

	Monday, 6 August	Tuesday, 7 August	Wednesday, 8 August	Thursday, 9 August	Friday, 10 August
09:00 - 09:45	Introductory Lecture: Epigenetic control of gene expression Peter Baumann	Introductory Lecture: DNA replication and repair Helle Ulrich	Introductory Lecture: Epigenetic mechanisms in development René Ketting	Introductory Lecture: Epigenetic mechanisms in disease Jens Marquardt	Introductory Lecture: Epigenetic mechanisms in evolution David Rosenkranz
9:50 - 10:20	Long tails, but no males - the biology of parthenogenetic whiptail lizards Peter Baumann	DNA damage sensing at and behind the replication fork Helle Ulrich	Small RNA-mediated gene regulation René Ketting	Epigenetics of cancer stem cells in solid tumors Jens Marquardt	HOT or NOT: The effect of target structure and temperature on small RNA pathways David Rosenkranz
10:20 - 10:40	<i>Coffee Break</i>				
10:40 - 11:10	Chromatin signalling during DNA repair Holger Richly	Checkpoints and non-coding RNA at telomeres Brian Luke	Fresh blood for the vertebrate globin gene family Thomas Hankeln	Redox regulation of epigenetic pathways, DNA damage and repair Andreas Daiber	Zebrafish in neuroscience Soojin Ryu
11:15 - 11:45	Intestinal stem cells Natalia Soshnikova	Responses to structurally defined DNA lesions Andriy Khobta	Circadian clocks as gene regulatory systems Eva Wolf	Epigenetics in the context of health and medicine Leszek Wojnowski	Engineering of neurogenesis via lineage reprogramming Benedikt Berninger
11:50 - 12:20	DNA methylation and demethylation Lars Schomacher (Niehrs)	Mechanisms of protein quality control Anton Khmelinskii	DNA damage response in human cells Petra Beli	Epigenetics in malignant hematopoiesis Thomas Kindler	Learning and memory in <i>Drosophila melanogaster</i> Roland Strauss

13:15-14:00: **Introduction
into IMB Core Facilities**
(Andreas Vonderheit)
followed by optional
guided tour

	Monday, 13 August	Tuesday, 14 August	Wednesday, 15 August	Thursday, 16 August	Friday, 17 August
09:00 - 09:30	The role of cytokines in the development of CNS autoimmunity Ari Waisman	The importance of being modified: a new RNA code for gene expression Jean-Yves Roignant	Molecular regulation of division of labor in insect societies Romain Libbrecht		
9:35 - 10:05	Computational systems genetics Susanne Gerber	Extracellular vesicles in cell-cell communication Eva-Maria Krämer-Albers	Genomic views of splicing regulation Julian König		
10:10 - 10:40	Symbioses as driving forces of evolutionary innovation Martin Kaltenpoth	Telomeres and telomerase Falk Butter	How we perceive our world Simon Rumpel		
10:40 - 11:00	<i>Coffee Break</i>				
11:00 - 11:30	Biological text and data mining Miguel Andrade	The biogenesis of chromosome translocations Vassilis Roukos	RNA-mediated regulation in development and disease Jennifer Winter		
11:35 - 12:05	Functional architecture of the nucleus Christoph Cremer	Systems approaches to biology Stefan Legewie	Coagulation signaling in cancer progression Wolfram Ruf		

12:20-13:00: Exam

50% of questions need to be answered correctly in order to pass.