



## 5. Ulm Meeting – Biophysics of Amyloid Formation Virtual meeting

### 16 February 2021

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- 09:00**     **Margaret Sunde** / University of Sydney, Australia  
RHIM functional amyloids operating for and against microbial infection
- 09:30**     **Meytal Landau** / Technion - Israel Institute of Technology, Israel  
Functional supramolecular structures in infectious diseases as targets and therapeutics
- 10:00**     **Simon Alberti** / Technical University of Dresden, Germany  
Biomolecular condensates at the nexus of stress, aging and protein aggregation disease
- 10:30**     **Raffaele Mezzenga** / ETH Zurich, Switzerland  
Amyloid liquid crystalline phase separation
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- 11:00**     **Break**
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- 11:30**     **Yuji Goto** / University of Osaka, Japan  
Breakdown of supersaturation barrier links protein folding to amyloid formation
- 12:00**     **Sheena E. Radford** / University of Leeds, UK  
Early steps in amyloid assembly: The Achilles heel of a disease mechanism
- 12:30**     **Tuomas Knowles** / University of Cambridge, UK  
Kinetics of protein aggregation
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- 13:00**     **Break**
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- 14:00**     **Adriano Aguzzi** / University Hospital Zurich, Switzerland  
Modifiers of prion propagation and toxicity
- 14:30**     **Mathias Jucker** / University of Tübingen, Germany  
Seeds at pre-amyloid disease stages
- 15:00**     **Bernd Bukau** / University of Heidelberg and German Cancer Research Center, Germany  
Molecular dissection of alpha-syn amyloid disaggregation by the human Hsp70 machinery
- 15:30**     **Ulrich Hartl** / Max Planck Institute of Biochemistry, Germany  
Chaperone functions in modulating amyloid aggregation
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- 16:00**     **Break**
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- 16:30**     **James Shorter** / University of Pennsylvania, USA  
Combating deleterious phases in ALS/FTD
- 17:00**     **Jeffery W. Kelly** / The Scripps Research Institute, USA  
Lessons learned from drugs that slow transthyretin amyloidosis applied to Parkinson's and Alzheimer's disease
- 17:30**     **Charles G. Glabe** / University of California, Irvine, USA  
Endogenous human anti-amyloid antibodies that are predictive or protective for AD
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- 18:00**     **End of today's sessions**
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## 17 February 2021

- 09:00**      **Ronald Melki** / Centre National de la Recherche Scientifique, France  
Alpha-synuclein assemblies propagation and the molecular basis of distinct synucleinopathies
- 09:30**      **Henning Stahlberg** / École Polytechnique Fédérale de Lausanne, Switzerland  
Cryo-EM studies alpha-synuclein fibril strains and of Lewy bodies in human brain
- 10:00**      **Sjors Scheres** / MRC Laboratory of Molecular Biology, UK  
Seeded assembly of alpha-synuclein filaments does not replicate MSA structures
- 10:30**      **Hilal A. Lashuel** / École Polytechnique Fédérale de Lausanne, Switzerland  
Disentangling the key determinants of Huntingtin inclusion formation and toxicity
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- 11:00**      **Break**
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- 11:30**      **Fabrizio Chiti** / University of Florence, Italy  
Following TDP-43 inclusion formation in vivo using a quantitative biology approach
- 12:00**      **Sara Linse** / Lund University, Sweden  
Secondary nucleation in amyloid formation
- 12:30**      **Per Hammarström** / Linköping University, Sweden  
Assessing Abeta and tau fibril polymorphs in vivo and in vitro
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- 13:00**      **Break**
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- 14:00**      **Jan Münch** / Ulm University, Germany  
Towards clinical application of peptide nanofibrils as viral transduction enhancer
- 14:30**      **Salvador Ventura** / Universitat Autònoma de Barcelona, Spain  
Alpha-helical peptides to target alpha-synuclein pathogenic species with nanomolar affinity
- 15:00**      **Jennifer C. Lee** / National Heart, Lung and Blood Institute, National Institutes of Health, USA  
Effects of PD-related truncations on alpha-synuclein fibril formation and structure
- 15:30**      **Daniel Raleigh** / Stony Brook University, USA, and University College London, UK  
Amylin induced beta-cell death from molecular biophysics to therapeutic applications
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- 16:00**      **Break**
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- 16:30**      **Robert G. Griffin** / Massachusetts Institute of Technology, USA  
<sup>1</sup>H-detection and dynamic nuclear polarization-enhanced NMR of Abeta (1-42) fibrils
- 17:00**      **William DeGrado** / University of California San Francisco, USA  
Sensing conformational strains of amyloids
- 17:30**      **David S. Eisenberg** / University of California Los Angeles, USA  
Functional amyloid versus pathogenic amyloid
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- 18:00**      **End of the meeting**
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Organization: Marcus Fändrich & Astrid Albiez