



November 27-28, 2025 // Hotel Le Saint Paul, Nice

MEETING PROGRAM

Thursday, November 27

8:30 – 8:45 | Welcome & Introduction

Opening remarks from the organizing committee.

8:45 - 10:25 | Session 1: Biochemistry of Mucus

Chairs: Catherine Robbe Masselot & George Birchenough

- **8:45 - 9:20** | *From mucins to mucus* – **Dave Thornton** (University of Manchester)
- **9:20 – 9:55** | *Mucin Glycosylation: Impact of Metals* – **Maria Maares** (University of Postdam)
- **9:55 - 10:10** | *Regulation of mucosal barrier functions by transmembrane mucins* – **Karin Strijbis** (Utrecht University)
- **10:10 – 10:25** | *Role of Transglutaminase 2 in mucus plugging in asthma*– **Séverine Létuvé** (Université Paris Cité)

10:25 – 11:00 | Coffee Break

11:00 - 12:45 | Session 2: Mucosal defense and Exposome

Chairs: Jean-Luc Desseyn & Dave Thornton

- **11:00 - 11:35** | *The role of goblet cell heterogeneity in mucosal defense* – **George Birchenough** (University of Gothenburg)
- **11:35 – 12:10** | *The mucus as a Strategic Defense System in Mucosal Pathologies* – **Catherine Robbe-Masselot** (Université de Lille)
- **12:10 - 12:45** | *Mucus matters: unveiling intestinal mucus as a key player in the human exposome*– **Muriel Mercier Bonin** (INRAE Toulouse)

12:45 - 14:00 | Lunch (Cocktail Style)

14:00 - 15:00 | Poster Session

15:00 - 16:10 | Session 3: Mathematics and physics of Mucus Dynamics

Chairs: Jean-François Berret & Lydia Esteban Enjuto

- **15:00 - 15:35** | *Numerical Modeling of Mucus and Mucociliary Clearance Using Lattice Boltzmann Methods* – **Umberto d’Ortona** (Université Aix-Marseille)
- **15:35 - 15:50** | *Bacterial swimming in a model complex fluid and its implications for mucus barrier penetration* - **Hector Urrea** (Sorbonne Université)
- **15:50 - 16:05** | *Quantifying the Contribution of Disulfide Bonds to Mucus Elasticity Using Passive Microrheology* - **Kawthar Shaalan** (Université de Grenoble)

16:05 - 16:40 | Coffee Break

16:40 - 17:30 | Session 4: Mini-Symposiums

- **16:40 - 17:00** | **GeneWiz**: Miriam Yamine, Associate Director, Business Development Preclinical & Clinical Services
- **17:00 – 17:20** | **Vertex Pharmaceuticals**: Cécile Chapelleaubos, Senior Medical Science Liaison

19:30 | Gala Dinner (Mamma Mia Saleya, 3 Pl. Charles Félix, 06300 Nice)



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Friday, November 28

8:45 - 10:10 | Session 5: Physical Properties of Mucus

Chairs: Umberto d'Ortona & Maria Maares

- **8:45 - 9:20** | *Mucus and Bacterial Biofilms as Biological Barriers to Anti-infective Drug Delivery* – **Claus-Michael Lehr** (Helmholtz Center for Infection Research, Sarrebruck)
- **9:20 – 9h55** | *Comparison of Sputum and Reconstituted Mucus Rheology* – **Lydia Esteban Enjuto** (Rheonova, Grenoble)
- **9h55 – 10:10** | *Mucus Reprogramming for Enhanced Antiviral Defense: Mucin-Derived Glycopeptides and Lectin-Based Barrier Engineering* - **Daniel Lauster** (Freie Universität Berlin)

10:10 – 10:40 | Coffee Break

10:40 - 12:35 | Session 6: Mucus in Infection

Chairs: Delphine Gras & Janna Nawroth

- **10:40 - 11:15** | *Respiratory mucus and cystic fibrosis*– **Pierre-Régis Burgel** (Université Paris Cité)
- **11:15 – 11h50** | *Host/microbiota interactions in health and diseases – It's time for mucus-associated microbiology!* – **Benoit Chassaing** (Institut Pasteur, Paris)
- **11h50 - 12h05** | *Mucin anchoring of SARS-CoV-2 antiviral to increase intranasal resident time* – **Nicolas Meunier** (INRAe Jouy En Josas)
- **12h05 -12h20** | *Study of mucociliary clearance during respiratory virus infection* – **Isis Leguay** (Université Paris-Saclay)
- **12h20 – 12:35** | *Mucin Dynamics in the Respiratory Tract of Poly-Infected Dairy Calves: Histological Insights* - **Guenaelle Derolez** (Université de Caen Normandie)

12:35 - 14:30 | Lunch (Seated Service)

14:30 – 16:10 | Session 7: *In vitro* models, Organ-on-Chip and Organoids – Eligible to “3R” Training (a participation certificate will be provided)

Chairs: Laure-Emmanuelle Zaragosi & Séverine Létuvé

- **14:30 - 15:05** | *Organ-on-Chip Technology in Mucus Research* – **Janna Nawroth** (Helmholtz Center, Munich)
- **15:05 - 15:40** | *Using pulmonary organoids to assess defense mechanisms* – **Katharina Raasch** (Université de Bordeaux)
- **15:40 - 15:55** | *Obesity associated metabolic stress impairs mucociliary clearance and airway mucus rheology in a human airway in vitro model* - **Ayse Tugce Sahin** (Helmholtz Center, Munich)
- **15:55 – 16h10** | *IPEC-J2: A suitable model for studying the interactions between mucus and food compounds?* - **Myriam Grundy** (INRAE Saint-Gilles)

16h10 - 16:30 | **Awards for best oral presentation and best poster.** General conclusions and closing remarks.