

Junior Group Workshop for the European Society for Virology: Imaging Viruses

February 13th-14th, 2025
CBMSO-CSIC, Madrid, Spain

Venue

The Center for Molecular Biology Severo Ochoa (CBMSO-CSIC)
Calle Nicolás Cabrera, 1, Fuencarral-El Pardo, 28049 Madrid
<https://www.cbm.uam.es/>

Train: Cantoblanco Universidad station of Cercanías RENFE

Bus: Lines 714, 827, 827A, and 828

Taxi/ Car: From Madrid take the M607, from Alcobendas take the M616

The meeting targets early-career scientists, ranging from PhD students to newly established principal investigators. We want to provide early-career virologists within the European Society of Virology a platform to connect and establish collaborations with researchers around Europe and thereby support in their pursuit of independence. The event will cover various aspects of imaging, including live cell imaging, quantitative imaging, antiviral immune cell dynamics, and correlative imaging.

Keynote speakers

Julian Kompa (Kai Johnsson lab, Max Planck Institute for Medical Research Heidelberg)

Dr. Susan Cox (King's College London)

Dr. Eric Snijder (Leiden University Medical Center)

Dr. Wolfgang Kastemüller (University Würzburg)

Workshop price:

- **€120** (VAT included)

Includes scientific program, coffee breaks, lunch breaks, and conference dinner.

Registration is open until **27th of January**

Please note that the number of participants is limited

Link to the registration form below

<https://form.jotform.com/243084567357364>



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BIOIMAGING**



Meeting Programme

Thursday 13th of February 2025

13.00-14.20 Registration and lunch

14.20-14.30 Dr. Carlos Gallego and Dr. Victoria Castro
Welcome and info

Session I: Live cell imaging

Chair: Dr. Visa Ruokolainen (University of Jyväskylä)

14.30-15.00 Julian Kompa (Max Planck Institute for Medical Research, Heidelberg)
Title: Self-labeling protein tags for advanced live-cell imaging

15.00-15.20 Dr. Isabel Fernández de Castro (Cell Structure Laboratory,
National Center for Biotechnology, CNB-CSIC, Madrid, Spain)
Title: Myosin-9 is required for lysosome-mediated nonlytic reovirus egress

15.20-15.40 Marlies Leysen (Trellis Research Group, Department of Cellular and
Molecular Medicine, KU Leuven, Belgium)
Title: Novel platforms for studying recombinant AAV (sub)cellular biology

15.40-16.00 Saskia Sanders (Hannover Medical School, Germany)
Title: Spatiotemporal dynamics of herpesvirus nuclear egress complex
formation using lattice light sheet microscopy

16.00-17.00 Coffee break sponsored by Euro BioImaging + Poster Session (1)

Session II: Quantitative imaging

Chairs: Dr. Salla Mattola (University of Jyväskylä)
Dörte Stalling (Center for Structural Systems Biology, Hamburg)

17.00-17.30 Dr. Susan Cox (King's College London)
Title: Quantifying structure and variation in microscopy data

17.30-17.50 Ritika Khatri (Max von Pettenkofer Institute, Ludwig Maximilians University,
Munich, Germany)
Title: Investigating the role of two-pore channels in SARS-CoV-2 infections

17.50-18.10 Agata Kublicka (Department of Pathology, University of Environmental and
Life Sciences, Wrocław, Poland)
Title: Imaging flow cytometry in tracking viral entry into the host cell

18.10-18.30 Dr. Salla Mattola (Department of Biological and Environmental Science,
University of Jyväskylä, Jyväskylä, Finland)
Title: Parvovirus Infection Alters Nucleolar Structure, Affecting Nucleolar
Function And Capsid Nuclear egress

18.30-19.00 Tour of the imaging facility

19.00- Welcome reception

Meeting Programme

Friday 14th of February 2025

Session III: Correlative imaging

Chair: Dr. Victoria Castro (The National Center for Biotechnology, CNB-CSIC, Madrid)

09.30-10.00 **Dr. Eric Snijder** (Leiden University Medical Center, LUMC)
Title: Replication Organelles of Coronaviruses and other Nidoviruses

10:00-10:20 Dr. Esther Gonzalez-Almela (Macromolecular Structures, National Center for Biotechnology, CNB-CSIC, Madrid, Spain)
Title: Unveiling the Adenovirus Entry Pathway through Advanced Fluorescence and Cryo-Electron Microscopy

10:20-10:40 Dr. Karyna Karneyeva (Department of Biological and Environmental Science and Nanoscience Center, University of Jyväskylä, Jyväskylä, Finland)
Title: Exploring Phage and Megaphage Co-infection Using Advanced Microscopy

10:40-11:00 Dr. Irene Carlon-Andres (Department of Infectious Diseases, King's College London, Faculty of Life Sciences & Medicine, London, United Kingdom)
Title: Structural and functional characterization of HIV-1 maturation using Fluorescence Lifetime and Cryo-Electron Microscopy

11.00-12.00 Coffee break + Poster Session (2)

Session IV: Virus-host interactions

Chairs: Dr. Valeria Fumagalli (Vita-Salute San Raffaele University, Milan)
Dr. Carlos Gallego (The Center for Molecular Biology Severo Ochoa, Madrid)

12.00-12.30 **Dr. Wolfgang Kastenmüller** (University Würzburg)
Title: TBA

12.30-12.50 Dr. Juan Andres Torreno-Pina (National Center for Biotechnology, CNB-CSIC, Madrid, Spain)
Title: Early steps of individual multi-receptor viral interactions dissected by high-density, multicolor quantum dot mapping in living cells

12.50-13.10 Jorge Martinez-Ortega (Universidad Autónoma de Madrid, Spain)
Title: The NS2 protein of the parvovirus Minute Virus of Mice (MVM) disrupts the Rae1-mediated mRNA nuclear export machinery.

13.10-13.30 Dr. Elena Criscuolo (Vita-Salute San Raffaele University, Milan)
Title: Single spike mutation differentiating XBB.1 and XBB.1.5 enhances SARS-CoV-2 cell-to-cell transmission and facilitates serum-mediated enhancement.

13.30-14.10 Discussion and concluding remarks

14.15- Lunch and the end of the meeting