

[Biointerfaces International Seminar \(BIS\) 2021, ETH Zurich, Switzerland, August 16, 2021](#)

Time slots	Topic / Titles	Lecturers	Keywords & Chairs/Discussion Leaders
09:00 - 09:10	Welcome & Introduction	Tina Buerki-Thurnherr , Dept Materials Meet Life, Empa, St. Gallen, CH, Web link	
09:10 - 09:50	Critical Overview of Biointerfacial Challenges and Unmet Needs <i>“How to avoid drinking the Kool-Aid”</i>	David W. Grainger Dept of Pharmaceutics and Pharmaceutical Chemistry, University of Utah, Salt Lake City, UT, US Web link	Only by analysing past mistakes and poor performance can we understand how to move forward for improved efficiency in translation Chair: Patricia Dankers , Biomedical Materials and Chemistry, Eindhoven University of Technology, NL, Web link
09:50 - 10:30	Nanoparticulate Drug Delivery Systems for Cancer Therapy	Martina Stenzel Dept of Chemistry, University of New South Wales, Sydney, AU Web link	Nanoparticles, mechanism of drug loading, behaviour of nanoparticles in a biological system (in vitro and in vivo) and ligands Chair: Tina Buerki-Thurnherr , Dept Materials Meet Life, Empa, St. Gallen, CH, Web link
10:30 - 11:00	<i>Break</i>		
11:00 - 11:40	Infection Fighting Materials	Andrés J. Garcia (tbc) Petit Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, GA, US, Web link	Bacteria, infection, biofilm, antibiotic-resistance, anti-microbials Chair: Simone Schürle-Finke , Dept of Health Sciences and Technology, ETH Zurich, CH, Web link
11:40 - 12:30	Mesenchymal Stromal Cell Therapies: Hype or Reality?	Ivan Martin Dept of Biomedicine, University of Basel, Basel, CH Web link	Biological characterization of MSCs, challenges towards clinical translation, possible use of materials for MSC manipulation Chair: Jan de Boer (tbc) , BioInterface Science, Eindhoven University of Technology, NL, Web link
12:30 - 14:10	Lunch and More – Ask Anything	Senior Staff (speakers, chairpersons, organizers, etc.) to lead discussion tables	Two senior, experienced persons at each table with (young) participants to ask any question (e.g., related to career planning, publication, collaborations, funding, life/work balance, etc.) Sally McArthur , Faculty of Science, Engineering & Technology, Swinburne University of Technology, Melbourne, AU, Web link H. Michelle Grandin , Scientific Consultant BioMaterials & Medical Devices, Instructor at UCSD Extension, US, Web link

14:10 - 14:50	How Forces Direct Extracellular Matrix Deposition	Viola Vogel Dept. of Health Science and Technology, ETH Zurich, CH, Web link	Mechanobiology of cells and extracellular matrix, how forces switch protein functions with powerful physiological consequences Chair: Sarah Köster , Cellular Biophysics, Georg-August-University, Göttingen, DE, Web link
14:50 - 15:30	Next Generation Organoids	Matthias Lutolf Institute of Bioengineering, Laboratory of Stem Cell Bioengineering, EPFL, CH Web link	Organoids, stem cells, self-organisation, tissue engineering, organs-on-a-chip Chair: Núria Montserrat Pulido , Institute for Bioengineering of Catalonia, Barcelona, ES, Web link
15:30 - 16:00	<i>Break</i>		
16:00 - 17:00	Scientific Integrity – Why do we care The How and Why to Open Science	Thorsten Ochsenreiter , Institute of Cell Biology, University of Berne, CH Web link Melanie Röthlisberger , English department of the University of Zurich, CH Web link	Plagiarism, honesty in communication, reproducibility, objectivity, misconduct Open science in reserach, Open data, caveats for young scientists David W. Grainger , Dept of Pharmaceutics and Pharmaceutical Chemistry, University of Utah, Salt Lake City, UT, US Web Link Eliav Haskal , Innovation Manager, NCCR Bio-Inspired Materials, University of Fribourg, Fribourg, CH, Web link
17:00 - 18:00	Lost in Translation: hurdles and opportunities in the translation of scientific discovery to clinics and market - including a pitch development workshop	Eliav Haskal , Innovation Manager, NCCR Bio-Inspired Materials, University of Fribourg, Fribourg, CH, Web link Sally McArthur , Faculty of Science, Engineering & Technology, Swinburne University of Technology, Melbourne, AU, Web link	Introductory talks - then preparation of a short elevator pitch by the participants Chair: Markus Ehrat , EK Biosciences, CH, Web link
18:00 - 18:30	Speed Networking: time to put your pitch into action and meet some of the other attendees	H. Michelle Grandin , Scientific Consultant BioMaterials & Medical Devices, Instructor at UCSD Extension, US, Web link Tina Buerki-Thurnherr , Dept Materials Meet Life, Empa, St. Gallen, CH, Web link	2 rows for 1:1 pitching; after each pitch, one row moves and the next pitch starts with new partner -> break the ice and continue discussions/networking during apero Sally McArthur , Faculty of Science, Engineering & Technology, Swinburne University of Technology, Melbourne, AU, Web link