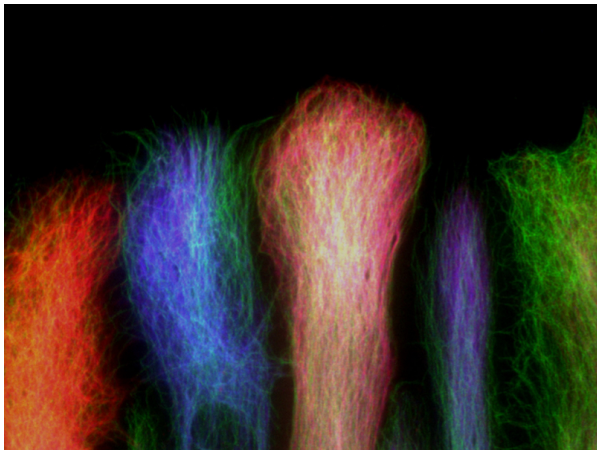




Intermediate Filaments
Gordon Research Conference

Connecting Structure, Assembly, and Phase Separation to Disease

juin 21 - 26, 2026

Chairs

Gisele Bonne and Giulio Agnetti

Vice Chairs

Sandrine Etienne-Manneville and
Susana Gonzalo

Rey Don Jaime Grand Hotel

Avinguda de l'Hotel
22 Castelldefels
Castelldefels, Barcelona, Spain

Conference Description

The Intermediate Filaments GRC is a premier, international scientific conference focused on advancing the frontiers of science through the presentation of cutting-edge and unpublished research, prioritizing time for discussion after each talk and fostering informal interactions among scientists of all career stages. The conference program includes an array of speakers and discussion leaders from institutions and organizations worldwide, concentrating on the latest developments in the field. The conference is five days long and held in a remote location to increase the sense of camaraderie and create scientific communities, with lasting collaborations and friendships. In addition to premier talks, the conference has designated time for poster sessions from individuals of all career stages, and afternoon free time and communal meals allow for informal networking opportunities with leaders in the field.

Description Intermediate filaments (IF) form cytosolic and nuclear networks that support cell shape and function. Each cell type in the body expresses a combination of cell-type specific IF proteins that changes during cell development, adaptation to stress and with disease. Mutations in genes encoding IF and changes in their composition lead to/reflect the development of a plethora of diseases, spanning rare to highly prevalent diseases (such as cardiovascular, neurodegenerative and cancer). This Gordon Research Conference (GRC) brings together researchers from a broad range of disciplines to showcase the most recent technological and biological acquisitions in the field of intermediate filament research. This historical GRC has fostered new ideas and collaborations, that have been instrumental to our understanding of the IF biophysics and their prominent roles in the protection from cellular stress. With the GRC and the accompanying Gordon Research Seminar (GRS), we aim to recruit and promote talented early-stage and established new investigators into the field, providing them with cutting-edge scientific presentations, mentorship and networking opportunities, and a collegial forum to critically contribute to re-shaping our understanding of IF function.

Conference Program

Sunday

2:00 pm - 9:00 pm	Arrival and Check-in
6:00 pm - 7:00 pm	Dinner
7:30 pm - 7:40 pm	Introductory Comments by GRC Staff / Welcome and Introduction from the Chairs
7:40 pm - 9:30 pm	Keynote Session: In Memory of Ueli Aebi: IF Phase Separation and Assembly Discussion Leaders: Robert Goldman (Northwestern University, United States) and Jan Lammerding (Cornell University, United States)
7:40 pm - 8:00 pm	Introduction by Discussion Leader

8:00 pm - 8:30 pm	David Weitz (Harvard University, United States) "Assembly of Vimentin Intermediate Filaments Through Liquid-Liquid Phase Separation"
8:30 pm - 8:40 pm	Discussion
8:40 pm - 9:10 pm	Vladimir Gelfand (Northwestern University, United States) "Static No More: The Dynamics of Intermediate Filaments and Why It Matters"
9:10 pm - 9:20 pm	Discussion
9:20 pm - 9:30 pm	General Discussion
Monday	
7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	Technologies to Study IFs Discussion Leader: Onnik Agbulut (CNRS / Sorbonne Université / INSERM, France)
9:00 am - 9:10 am	Introduction by Discussion Leader
9:10 am - 9:30 am	Abigail Buchwalter (University of California, San Francisco, United States) "Mapping Sequence to Folding and Function by Deep Mutational Scanning of the Nuclear lamina"
9:30 am - 9:40 am	Discussion
9:40 am - 9:50 am	Short Talk Selected from Poster Abstracts
9:50 am - 9:55 am	Discussion
9:55 am - 10:05 am	Short Talk Selected from Poster Abstracts
10:05 am - 10:10 am	Discussion
10:10 am - 10:40 am	Coffee Break
10:40 am - 11:00 am	Andrew Moore (HHMI, United States) "Investigating Vimentin-Dependent Organelle Positioning with FilaBuster, a Rapid Light-Triggered Intermediate Filament Disassembly Tool"
11:00 am - 11:10 am	Discussion
11:10 am - 11:20 am	Short Talk Selected from Poster Abstracts
11:20 am - 11:25 am	Discussion
11:25 am - 11:35 am	Short Talk Selected from Poster Abstracts
11:35 am - 11:40 am	Discussion
11:40 am - 12:00 pm	Sarah Köster (University of Göttingen, Germany) "Mechanical Characterization of Intermediate Filaments: From Single Filaments to Networks and Cells"

12:00 pm - 12:10 pm	Discussion
12:10 pm - 12:30 pm	Poster Previews
12:30 pm - 1:30 pm	Lunch
1:30 pm - 4:30 pm	Free Time
4:30 pm - 6:00 pm	Poster Session
6:00 pm - 8:00 pm	IFs as Integrators of Signaling Pathways for Cell Differentiation, Migration and Stress Responses Discussion Leader: Pekka Taimen (University of Turku and Turku University Hospital, Finland)
6:00 pm - 6:10 pm	Introduction by Discussion Leader
6:10 pm - 6:30 pm	Dolores Pérez-Sala (CSIC, Spain) "Remodeling of Vimentin in Response to Changes in the Intracellular Environment"
6:30 pm - 6:40 pm	Discussion
6:40 pm - 6:50 pm	Short Talk Selected from Poster Abstracts
6:50 pm - 6:55 pm	Discussion
6:55 pm - 7:05 pm	Short Talk Selected from Poster Abstracts
7:05 pm - 7:10 pm	Discussion
7:10 pm - 7:20 pm	Short Talk Selected from Poster Abstracts
7:20 pm - 7:25 pm	Discussion
7:25 pm - 7:45 pm	Georg Weitzer (Medical University of Vienna, Austria) "On the Non-Cell Autonomous Role of Desmin in the Heart"
7:45 pm - 7:55 pm	Discussion
7:55 pm - 8:00 pm	General Discussion
8:00 pm - 9:00 pm	Dinner
Tuesday	
7:30 am - 8:30 am	Breakfast
8:30 am - 9:00 am	Group Photo
9:00 am - 12:30 pm	Mechanobiology and Rheology of the IFs Discussion Leader: Dennis Discher (University of Pennsylvania, United States)
9:00 am - 9:10 am	Introduction by Discussion Leader
9:10 am - 9:30 am	Ohad Medalia (University of Zurich, Switzerland) "The Structural Diversity of Intermediate Filaments"

9:30 am - 9:40 am	Discussion
9:40 am - 9:50 am	Short Talk Selected from Poster Abstracts
9:50 am - 9:55 am	Discussion
9:55 am - 10:05 am	Short Talk Selected from Poster Abstracts
10:05 am - 10:10 am	Discussion
10:10 am - 10:40 am	Coffee Break
10:40 am - 11:00 am	Carl-Philipp Heisenberg (IST Austria, Austria) "Keratins in Epithelial Cell Layer Spreading During Zebrafish Gastrulation"
11:00 am - 11:10 am	Discussion
11:10 am - 11:20 am	Short Talk Selected from Poster Abstracts
11:20 am - 11:25 am	Discussion
11:25 am - 11:35 am	Short Talk Selected from Poster Abstracts
11:35 am - 11:40 am	Discussion
11:40 am - 12:00 pm	Daniel Garcia-Gonzalez (Universidad Carlos III de Madrid, Spain) "Deciphering the Impact of Cytoskeletal Dynamics on Glioblastoma Mechanics Using Magneto-Active Substrates"
12:00 pm - 12:10 pm	Discussion
12:10 pm - 12:30 pm	Poster Previews
12:30 pm - 1:30 pm	Lunch
1:30 pm - 4:30 pm	Free Time
4:30 pm - 6:00 pm	Poster Session
6:00 pm - 8:00 pm	Roles of the IFs in Striated Muscle Disease Discussion Leader: Natasha Snider (University of North Carolina at Chapel Hill, United States)
6:00 pm - 6:10 pm	Introduction by Discussion Leader
6:10 pm - 6:30 pm	Mario Delmar (New York University School of Medicine, United States) "Desmin and its Role in the Sudden Cardiac Death of Young Athletes"
6:30 pm - 6:40 pm	Discussion
6:40 pm - 6:50 pm	Short Talk Selected from Poster Abstracts
6:50 pm - 6:55 pm	Discussion
6:55 pm - 7:05 pm	Short Talk Selected from Poster Abstracts
7:05 pm - 7:10 pm	Discussion

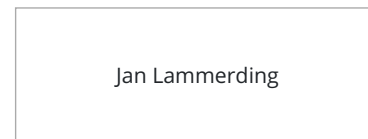
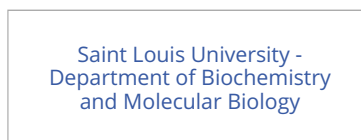
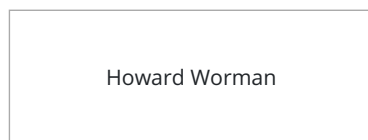
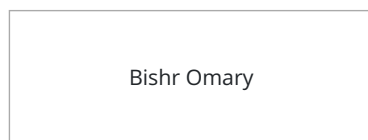
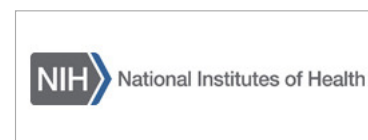
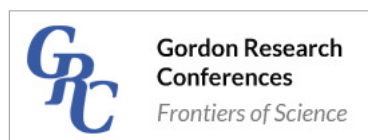
7:10 pm - 7:20 pm	Short Talk Selected from Poster Abstracts
7:20 pm - 7:25 pm	Discussion
7:25 pm - 7:45 pm	Bianca Brundel (Amsterdam UMC, The Netherlands) "Intermediate Filament Failure as a Molecular Starting Point for Atrial Disease: The Case of Desmin"
7:45 pm - 7:55 pm	Discussion
7:55 pm - 8:00 pm	General Discussion
8:00 pm - 9:00 pm	Dinner
Wednesday	
7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	IF Pathobiology in Cancer Discussion Leader: Ronald Liem (Columbia University, United States)
9:00 am - 9:10 am	Introduction by Discussion Leader
9:10 am - 9:30 am	Emma van Bodegraven (University Medical Center Utrecht, The Netherlands) "Drivers of Brain Tumor Invasion: Intermediate Filament-Mediated Mechanisms"
9:30 am - 9:40 am	Discussion
9:40 am - 9:50 am	Short Talk Selected from Poster Abstracts
9:50 am - 9:55 am	Discussion
9:55 am - 10:05 am	Short Talk Selected from Poster Abstracts
10:05 am - 10:10 am	Discussion
10:10 am - 10:40 am	Coffee Break
10:40 am - 11:00 am	Cedric Delevoye (INEM / INSERM, France) "Intermediate Filaments as Mechanical Drivers of Genome Photoprotection"
11:00 am - 11:10 am	Discussion
11:10 am - 11:20 am	Short Talk Selected from Poster Abstracts
11:20 am - 11:25 am	Discussion
11:25 am - 11:35 am	Short Talk Selected from Poster Abstracts
11:35 am - 11:40 am	Discussion
11:40 am - 12:00 pm	Daniel Kaganovich (Conquest, United States) "Mapping Phenotypic Space to Engineer Cancer Therapy"
12:00 pm - 12:10 pm	Discussion

12:10 pm - 12:30 pm	Poster Previews
12:30 pm - 1:30 pm	Lunch
1:30 pm - 4:30 pm	Free Time
4:30 pm - 6:00 pm	Poster Session
6:00 pm - 8:00 pm	IFs in Aging and Neurodegeneration Discussion Leader: Vicente Andres (Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Spain)
6:00 pm - 6:10 pm	Introduction by Discussion Leader
6:10 pm - 6:30 pm	Elly Hol (UMC Utrecht, The Netherlands) "Modeling Alexander Disease: How GFAP Mutations Alter Early Neural Fate and Brain Organoid Development"
6:30 pm - 6:40 pm	Discussion
6:40 pm - 6:50 pm	Short Talk Selected from Poster Abstracts
6:50 pm - 6:55 pm	Discussion
6:55 pm - 7:05 pm	Short Talk Selected from Poster Abstracts
7:05 pm - 7:10 pm	Discussion
7:10 pm - 7:20 pm	Short Talk Selected from Poster Abstracts
7:20 pm - 7:25 pm	Discussion
7:25 pm - 7:45 pm	Howard Worman (Columbia University, United States) "Unprocessed Prelamin A in Accelerated Aging Disorders"
7:45 pm - 7:55 pm	Discussion
7:55 pm - 8:00 pm	General Discussion
8:00 pm - 9:00 pm	Dinner
Thursday	
7:30 am - 8:30 am	Breakfast
8:30 am - 9:00 am	Business Meeting <i>Nominations for the Next Vice Chair(s); Complete the GRC Evaluation Forms; Election of the Next Vice Chair(s)</i>
9:00 am - 12:30 pm	IFs in Skin, Gut and Bones Discussion Leader: Diana Toivola (Åbo Akademi University, Finland)
9:00 am - 9:10 am	Introduction by Discussion Leader
9:10 am - 9:30 am	Pierre Coulombe (University of Michigan, United States) "Keratins Collectively Regulate the Initiation and Sustainment of Keratinocyte Differentiation in Epidermis"

9:30 am - 9:40 am	Discussion
9:40 am - 9:50 am	Short Talk Selected from Poster Abstracts
9:50 am - 9:55 am	Discussion
9:55 am - 10:05 am	Short Talk Selected from Poster Abstracts
10:05 am - 10:10 am	Discussion
10:10 am - 10:40 am	Coffee Break
10:40 am - 11:00 am	Karine Raymond (Leiden University Medical Center, The Netherlands) "From Skin to Heart: KLHL24-Driven Intermediate Filament Degradation Links Epidermolysis Bullosa Simplex to Cardiomyopathy"
11:00 am - 11:10 am	Discussion
11:10 am - 11:20 am	Short Talk Selected from Poster Abstracts
11:20 am - 11:25 am	Discussion
11:25 am - 11:35 am	Short Talk Selected from Poster Abstracts
11:35 am - 11:40 am	Discussion
11:40 am - 12:00 pm	General Discussion
12:00 pm - 12:20 pm	Nicole Schwarz (RWTH Aachen University, Germany) "How Keratins Shape Organelle Localisation"
12:20 pm - 12:30 pm	Discussion
12:30 pm - 1:30 pm	Lunch
1:30 pm - 4:30 pm	Free Time
4:30 pm - 6:00 pm	Poster Session
6:00 pm - 8:00 pm	IFs Host Pathogens Interactions Discussion Leader: Paul Janmey (University of Pennsylvania, United States)
6:00 pm - 6:10 pm	Introduction by Discussion Leader
6:10 pm - 6:30 pm	Karen Ridge (Northwestern University, United States) "Vimentin at the Crossroads of Lung Disease: Orchestrating Immune Signaling and Host Responses"
6:30 pm - 6:40 pm	Discussion
6:40 pm - 6:50 pm	Short Talk Selected from Poster Abstracts
6:50 pm - 6:55 pm	Discussion
6:55 pm - 7:05 pm	Short Talk Selected from Poster Abstracts
7:05 pm - 7:10 pm	Discussion

7:10 pm - 7:20 pm	Short Talk Selected from Poster Abstracts
7:20 pm - 7:25 pm	Discussion
7:25 pm - 7:45 pm	John Eriksson (Åbo Akademi University, Finland) "Intermediate Filaments at the Host-Pathogen Interface: Signaling, Positioning, and Control"
7:45 pm - 7:55 pm	Discussion
7:55 pm - 8:00 pm	General Discussion
8:00 pm - 9:00 pm	Dinner
Friday	
7:30 am - 8:30 am	Breakfast
9:00 am	Departure

Contributors



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