D-BIOL Symposium 2018
Program
Monday, June 11

11:00 – 12:45  
Registration / Mounting of posters  
Sandwich bar (in front of room Davos)

13:00 – 13:10  
Welcome address  
Prof. Markus Aebi, D-BIOL Chair

Lecture session I  
Chair: Manfred Kopf  
Room: Davos

13:10 – 13:55  
Guest Lecture  
Gaudenz Danuser; UT Southwestern Medical Center, Dallas  
Inferring causal relations among molecular processes

13:55 – 14:20  
Manfred Claassen; Institute of Molecular Systems Biology  
T cell marathon at single cell resolution - Learning how to become exhausted

14:20 – 14:45  
Jan Kisielow; Institute of Molecular Health Sciences  
From T-cell specificity to personalised therapy

14:45 – 15:10  
Matthias Peter; Institute of Biochemistry  
Regulation of cell growth and division

15:10 – 15:30  
Poster flash talks

15:30 – 16:00  
Coffee break (in front of room Davos)

Lecture session II  
Chair: Rudi Glockshuber  
Room: Davos

16:00 – 16:25  
Kaspar Locher; Institute of Molecular Biology and Biophysics  
Structural and mechanistic insight into oligosaccharyltransferase

16:25 – 16:50  
Martin Pilhofer; Institute of Molecular Biology and Biophysics  
Structure, function, and evolution of bacterial contractile injection systems
<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
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<tbody>
<tr>
<td>16:50 – 17:15</td>
<td>Gebhard Schertler; PSI</td>
<td><strong>Cryo-EM and x-ray structures of signalling complexes of rhodopsin shedding light on the G protein selectivity of GPCRs</strong></td>
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<tr>
<td>17:15 – 17:40</td>
<td>Volodymyr Korkhov; Institute of Biochemistry</td>
<td><strong>Structure and function of membrane adenyl cyclases, key enzymes in signal transduction</strong></td>
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<td>17:40 – 18:00</td>
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<td><strong>Poster flash talks</strong></td>
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<td>18:00 – 20:00</td>
<td><strong>Poster-Apéro</strong></td>
<td><strong>Odd numbered posters in rooms Hallway and Foyer A2, main floor</strong></td>
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<tr>
<td>20:00</td>
<td><strong>Dinner (Rooms Sanada and Sanada Foyer)</strong></td>
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**Tuesday, June 12**

**Lecture session III**

*Chair: Sam Zeeman*

*Room: Davos*

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<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
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<tbody>
<tr>
<td>08:30 – 08:55</td>
<td>Olivier Voinnet; Institute of Molecular Plant Biology</td>
<td><strong>Non invasive, single cell type resolution of genome-wide miRNA activities in a complex organ</strong></td>
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<tr>
<td>08:55 – 09:20</td>
<td>Navreet Bhullar; Institute of Molecular Plant Biology</td>
<td><strong>Iron and Zinc biofortification of staple cereal grains: novel strategies for producing healthy food</strong></td>
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<td>09:20 – 09:45</td>
<td>Elisabeth Truernit; Institute of Molecular Plant Biology</td>
<td><strong>From shoot to root: Novel players in plant phloem development</strong></td>
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<td>09:45 – 10:10</td>
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<td><strong>Poster flash talks</strong></td>
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<tr>
<td>10:10 – 10:40</td>
<td><strong>Coffee break (in front of room Davos)</strong></td>
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Lecture session IV
Chair: Yves Barral
Room: Davos

10:40 – 11:25  **Guest Lecture**
Steve Kay; University of Southern California
*It's about time: circadian networks in health and disease*

11:25 – 11:50  Werner Kovacs; Institute of Molecular Health Sciences
*Hypoxia control of pexophagy in cancer pathogenesis*

11:50 – 12:15  Gerald Schwank; Institute of Molecular Health Sciences
*Targeting monogenetic diseases with CRISPR*

12:15 – 12:40  Sabine Werner; Institute of Molecular Health Sciences
*Novel mechanisms underlying inflammatory and viral skin disease*

12:40 – 12:50  Jacob Corn; Institute of Molecular Health Sciences
*Genome editing at the crossroads of biology and therapy*

12:50 – 16:00  Lunch (in front of room Davos) & break
12:50 – 16:00  Postdoc mentoring program lunch (Postdocs & mentors)

Lecture session V
Chair: Julia Vorholt
Room: Davos

16:00 – 16:25  Jörn Piel; Institute of Microbiology
*New synthetic biology tools from microbial dark matter*

16:25 – 16:50  Emma Slack; Institute of Microbiology
*IgA: Chaining up intestinal pathogens*

16:50 – 17:15  Wolf-Dietrich Hardt; Institute of Microbiology
*Salmonella growth in the gut*

17:15 – 17:40  Eilika Weber-Ban; Institute of Molecular Biology and Biophysics
*The Pup-proteasome gene locus and the mycobacterial stress response*

17:40 – 18:00  Poster flash talks

18:00 – 20:00  Poster-Apéro
*Even numbered posters in rooms Hallway and Foyer A2, main floor*

20:00  Dinner (Room Davos)
Wednesday, June 13

Lecture session VI
Chair: Uwe Sauer
Room: Davos

08:30 – 09:15  **Guest Lecture**
Timm Schroeder; D-BSSE
*Long-term single-cell quantification: New tools for old questions*

09:15 – 09:40  **Berend Snijder;** Institute of Molecular Systems Biology
*Image-based systems biology for personalized medicine*

09:40 – 10:05  **Shinichi Sunagawa;** Institute of Microbiology
*Meta-omics approaches to study the ocean microbiome at global scale*

10:05 – 10:30  **Beat Christen;** Institute of Molecular Systems Biology
*Transposon sequencing approaches for bio-systems analysis and design*

10:30 – 11:00  **Coffee break (in front of room Davos)**

Lecture session VII
Chair: Ulrike Kutay
Room: Davos

11:00 – 11:25  **Stefanie Jonas;** Institute of Molecular Biology and Biophysics
*Molecular Machines for RNA processing*

11:25 – 11:50  **Joao Matos;** Institute of Biochemistry
*Rewiring DNA repair for genome stability and haploidiisation*

11:50 – 12:15  **Karsten Weis;** Institute of Biochemistry
*The life of an mRNA: from birth to death*

12:15  **Farewell**
Posters

Poster Exhibition in Hallway and Foyer A2 (main floor)

Posters highlighted in green with flash talk presentation

1. Acharya, Ananya (Dr. P. Cejka), Biochemistry
   Understanding DNA end resection: functional interaction of replication protein A (RPA) and Dna2 nuclease

2. Aizawa, Eishi (Prof. Dr. A. Wutz), Molecular Health Sciences
   Development of a culture system for oogenesis and totipotent cells from mouse pluripotent stem cells

3. Albertini, Daniele (Prof. Dr. O. Voinnet), Molecular Plant Biology
   Gaining new insights into RNAi-mediated antiviral defense using Arabidopsis thaliana as a model

4. Aloia, Andrea, Molecular Health Sciences
   MAPK inhibition induces a metabolic reprogramming involving decreased glycolysis and increased fatty acid oxidation in melanoma

5. Arigoni-Affolter, Ilaria (Prof. Dr. M. Aebi), Microbiology
   New insights into N-glycosylation: Time-course SILAC data together with modeling give a functional resolution of the secretory pathway

6. Arvaniti, Eirini (Prof. Dr. M. Claassen), Molecular Systems Biology
   Automated Gleason grading of prostate cancer tissue microarrays via deep learning

7. Bachofner, Sven (Prof. Dr. U. Suter), Molecular Health Sciences
   Functional Role of TDP-43 in Schwann Cells and Oligodendrocytes

8. Bakkeren, Erik (Prof. Dr. W.-D. Hardt), Microbiology
   A reservoir for Salmonella conjugative plasmids in the intestinal mucosa

9. Barragan Borrero, Veronica and Mateescu, Bogdan, Molecular Plant Biology
   Milk as paradigm to study extracellular RNAs biogenesis and functions

10. Barth, Julia, Hempel, Susanna and Schmitz, Jennifer, Molecular Systems Biology
    CAL: efficient learning through student engagement

11. Ben-Yehuda Greenwald, Maya, Molecular Health Sciences
    Can an “optimized” Viagra accelerate cutaneous wound healing?

12. Benoit, Roger, Structural Biology (PSI)
    Scaffolds for the structure elucidation of GPCR-drug complexes from single particles by cryo-EM

13. Bhaskaran, Jahnavi (Prof. Dr. G. Schwank), Molecular Health Sciences
    Function and regulation of DNA methyltransferases during disease and development
14. Birkeland, Eivind (Dr. R. Dechant), Biochemistry
Understanding the regulation and functional mechanisms of NHE1 in pancreatic adenocarcinoma cell growth

15. Blattmann, Peter, Molecular Systems Biology
Systems pharmacology dissection of cell-specific cholesterol regulation mechanisms reveals large pharmacodynamic variability

16. Bodak, Maxime, Molecular Health Sciences
LINE-1 elements are regulated by the miRNA pathway in mouse embryonic stem cells, in an indirect manner

17. Buffing, Marieke Franscisca (Prof. Dr. U. Sauer), Molecular Systems Biology
High-throughput metabolomics-based identification of allosteric regulators in E. coli

18. Buljan, Marija, Molecular Systems Biology
Identifying interactions relevant for cancer development

19. Burgy, Leo (Prof. Dr. S. Zeeman), Molecular Plant Biology
The hidden dynamic of starch granules in Arabidopsis thaliana

20. Cangkrama, Michael, Molecular Health Sciences
Targeting Activin signaling pathway in skin cancers

21. Cannac, Fabien (Prof. Dr. V. Korkhov), Biochemistry
Structure and functions of membrane receptor cyclases

22. Canonica, Fabia (Prof. Dr. R. Glockshuber), Molecular Biology and Biophysics
In vitro reconstitution of chaperone-dependent CuA center formation in aa3-type cytochrome c oxidase

23. Cereghetti, Gea (Prof. Dr. M. Peter), Biochemistry
Reversible amyloid-like aggregates of the yeast pyruvate kinase are essential for cell cycle restart after stress

24. Champagne, Annie, Molecular Systems Biology
Survey on curricular requirements in the first two years of the Biology BSc at ETH Zürich

25. Chanez, Christelle, Molecular Plant Biology
CRISPR-Cas9 genome editing in cassava

26. Chen, Yiwei (Prof. Dr. A. Lanzavecchia, Prof. Dr. F. Sallusto)
CRISPR/Cas 9 mediated editing of the B cell receptor

27. Cherkayoui, Sarah (Prof. Dr. N. Zamboni), Molecular Systems Biology
Inference of cancer heterogeneous metabolic phenotypes by pathway-based analysis of metabolomics data

28. Crivelli, Simona (Prof. Dr. S. Zeeman), Molecular Plant Biology
Investigation of the role of the OCTOPUS gene family in plant vascular development

29. Cuenca, Miguelangel, Microbiology
The human intestinal phage catalog
30. Cui, Hengjun (Prof. Dr. E. Weber-Ban), Molecular Biology and Biophysics
Structural insights into the function of Depupylase Dop

31. de Vries, Tebbe (Prof. Dr. F. Allain), Molecular Biology and Biophysics
Crosslinking of segmentally isotope labeled RNA and MS/MS on large multi-
molecular complexes and different RNA-binding domains

32. Deslandes, Gabriel (Prof. Dr. S. Zeeman), Molecular Plant Biology
Research into the function of RubisCO in green seeds

33. Di Minin, Giulio, Molecular Health Sciences
A forward genetic approach to identify new modulators of Hedgehog signaling in
haploid ES cell

34. Diethelm, Patrizia (Prof. Dr. M. Kopf), Molecular Health Sciences
Regulation and function of the two co-signaling molecules BTLA and HVEM on
virus-specific CD8+ T cells during a LCMV infection

35. Dörner, Kerstin (Prof. Dr. U. Kutay), Biochemistry
Linking human ribosome biogenesis and the ubiquitin proteasome system

36. Dultz, Elisa, Biochemistry
Quantitative imaging of chromatin decompaction in living cells

37. Eberhart, Tanja (Prof. Dr. W. Krek), Molecular Health Sciences
Exploring the impact of reduced peroxisome abundance on tumorigenesis

38. Eisenstein, Fabian (Prof. Dr. M. Pilhofer), Molecular Biology and Biophysics
Mechanism of effector delivery of a contractile injection system revealed by
electron cryotomography

39. Emmanouilidis, Leonidas, Molecular Biology and Biophysics
Biophysical characterization of FUS liquid droplets

40. Emurla, Hyuliya (Prof. Dr. A. Oxenius), Microbiology
DIFFUSION BARRIER FUNCTION IN T CELL FATE DETERMINATION

41. Ewing, Michael, Molecular Systems Biology
Statistics for Omics on a Small Scale: An “averaging” method to increase
confidence in XL-MS

42. Eyring, Jillianne (Prof. Dr. M. Aebi), Microbiology
Biochemical characterization of the yeast oligosaccharyltransferase

43. Fearon, Abbie, Molecular Health Sciences
The RNA methyltransferase Nop2 is a novel regulator of liver regeneration

44. Finol, Esteban (Prof. Dr. F. Allain), Molecular Biology and Biophysics
Experimental and computational investigation into anticooperativity in RsmE
protein homodimer for mRNA translation regulation in Pseudomonas fluorescens’

45. Flores Tinoco, Carlos Eduard (Prof. Dr. B. Christen), Molecular Systems Biology
Systems-biology of nitrogen-fixing microbe-plant symbiosis
46. Fossati, Andrea (Dr. M. Gstaiger, Prof. Dr. A. Wutz, Prof. Dr. R. Aebersold), Molecular Systems Biology
   A chat with the chromatin: SEC-MS analysis of nuclear protein complexes

47. Frey, Kathrin (Prof. Dr. B. Wollscheid), Molecular Systems Biology
   Associating HDL proteotype with clinical HDL particle signaling capacity

48. Frey, Nina (Prof. Dr. G. Schwank), Molecular Health Sciences
   CRISPR knockout screen in acinar- and duct-derived pancreatic cancer organoids to map mutational patterns to the cell of origin

49. Friedrich-Grube, Betty (Prof. Dr. R. Aebersold), Molecular Systems Biology
   Conservation of clinically-relevant biological signatures of high-grade serous ovarian cancer across proteomic platforms

50. Furter, Markus (Prof. Dr. W.-D. Hardt), Microbiology
   The gut mucus and its protective role in Salmonella Typhimurium infection

51. Gäbelein, Christoph Georg Erich (Prof. Dr. J. Vorholt), Microbiology
   FluidFM as a tool for organelle transplantation

52. Gazorpak, Mahshid (Prof. Dr. M. Peter), Biochemistry
   From function to regulation of a novel E3 ubiquitin ligase: The Mammalian GID Complex

53. Genick, Ulrich, Molecular Systems Biology
   MIDATA - Citizen Controlled Data Aggregation and Sharing for Research and Patient Reported Outcome

54. George, Gavin, Molecular Plant Biology
   Insights into the roles of various SnRK subunits - signalling low energy in plants

55. Ghidinelli, Monica, Molecular Health Sciences
   AP2/clathrin-mediated endocytosis is required for oligodendrocytes myelination in the central nervous system

56. Gilberto, Samuel, Biochemistry
   Same same, but different: CUL4A and CUL4B in cell cycle control

57. Gillioz, Laurent (Prof. Dr. F. Allain), Molecular Biology and Biophysics
   Application of CLIR-MS/MS in nuclear extract to map RNA binding sites of factors involved in SMN1 and SMN2 exon 7 splicing regulation

58. Grigaitis, Rokas, Biochemistry
   Regulation of anti-crossover DNA helicases in recombinational DNA repair

59. Guccini, Ilaria, Molecular Health Sciences
   Novel approaches to interrogate the fructose regulatory circuit in pancreatic cancer: role of Khk

60. Hauser, Thomas, Molecular Systems Biology
   Measuring protein functional states in central carbon metabolism using a structural proteomics approach

61. Hausmann, Annika (Prof. Dr. W.-D. Hardt), Microbiology
   The NLRC4 inflammasome - more than a first line of defense?
62. **Heinrich, Stephanie, Biochemistry**
   Regulation of mRNA export in vivo by the DEAD-box ATPase Dbp5

63. **Hemmann, Jethro (Prof. Dr. J. Vorholt), Microbiology**
   Structure and Function of Methylofuran, the Largest Known Coenzyme

64. **Hemmerle, Lucas (Prof. Dr. J. Vorholt), Microbiology**
   Systems-level analysis of synthetic microbial communities in planta

65. **Hemmerling, Franziska, Microbiology**
   Identifying metabolic functions of uncultivated microbiota by Raman microscopy, single-bacterial genomics and biochemical studies

66. **Hiebert, Paul, Molecular Health Sciences**
   Control of fibroblast behaviour by Nrf2-mediated microRNA expression and the potential impact on wound repair and regeneration

67. **Holbrook-Smith, Duncan (Prof. Dr. U. Sauer), Molecular Systems Biology**
   Interrogation of Yeast receptors using a metabolomics-based chemical genomics screening system

68. **Hu, Mengyun (Prof. Dr. F. Sallusto), Microbiology**
   Antigen dependent TCR repertoire relation of cTfh and non-cTfh subsets

69. **Huang, Hsin-Yao (Prof. Dr. C. Sanchez-Rodriguez), Molecular Plant Biology**
   Clathrin-mediated endocytosis in plant response to Fusarium oxysporum infection

70. **Huerta, Apolonio (Prof. Dr. C. Sanchez-Rodriguez), Molecular Plant Biology**
   The role of Fungal Extracellular Vesicles in Plant-Pathogen Interactions

71. **Hung Tri, Tran (Prof. Dr. G. Schertler), PSI**
   New imaging agents and technologies for investigating brain disease at the nanoscale

72. **Hunkeler, Anna (Prof. Dr. A. Rodriguez-Villalon), Molecular Plant Biology**
   PTEN3 as a novel negative regulator of xylem differentiation

73. **Iselin, Raphael (Prof. Dr. Y. Barral), Biochemistry**
   DNA condensation during budding yeast cell division

74. **Järvinen, Valtteri (Prof. Dr. T. Ishikawa), PSI**
   Cryo-EM analysis of the radial spoke from cilia

75. **Kawakami, Yuta (Prof. Dr. W. Gruissem and Dr. N. Bhullar), Molecular Plant Biology**
   Biofortification of staple cereals – addressing micronutrient deficiencies affecting human health

76. **Kesten, Christopher, Molecular Plant Biology**
   Cellulose synthesis and biological stress - Is it different than the response to abiotic stress?

77. **Keys, Tim, Microbiology**
   Artificial N-glycosylation pathways for the synthesis of new-to-nature glycoproteins
78. Khawaja, Sarah (Prof. Dr. K. Weis), Biochemistry
The role of P bodies in regulating translational repression.

79. Kimmig, Philipp, Biochemistry
The ribosome preservation factor Stm1 regulates ribosome abundance under starvation

80. Kissling, Vera Maria (Prof. Dr. M. Peter), Biochemistry
Structural insights into the repair of broken DNA

81. Kooger, Romain (Prof. Dr. M. Pilhofer), Molecular Biology and Biophysics
In situ structure of the trans-envelope complex of the type VI secretion system

82. Kralt, Annemarie, Biochemistry
Composition and Structure of the Yeast Nuclear Pore Complex

83. Kummer, Eva, Molecular Biology and Biophysics
Unique features of mitochondrial translation initiation revealed by cryo-EM

84. Rust, Michael (Prof. Dr. J. Piel), Microbiology
Deciphering and Exploiting the Biosynthetic Potential of the Chemically Rich Sponge Mycale hentscheli

85. Latorre, Daniela, Microbiology
CD4+ and CD8+ autoreactive T cells in narcolepsy patients target self-antigens of hypocretin-producing neurons

86. Ledermann, Raphael, Microbiology
The general stress response is crucial for the Bradyrhizobium diazoefficiens-soybean symbiosis

87. Lehmann, Elisabeth, Molecular Biology and Biophysics
Interaction of hnRNP A1 with splicing regulatory elements or telomeric repeat sequences

88. Leopold-Messer, Stefan (Prof. Dr. J. Piel), Microbiology
Evolution of combinatorial diversity in trans-AT polyketide assembly lines across bacteria

89. Leu, Philipp (Prof. Dr. U. Kutay), Biochemistry
The Two-Faced Role of TBPL1 in Ribosome Biogenesis and Cell Growth

90. Linker, Stephanie (Prof. Dr. U. Sauer), Molecular Systems Biology
Carbon co-utilization leads to history dependence between growth states in Escherichia coli

91. Luithle, Naemi, Biochemistry
A novel role for Torsins in clearing LAP1 from mitotic chromatin

92. Malinovska, Liliana, Molecular Systems Biology
Probing the structural landscape of alpha synuclein in cells and tissues

93. Balbo Pogliano, Chiara, Biochemistry
Regulation of Bloom’s syndrome helicase BLM
94. Martini, Francesca (Prof. Dr. M. Aebi), Microbiology
   A sweet parasite: N-glycome profiling of the dog’s heartworm

95. Masiero, Mauro Miguel (Prof. Dr. N. Zamboni), Molecular Systems Biology
   Identification of mechanisms of drug resistance in cancer cells by untargeted metabolomic profiling

96. Matabaro, Emmanuel (Prof. Dr. M. Künzler, Prof. Dr. J. Piel), Microbiology
   Omphalotins: cyclic N-methylated peptides as a new family of ribosomally synthesized and post-translationally modified peptides

97. Meger, Benoit (Prof. Dr. G. Schertler), Structural Biology (PSI)
   Development of novel arrestin-3 biosensors for GPCR drug discovery

98. Mehnert, Martin, Molecular Systems Biology
   Multilayered proteomic analysis of cancer related mutations in the Dyrk2 kinase complex

99. Meier, Sandro (Prof. Dr. Y. Barral, Prof. Dr. M. Steinmetz), Biochemistry
   Liquid phase transition of plus-end proteins as a mechanism to functionally distinguish individual microtubules form the others in living cells

100. Meoded, Roy (Prof. Dr. J. Piel), Microbiology
    A polyketide synthase component for oxygen insertion into polyketide backbones

101. Meyer, Fabian (Prof. Dr. J. Vorholt), Microbiology
    Getting Escherichia coli addicted to methanol

102. Micheller, Sebastian (Prof. Dr. M. Künzler, Prof. Dr. J. Piel), Microbiology
    Bacteria-induced defense responses in the filamentous fungus Coprinopsis cinerea

103. Mishra, Ranjan (Prof. Dr. M. Peter), Biochemistry
    Conserved signaling pathways antagonize polarized growth to protect cells upon mechanical stress

104. Mittelviefhaus, Max (Prof. Dr. J. Vorholt), Microbiology
    FluidFM as emerging tool for force-controlled single-cell manipulation and force measurements

105. Monfort, Asun, Molecular Health Sciences
    Hira/Ubn2 is a new complex involved in X-linked gene silencing

106. Montellese, Christian, Biochemistry
    RPS27a deubiquitination by the 40S subunit-associated DUB USP16 is counteracted by the core NMD factor UPF1

107. Mosbacher, Maximilian (Prof. Dr. M. Claassen), Molecular Systems Biology
    Investigating the phosphorylation dynamics of Hog1 using a modeling approach

108. Müller, Barbara (Prof. Dr. J. Vorholt), Microbiology
    The plant-associated microbiota is stable and resilient upon perturbation

109. Müller, Madlen (Prof. Dr. C. Ciaudo), Molecular Health Sciences
    Elucidating the role of the RNAi effector proteins during mouse early development
110. Müller, Maik (Prof. Dr. B. Wollscheid), Molecular Systems Biology
Deciphering the synaptic microenvironment using LUX-MS (together with M. van Oostrum)

111. Muri, Jonathan (Prof. Dr. M. Kopf), Molecular Health Sciences
The thioredoxin-1 system is essential for fueling DNA synthesis during T cell metabolic reprogramming and proliferation

112. Napolitano, Silvia (Prof. Dr. R. Glockshuber), Molecular Biology and Biophysics
Evolution of Thioredoxins: a journey over four billion years

113. Nguyen, Bidong, Microbiology
High Precision Gene Fitness Profiling

114. Nguyen, Cristina Kim Xuan (Prof. Dr. F. Allain), Molecular Biology and Biophysics
Investigation of the function of SRSF1 disordered regions in RNA binding and droplet formation

115. Nicod, Charlotte (Dr. B. Collins & Prof. Dr. R. Aebersold), Molecular Systems Biology
Host-pathogen interactions in the context of Mycobacterium tuberculosis infections

116. Nikolaou, Konstantinos, Molecular Health Sciences
Study the function of APOBEC1 Complementation Factor in the mouse liver

117. Noga, Akira (Prof. Dr. T. Ishikawa), PSI
Cryo-electron tomography analysis of ciliary basal bodies

118. Nogly, Przemyslaw, Structural Biology (PSI)
Time-resolved crystallography at XFEL provides molecular movie of bacteriorhodopsin

119. Noor, Elad, Molecular Systems Biology
Genome-scale architecture of small molecule regulatory networks and the fundamental trade-off between regulation and enzymatic activity

120. Notarbartolo, Samuele, Microbiology
An activation-induced immunoregulatory and tissue-residency program tuned by cMAF in human memory Th17 cells

121. Nuñez, Felipe (Prof. Dr. M. Stoffel), Molecular Health Sciences
Chromatin and Single-Cell RNA-Seq Profiling of pancreatic beta cell proliferation under stress conditions

122. Oderbolz, Josua (Prof. Dr. A. Oxenius), Microbiology
CD4+ T cell mediated suppression of cytomegalovirus replication in murine salivary glands

123. Okada, Hirokazu, Molecular Systems Biology
Genetic control of wing size phenotype in natural populations

124. Okreglicka, Katarzyna (Prof. Dr. M. Kopf), Molecular Health Sciences
Peroxisome proliferator-activated receptor gamma (PPAR-gamma) plays a crucial role in the red pulp macrophage development
125. Olechwier, Agnieszka (Prof. Dr. G. Schertler), Structural Biology (PSI)
Design and characterization of G proteins for studying GPCRs in their active conformation

126. Ommer, Andrea (Prof. Dr. U. Suter), Molecular Health Sciences
Rally for Radial Sorting: RasGTPases in Peripheral Nerve Development

127. Ortmayr, Karin, Molecular Systems Biology
Charting the cross-functional map between transcription factors and cancer metabolism

128. Pamula, Filip (Prof. Dr. G. Schertler), Structural Biology (PSI)
The active rhodopsin-G-protein complex revealed by cryo-EM and X-ray structures

129. Pantasis, Sophia (Prof. Dr. S.Werner and Dr. M.Bordoli), Molecular Health Sciences
Extracellular phosphorylation as a potential regulatory mechanism of matrix remodeling – function of the secreted tyrosine kinase VLK in liver injury and regeneration

130. Pawar, Sumit (Prof. Dr. U. Kutay), Biochemistry
Efficient protein targeting to the inner nuclear membrane requires Atlastin-dependent maintenance of ER topology

131. Pedrioli, Alessandro (Prof. Dr. A. Oxenius), Microbiology
LCMV-specific antibody sequencing upon chronic infection

132. Perez Escriva, Pau (Prof. Dr. U. Sauer), Molecular Systems Biology
Charting metabolic interactions in the gut microbiome

133. Peterka, Martin (Prof. Dr. B. Kornmann), Biochemistry
Dissecting the function of Cenp-F in vivo

134. Petersen, Sebastian (Prof. Dr. S. Zeeman), Molecular Plant Biology
Elucidating the molecular basis for the role of protein degradation in defence response

135. Petrungaro, Carmelina, Biochemistry
Tracing lipids: A versatile method to monitor lipid flux in vivo

136. Pfister, Barbara (Prof. Dr. S. Zeeman), Molecular Plant Biology
Expression variation of starch-biosynthetic enzymes in yeast

137. Pohlmeier, Lea (Prof. Dr. M. Kopf), Molecular Health Sciences
Skin microbiome-derived cues promote psoriasiform dermatitis by sustaining the effect of innate inflammatory mediators

138. Probst, Silke (Prof. Dr. J. Piel), Microbiology
Ecosystem- and genome-guided antibiotic discovery

139. Qi, Chao (Prof. Dr. V. Korkhov), Biochemistry
Molecular architecture of adenylyl cyclase based signal transduction complex

140. Rauschendorfer, Theresa (Prof. Dr. S. Werner), Molecular Health Sciences
An optogenetic approach to study FGF signaling in skin
141. Renz, Peter (Prof. Dr. A. Wutz), Molecular Health Sciences
Time course transcriptomics identifies STOX2 as a novel player in the TGFβ pathway

142. Ripin, Nina (Prof. Dr. F. Allain), Molecular Biology and Biophysics
Molecular basis for AU-rich element recognition and homo-dimerization by the HuR C-terminal RRM domain

143. Lakis, Edgars (Prof. Dr. J. Piel), Microbiology
RiPP splicase substrate specificity and applications of α-keto-β-amino protein motif

144. Sabath, Kevin (Prof. Dr. S. Jonas), Molecular Biology and Biophysics
Elucidation of the mechanism of small non-coding RNA processing by the Integrator complex

145. Sajic, Tatjana, Molecular Systems Biology
SWATH-MS analysis of serine hydrolase-activity: potential biomarkers of human lung adenocarcinoma

146. Sandu, Ioana (Prof. Dr. M. Claassen, Prof. Dr. A. Oxenius), Molecular Systems Biology
In vivo differential T cell activation during viral chronic infection

147. Scaiola, Alain, Molecular Biology and Biophysics
Structure of a eukaryotic cytoplasmic pre-40S ribosomal subunit

148. Schäfer, Martin (Prof. Dr. J. Vorholt), Microbiology
High-throughput screening of bacterial interactions in a harsh environment

149. Schenkel, Laura (Dr. R. Kroschewski), Biochemistry
Mammalian cells maintain cytosolic plasmid DNA in a nuclear envelope-like double membrane in dependence on Emerin’s LEM-domain

150. Schläpfer, Pascal, Molecular Plant Biology
Computational exploration of strategies to enhance cassava starch yields

151. Schreier, Tina (Prof. Dr. S. Zeeman), Molecular Plant Biology
Plastidial NAD-dependent malate dehydrogenase: A moonlighting protein involved in early chloroplast development

152. Silva, Pamuditha, Molecular Health Sciences
Developing a human beta cell-derived pseudo-islet platform

153. Simmler, Patrik (Prof. Dr. W. Krek), Molecular Health Sciences
Assessing the oncogenic roles of SF3B1 mutant splicing factor in pancreatic tumor genesis

154. Slabber, Coenraad Frederik (Prof. Dr. S. Werner), Molecular Health Sciences
The E3 Ubiquitin Ligase Uhrf2 - A novel regulator of liver regeneration-

155. Sliwa-Gonzalez, Andrzej (Prof. Dr. Y. Barral), Biochemistry
Lateral compartmentalisation of the yeast ER during mitosis

156. Spies, Daniel (Prof. Dr. C. Ciaudo), Molecular Health Sciences
Computational dissection of Extra-Embryonic endoderm differentiation of Ago2 mutant mESCs
157. Stocker, Christian (Prof. Dr. P. Kast), Organic Chemistry
Generating cyclic peptides as modulators of Mycobacterium tuberculosis chorismate mutase activity

158. Taylor-King, Jake, Molecular Systems Biology

159. Taylor, Gabrielle (Prof. Dr. E. Weber-Ban), Molecular Biology and Biophysics
Substrate clientele of the ClpCP chaperone-protease complex in Mycobacterium tuberculosis

160. Tayyrov, Annageldi (Prof. Dr. M. Künzler, Prof. Dr. M. Aebi), Microbiology
Cloning, expression and functional characterization of a novel type of ribotoxin from the basidiomycete mushroom Agrocybe aegerita

161. Timofiiva, Anastasia, Biochemistry
Characterizing Novel Mechanisms of Reversible Protein Aggregation in Yeast

162. Title, Alexandra (Prof. Dr. M. Stoffel), Molecular Health Sciences
Genetic dissection of the miR-200–Zeb1 axis in pancreatic β-cell carcinogenesis

163. Tognetti, Marco (Prof. Dr. P. Picotti), Molecular Systems Biology
Deciphering the Signaling Network Landscape of Breast Cancer to Enable Personalized Medicine

164. Tortola, Luigi, Molecular Health Sciences
High-dimensional profiling of T helper cell responses by mass cytometry uncovers a broad diversity of stably committed effector states

165. Tytgat, Hanne, Microbiology
Glycoli: glycoengineering of novel protein N-glycosylation pathways in the E. coli cytosol

166. Uliana, Federico (Dr. M. Gstaiger), Molecular Systems Biology
Dissection of the YAP1 interactome

167. Valentini, Mattia (Prof. Dr. Y. Barral), Biochemistry
self versus non-self: a novel role of chromatin in fission yeast genomic immunity

168. van den Heuvel, Jasmin (Prof. Dr. U. Kutay), Biochemistry
Processing of the Ribosomal Ubiquitin-like Fusion Protein FUBI-eS30/FAU is Required for 40S Maturation

169. van Kooten, Mariëlle (Prof. Dr. B. Christen), Molecular Systems Biology
Interpretation of digitized information in the nucleotide sequence of a synthetic bacterial genome

170. van Leeuwen, Daniel (Dr. B. Mateescu, Prof. Dr. O. Voinnet), Molecular Plant Biology
Deciphering the role of PACT and TRBP in mammalian RNAi

171. Venetz, Jonathan (Prof. Dr. B. Christen), Molecular Systems Biology
Open up possibilities in synthetic biology; fast de novo synthesis and assembly of the Caulobacter ethensis genome
172. van Schie, Sabine (Prof. Dr. B. Kornmann), Biochemistry  
   Re-wiring lipid metabolism to map lipid trafficking between organelles

173. Vercellino, Irene (Prof. Dr. V. Korkhov), Biochemistry  
   Structural and functional studies of mycobacterial adenylyl cyclase

174. Verest, Marjan (Prof. Dr. J. Piel), Microbiology  
   Functional analysis of splicotides, a novel class of protein splicing enzymes

175. Völler, Tom, Microbiology  
   Metabolic inhibition of Salmonella infections

176. Weber, Carmen (Prof. Dr. K. Weis), Biochemistry  
   Reorganization of the cytoplasm upon glucose starvation OR how do yeast cells survive glucose starvation?

177. Weisshaar, Marc (Prof. Dr. F. Sallusto), Microbiology  
   T helper cell differentiation in patients with primary immunodeficiencies

178. Welten, Suzanne, Microbiology  
   Inflationary T cells versus Tissue resident memory T cells. Who protects best?

179. Wendt, Fabian (Prof. Dr. B. Wollscheid), Molecular Systems Biology  
   Decoding ligand-receptor interactions by using chemoproteomic technologies

180. Wietecha, Mateusz, Molecular Health Sciences  
   Transcriptomic meta-analysis of healing wounds, solid tumors and associated fibroblasts identifies prognostic stromal gene expression signatures which categorize tumors into wound phase phenotypes

181. Wild, Rebekka, Molecular Biology and Biophysics  
   Structure of the yeast oligosaccharyltransferase complex gives insight into eukaryotic N-glycosylation

182. Wolf, Tobias, Microbiology  
   Quantitative analysis of protein synthesis in naïve T cells reveals posttranscriptional mechanisms for rapid activation

183. Xue, Jing (Prof. Dr. M. Stoffel), Molecular Health Sciences  
   CDK8 regulates pancreatic beta cell function and apoptosis

184. Yagabasan, Büsra (Prof. Dr. M. Stoffel), Molecular Health Sciences  
   miR-802 controls proliferation and differentiation of intestinal cells by targeting expansion of Paneth cell population

185. Yagi, Ryohei, Molecular Systems Biology  
   Refined CRISPR/Cas9 plasmids for efficient homology-directed genome editing in Drosophila

186. Zanella, Martina (Prof. Dr. S. Zeeman), Molecular Plant Biology  
   Evidence for metabolite damages and repairing mechanisms in A. thaliana Calvin-Benson cycle

187. Zünd, Mirjam (Prof. Dr. S. Sunagawa), Microbiology  
   Detection of phage induction in a complex ecosystem
The assembly platform FimD is required for the attainment of the thermodynamically most stable quaternary structure of type 1 pili.