

# Conceptual and Methodological Aspects of Biomedical Research

28-30 October, 2020

Department of Analytic Philosophy, Institute of Philosophy, Czech Academy of Sciences

Main organizer: Martin Zach ([zach@flu.cas.cz](mailto:zach@flu.cas.cz))

More information and online registration [here](#)

## Invited speakers:

**Meritxell Alberich Jordà** (Laboratory of Haematology, Institute of Molecular Genetics, Czech Academy of Sciences)

**Soňa Hubáčková** (Laboratory of Molecular Therapy, Institute of Biotechnology, Czech Academy of Sciences)

**Lucie Laplane** (CNRS, IHPST Université Paris I-Panthéon-Sorbonne, Institut de Cancérologie Gustave Roussy)

**Barbara Osimani** (Faculty of Medicine, Polytechnic University of Marche at Ancona)

**Anya Plutynski** (Department of Philosophy, Washington University in St. Louis)

**Jacob Stegenga** (Department of History and Philosophy of Science, University of Cambridge)

**Michal Šmahel** (Laboratory of Immunotherapy, Faculty of Science, Charles University in Prague & BIOCEV)

**Jaromír Šrámek** (Institute of Histology and Embryology, First Faculty of Medicine, Charles University in Prague & Czech Skeptics' Club Sisyfos)

**Jiří Vejmelka** (Department of Internal Medicine, Thomayer Hospital & Third Faculty of Medicine, Charles University in Prague)

Time zone: Prague (CET = UTC+1)

## October 28, 2020

14:15 – 15:15 **Anya Plutynski** (Department of Philosophy, Washington University in St. Louis)

*Big Data, AI, and Precision Oncology: Is More Better?*

15:15 – 15:45 **Katherine Valde** (Philosophy Department, Wofford College)

*Using Metaphysics to Institutionalize Pluralism*

16:00 – 16:30 **Marina DiMarco** (Department of History and Philosophy of Science, University of Pittsburgh)

*Wishful Intelligibility*

16:30 – 17:00 **Michel Shamy** (Departments of Medicine & Epidemiology, University of Ottawa & Ottawa Hospital Research Institute)

*The Evidential Problem of Randomized Clinical Trials: Assessing Physicians' Beliefs*

- 17:15 – 17:45 **Jonathan Fuller** (Department of History and Philosophy of Science, University of Pittsburgh)  
*To Prevent, To Cure*
- 17:45 – 18:15 **Devora Shapiro** (Philosophy Faculty, Southern Oregon University)  
*Medical Outliers, Intersectional Subjects, and the Peculiar Failure of the Differential: A Proposal for Improvement*
- 18:30 – 19:00 **Christopher Donohue** (National Human Genome Research Institute, NIH)  
*'Missing Heritability' and the 'Existential' Crisis of Genomics*
- 19:00 – 19:30 **Kari Theurer** (Department of Philosophy, Trinity College)  
*Disorder As Dysfunction: Adaptationism and Teleology in Psychiatry*

## October 29, 2020

- 9:40 **Martin Zach & Ondřej Ševeček** (Institute of Philosophy, Czech Academy of Sciences)  
*Introduction: Bringing together philosophers, scientists, and medical doctors*
- 10:00 – 11:00 **Lucie Laplane** (CNRS, IHPST Université Paris I-Panthéon-Sorbonne, Institut de Cancérologie Gustave Roussy)  
*Stem cell: Between philosophy and biology*
- 11:00 – 11:30 **Laurence Huc** (Toxalim, INRA & University of Toulouse)  
*What is a carcinogen? bridging the gap between basic biology and regulatory toxicology*

*Break*

- 12:00 – 12:40 **Soňa Hubáčková** (Laboratory of Molecular Therapy, Institute of Biotechnology, Czech Academy of Sciences)  
*Targeting cellular senescence as a new strategy in treatment of age-related diseases*
- 12:40 – 13:10 **Jonathan Sholl** (ImmunoConcEpT, CNRS UMR 5164, University of Bordeaux)  
*Mobilizing Biogerontology and Immunology in the Project of Theorizing Health*

*Lunch break*

- 14:30 – 15:30 **Jaromír Šrámek** (Institute of Histology and Embryology, First Faculty of Medicine, Charles University in Prague & Czech Skeptics' Club Sisyfos)  
*Evidence-based medicine: Fisher, Bayes, and medical education in the Czech Republic*
- 15:30 – 16:00 **Mariusz Maziarz** (Interdisciplinary Centre for Ethics & Institute of Philosophy, Jagiellonian University)  
*Causal pluralism in medicine and its implications for clinical practice*

*Break*

- 16:30 – 17:10 **Jiří Vejmělka** (Department of Internal Medicine, Thomayer Hospital & Third Faculty of Medicine, Charles University in Prague)  
*Gut microbiota modulation in IBS – novel challenges*
- 17:10 – 17:40 **Gregor Greslehner** (Department of Philosophy, University of Vienna & ImmunoConcEpT, CNRS UMR 5164, University of Bordeaux)  
*Quo vadis, immunology? Towards a new theory of immunological recognition*

## October 30, 2020

- 10:00 – 11:00 **Jacob Stegenga** (Department of History and Philosophy of Science, University of Cambridge)  
*The Medicalisation of Sexual Desire*
- 11:00 – 11:30 **Michaela Egli** (Department of Philosophy, University of Geneva)  
*Can Pragmatic Clinical Trials Measure Effectiveness?*

*Break*

- 12:00 – 12:40 **Michal Šmahel** (Laboratory of Immunotherapy, Faculty of Science, Charles University in Prague & BIOCEV)  
*Cancer Immunotherapy: Overcoming Tumor Immune Escape*
- 12:40 – 13:10 **Elena Rondeau** (ImmunoConcEpT, CNRS UMR 5164, University of Bordeaux)  
*Understanding cancer progression and its control: An analysis of immune contribution to metastasis*

*Lunch break*

- 14:30 – 15:30 **Barbara Osimani** (Faculty of Medicine, Polytechnic University of Marche at Ancona)  
*The Causal Structure of Epistemic Environments*
- 15:30 – 16:00 **Alessandro Blasimme** (Department of Health Sciences and Technology, ETH Zurich)  
*Interpreting medical algorithms: Opacity, explainability and the epistemology of future medicine*

*Break*

- 16:30 – 17:10 **Meritxell Alberich Jordà** (Laboratory of Haematocology, Institute of Molecular Genetics, Czech Academy of Sciences)  
*Understanding the molecular basis of blood cell production: the  $\beta$ -catenin-TCF/LEF signaling pathway in hematopoiesis*
- 17:10 – 17:40 **Simon Lohse** (Centre for Ethics and Law in the Life Sciences, Leibniz University Hannover)  
*Scientific inertia in replacing animal experimentation in biomedicine*