12.00 – 12.30	Karla Njegric (University of Zadar) “Genetic Underpinnings of Human Intelligence”
12.30 – 14.00	Lunch Break
14.00 – 15.00	Dan Nicholson (KLI Klosterneuburg) “What Is Life? at 75: A Retrospective Evaluation”
15.00 – 15.30	Concluding remarks

16.00	Visit to Pajol beach (optional)
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HRZZ
Croatian Science
Foundation

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