



## Tuesday, 6 July

- 2pm **Opening Session**  
*Plenary Room*  
Chaired by: Hervé Le Hir and Dr. Smita Patel and Prof. Vincent Croquette
- 2:15pm **Keynote 1**  
*Plenary Room*  
Chaired by: Prof. Katrin Paeschke
- 2:15pm **The DEAD-box Helicase DDX5: From *S. cerevisiae* to Cancer**  
» [Prof. Elizabeth Tran](#)
- 2:45pm **Oral Session**  
*Plenary Room*  
Chaired by: Prof. Katrin Paeschke
- 2:45pm **The RNA helicase Dbp7 promotes domain V/VI compaction and stabilization of interdomain interactions during early 60S assembly**  
» Mr. Gerald R. Aquino, Mr. Philipp Hackert, Dr. Nicolai Krogh, Dr. Kuan-Ting Pan, Prof. Henrik Nielsen, Prof. Henning Urlaub, Dr. Katherine E. Bohnsack, [Prof. Markus T. Bohnsack](#)
- 3:05pm **The spatial organization of genes is associated with the control of alternative splicing and 3' end processing by RNA helicases DDX5 and DDX17**  
» [Dr. Cyril Bourgeois](#)
- 3:30pm **Coffee Break**  
*Networking and Break Area*
- 4pm **Poster Session 1-A**  
*Plenary Room*

### Characterization of the *Escherichia coli* XPD/Rad3 iron-sulfur helicase, YoaA, in complex with the DNA polymerase III clamp loader subunit, chi

» [Mrs. Savannah Weeks](#), Ms. Yasmin Ali, Mrs. Elizabeth Dudenhausen, Dr. Linda Bloom

### Searching for synthetic lethality in *Escherichia coli* strains lacking uup, radD, or recG

» [Ms. Nina Bonde](#), Dr. Zachary Romero, Mr. Aidan McKenzie, Prof. James Keck, Prof. Michael Cox

### SSB Increases *E. coli* Clamp Loader Lifetime on DNA, and is Rapidly Remodeled

» [Mr. Elijah Newcomb](#), Dr. Linda Bloom

### The *Mycobacterium tuberculosis* DNA-repair helicase UvrD1 is activated by redox-dependent dimerization of a 2B domain cysteine.

» [Ms. Ankita Chadda](#), Mr. Drake Jensen, Dr. Eric Tomko, Dr. Ana Ruiz Manzano, Dr. Binh Nguyen, Dr. Timothy Lohman, Dr. Eric Galburt

### Cell-cycle-regulated interaction of the Bloom syndrome helicase with Mcm6 controls DNA replication speed and the DNA-damage response

» Dr. Vivek Shastri, [Mrs. Veena Subramanian](#), Dr. Kristina Schmidt

## 4pm **Poster Session 1-B**

*Room 2*

### A Single Molecule Investigation of Structure and Accessibility of Long Telomeric Overhangs

» [Prof. Hamza Balci](#), Mr. Golam Mustafa, Mr. Sajad Shiekh

### DEAD box 1 (DDX1) Stabilizes Cytoplasmic mRNAs During Oxidative Stress

» [Dr. Lei Li](#), Dr. Mansi Garg, Dr. Yixiong Wang, Dr. Weiwei Wang, Dr. Roseline Godbout



Continued from **Tuesday, 6 July**

**VASA helicase GLH-1 drives the phase separation of perinuclear germ granules to promote the fidelity of piRNA-mediated genome surveillance**

» Dr. Wenjun Chen, Mr. Jordan Brown, Dr. Shikui Tu, Dr. Zhiping Weng, Dr. Donglei Zhang, [Dr. Heng-Chi Lee](#)

**Genome-wide impact of DExH-box RNA helicases on RNA splicing and quality control**

» [Dr. Qing Feng](#), Mr. Keegan Krick, Prof. Christopher Burge

**Intriguing synergic and opposing activities of RecQ-like DNA helicase Hel112 in combination with enzymes involved in different DNA metabolism activities**

» [Dr. Mariarosaria De Falco](#), Dr. Mariarita De Felice

4pm

**Poster Session 1-C**

Room 3

**Kinetics of Nucleotide Binding to the gp16 ATPase**

» [Mr. Aaron Morgan](#), Dr. Christopher Fischer, Dr. Paul Jardine, Dr. Allen Eastlund

**Three charged amino acid residues at the extreme C-terminus of the BFK20 gp41 helicase play a role in the ATPase activity of the protein**

» [Dr. Nora Halgasova](#), Dr. Gabriela Bukovska

**How to limit the speed of a motor - the intricate regulation of the XPB ATPase and translocase in TFIIH**

» [Ms. Jeannette Kappenberger](#), Dr. Wolfgang Kölmel, Dr. Elisabeth Schönwetter, Mr. Tobias Scheuer, Ms. Julia Wörner, Dr. Jochen Kuper, Prof. Caroline Kisker

**A rotary-mechanism for GTP hydrolysis by the AAA+ protein McrB stimulated by the endonuclease McrC**

» [Prof. Saikrishnan Kayarat](#)

**Insertion of a flexible linker alters winged helix domain dynamics affecting substrate binding and unwinding activity of human RECQ1**

» [Ms. Tulika Das](#), Ms. Swagata Mukhopadhyay, Dr. Agneyo Ganguly

4:30pm

**Keynote 2**

Plenary Room

Chaired by: Dr. Dagmar Klostermeier

4:30pm

**Light, CRISPR and DNA Repair**

» [Prof. Taekjip Ha](#)

5pm

**Oral Session**

Plenary Room

Chaired by: Dr. Dagmar Klostermeier

5pm

**Mechanism and regulation of an RNA-guided helicase-nuclease, CRISPR-Cas3**

» [Prof. Ailong Ke](#)

5:20pm

**Vectorial folding of telomere overhang by a superhelicase, Rep-X**

» [Dr. Sua Myong](#), Dr. Tapas Paul, Prof. Taekjip Ha

5:40pm

**Design and application of force-activated DNA substrates for helicase binding and unwinding studies**

» [Mr. Arnulf Taylor](#), Mr. Stephen Okoniewski, Mr. Lyle Uyetake, Prof. Thomas Perkins

6pm

**Networking Session**

Networking and Break Area

6:30pm

**Keynote 3**

Plenary Room

Chaired by: Dr. Eric Enemark

6:30pm

**Regulatory mechanisms of the RNA exosome helicases**

» [Prof. Elena Conti](#), Dr. Piotr Gerlach, Mr. Alexander Koegel, Mr. Felix Sandmeir, Dr. Ingmar Schaefer, Mr. Fabien Bonneau



Continued from **Tuesday, 6 July**

- 7pm **Oral Session**  
*Plenary Room*  
Chaired by: Dr. Eric Enemark
- 7pm **RNA sensing mechanisms in the Mtr4 arch domain influence RNA helicase activity and conformational dynamics**  
» [Prof. Sean Johnson](#)
- 7:20pm **Structure of the catalytic core of the Integrator complex**  
» Mr. Moritz Pfeleiderer, [Dr. Wojciech Galej](#)
- 7:40pm **Structural basis for the activation of the DEAD-box RNA helicase DbpA by the nascent ribosome**  
» [Dr. Ian Philip Wurm](#), Prof. remco sprangers

**Wednesday, 7 July**

- 2pm **Keynote 4**  
*Plenary Room*  
Chaired by: Prof. Maria Spies
- 2pm **Activation of SF1 DNA Helicases by Protein Accessory Factors**  
» [Dr. Timothy Lohman](#)
- 2:30pm **Oral Session**  
*Plenary Room*  
Chaired by: Prof. Maria Spies
- 2:30pm **Large-scale ratcheting in a bacterial DEAH/RHA-type RNA helicase that modulates antibiotics susceptibility**  
» [Ms. Lena Grass](#), Dr. Jan Wollenhaupt, Ms. Tatjana Barthel, Dr. Iwan Parfentev, Prof. Henning Urlaub, Dr. Bernhard Loll, Dr. Eberhard Klauk, Prof. Haike Antelmann, Prof. Markus Wahl

2:50pm **Human HELB is a processive motor protein which catalyses RPA clearance from single-stranded DNA**  
» Dr. Silvia Hormeno, Dr. Oliver J. Wilkinson, Dr. Clara Aicart-Ramos, Dr. Sahiti Kuppa, Prof. Edwin Antony, Prof. Mark S. Dillingham, [Prof. FERNANDO MORENO-HERRERO](#)

3:10pm **Interactions of translocating Rep**  
» [Ms. Olivia Yang](#), Dr. Sonisilpa Mohapatra, Mr. Brian Soong, Prof. Taekjip Ha

3:30pm **Coffee Break**  
*Networking and Break Area*

4pm **Poster Session 2-A**  
*Plenary Room*

**SLX4 forms SUMOylation factories via liquid phase separation.**  
» [Mr. Emile Alghoul](#), Dr. Jihane Basbous, Dr. Angelos Constantinou

**Motif I of the Cas3 SF2 helicase domain regulates directionality of Cas3 movement during CRISPR interference and primed adaptation**  
» [Mr. Nikita Vaulin](#), Dr. Anna Shiriaeva, Dr. Ekaterina Semenova, Prof. Konstantin Severinov

**Human DNA/ RNA Topoisomerase TOP3-beta (TOP3B) is coordinated with the DEAD-box Helicases DDX5 and DDX6 to resolve R-Loops**  
» [Dr. Sourav Saha](#), Dr. Yves Pommier

**A 3.2 Å structure of the PriA/PriB/replication fork complex reveals mechanistic insight into bacterial DNA replication restart**  
» [Mr. Alexander Duckworth](#), Dr. Kenneth Satyshur, Prof. Timothy Grant, Prof. James Keck

**Functional interaction between Sgs1 and Sod2 in the suppression of oxidative-damage-induced chromosomal rearrangements and mitochondrial abnormalities in *Saccharomyces cerevisiae***  
» [Ms. Sonia Vidushi Gupta](#), Dr. Kristina Schmidt, Dr. Lillian Campos-Doerfler



Continued from **Wednesday, 7 July**

**The evolutionary origins of Pif1 helicases from Helitron transposons**

» [Mr. Pedro Heringer](#), Dr. Gustavo C. S. Kuhn

4pm

**Poster Session 2-B**

Room 2

**Structural snapshots of ATPase cycle of tick-borne encephalitis virus NS3 helicase**

» [Dr. Paulina Duhita Anindita](#), Dr. Pavel Grinkevich, Dr. Roman Tuma, Dr. Zdenek Franta

**Biochemical studies of the COVID-19 Nsp13 helicase required for coronavirus replication**

» [Ms. Rebecca Lee](#), Mr. Joshua Sommers, Dr. Arindam Datta, Dr. Robert Brosh

**Mechanism of RNA mediated phosphate release from the active site of the tick-borne encephalitis virus helicase.**

» [Mr. Marco Halbeisen](#), Dr. Roman Tuma, Dr. Paulina Duhita Anindita, Dr. Zdenek Franta, Dr. David Reha

**Structural basis for backtracking by the SARS-CoV-2 replication-transcription complex**

» [Mr. Brandon Malone](#), Dr. Elizabeth Campbell, Prof. Seth Darst

**Unwinding of duplex nucleic acids by cooperative translocation of SARS coronavirus helicase nsp13 is modulated with ATP concentration**

» [Prof. Dong-Eun Kim](#)

4pm

**Poster Session 2-C**

Room 3

**The DEAD-box RNA helicase RhIE2 is a global regulator of Pseudomonas aeruginosa lifestyle and pathogenesis**

» Dr. Stéphane Hausmann, Dr. Diego Gonzalez, Mr. Johan Geiser, [Dr. Martina Valentini](#)

**The DEAD-box RNA helicase eIF4A is a promising host target for the development of potent broad-spectrum antivirals**

» [Prof. Arnold Grünweller](#), Dr. Wiebke Obermann, Dr. Christin Müller, Prof. Roland K. Hartmann, Prof. John Ziebuhr

**Structural basis for resistance of Mycobacterium tuberculosis Rho to bicyclomycin**

» [Dr. Marc Boudvillain](#), Dr. Emmanuel Saridakis, Dr. Rishi Vishwakarma, Mr. Kevin Martin, Mrs. Isabelle Simon, Dr. Martin Cohen-Gonsaud, Dr. Franck COSTE, Dr. Emmanuel Margeat, Dr. Patrick Bron

**EXO5-DNA Structure and BLM Interactions Direct DNA Resection Critical for ATR-dependent Replication Restart**

» [Dr. Chi-Lin Tsai](#), Dr. Shashank Hambarde, Dr. Albino Bacolla, Prof. Tej Pandita, Prof. John Tainer

**New insights into the functions of SV40 T antigen helicase and beyond - The functional cooperation of SV40 T antigen monomers and hexamers is essential for viral DNA replication**

» [Dr. Heinz Nasheuer](#), Dr. Nick Onwubiko, Dr. Ingrid Tessmer

4:30pm

**Keynote 5**

Plenary Room

Chaired by: Prof. Elena Conti

4:30pm

**Modulation of DnaB helicase conformation and contacts interrupts replisome coupling, creating genome instability**

» [Prof. Michael Trakselis](#), Ms. Megan Behrmann, Ms. Himasha Perera, Ms. Malisha Welikala

5pm

**Oral Session**

Plenary Room

Chaired by: Prof. Elena Conti



Continued from **Wednesday, 7 July**

- 5pm **Structural Basis of Mitochondria Twinkle Helicase Action and Twinkle Related Mitochondria Diseases**  
» [Dr. Yang Gao](#)
- 5:20pm **CryoEM structure of RadA, a Superfamily 4 modular helicase involved in natural transformation in *Streptococcus pneumoniae***  
» [Dr. Leonardo Talachia Rosa](#), Dr. Emeline Vernhes, Dr. Patrice Polard, Dr. Rémi Fronzes
- 5:40pm **Structure of an MCM ring encircling bona fide melted DNA illustrates a key step of replication initiation**  
» [Dr. Eric Enemark](#), Dr. Sanaz Rasouli, Dr. Alexander Myasnikov
- 6pm **Networking Session**  
*Networking and Break Area*
- 6:30pm **Keynote 6**  
*Plenary Room*  
Chaired by: Dr. Alicia K. Byrd
- 6:30pm **Mechanisms of regulation of DEAD-box helicase activities**  
» [Dr. Dagmar Klostermeier](#)
- 7pm **Oral Session**  
*Plenary Room*  
Chaired by: Dr. Alicia K. Byrd
- 7pm **Translocation activities of *S. Cerevisiae* Pif1 helicase**  
» [Dr. Kevin Raney](#), Dr. Jun Gao, Dr. John C. Marecki, Mr. David Proffitt, Dr. Alicia K. Byrd
- 7:20pm **WRN helicase stabilizes deprotected replication forks in BRCA2-deficient cancer cells**  
» [Dr. Arindam Datta](#), Dr. Kajal Biswas, Mr. Joshua Sommers, Ms. Haley Thompson, Dr. Sanket Awate, Dr. Claudia Nicolae, Dr. George-Lucian Moldovan, Dr. Robert Shoemaker, Dr. Shyam Sharan, Dr. Robert Brosh

7:40pm

**Nucleosome recognition and DNA distortion by the Chd1 chromatin remodeler**

» Dr. Ilana Nodelman \*, Mr. Sayan Das \*, Ms. Anneliese Faustino, Prof. Stephen Fried, [Prof. Greg Bowman](#), Prof. Jean-Paul Armache

**Thursday, 8 July**

2pm

**Keynote 7**

*Plenary Room*

Chaired by: Prof. Sua Myong

2pm

**Visualizing the action of SARS-CoV-2 and eukaryotic replicative helicases**

» [Dr. Shixin Liu](#)

2:30pm

**Oral Session**

*Plenary Room*

Chaired by: Prof. Sua Myong

2:30pm

**The *E. coli* replisome does not require ATP to replicate DNA.**

» [Dr. Lisanne Spenkelink](#), Mr. Richard Spinks, Dr. Slobodan Jergic, Dr. Jacob Lewis, Prof. Nicholas Dixon, Prof. Antoine van Oijen

2:50pm

**Primase - Helicase pairs from Staphylococcal mobile genetic elements**

» [Dr. Phoebe Rice](#), Dr. heewhan shin, Dr. Aleksandra Bebel, Dr. Ignacio Mir Sanchis

3:10pm

**Human DNA helicase B protects stalled replication forks from degradation**

» [Dr. Alicia K. Byrd](#), Dr. Maroof Khan Zafar, Ms. Lindsey Hazeslip, Mr. Matthew Thompson

3:30pm

**Coffee Break**

*Networking and Break Area*



Continued from **Thursday, 8 July**

4pm

**Poster Session 3-A**

*Plenary Room*

**Analysis of the iron chaperone PCBP1 interactome: intersection of DNA repair and iron trafficking**

» [Dr. Lorena Novoa-Aponte](#), Dr. Sarju Patel, Dr. Olga Protchenko, Dr. James Wohlschlegel, Dr. Caroline Philpott

**How XPD helicase responds to DNA damage and base composition.**

» [Dr. Remi Fritzen](#), Dr. Francesco Colizzi, Dr. Giovanni Bussi, Dr. J. Carlos Penedo, Prof. Malcolm F. White

**DNA damage repair and DEAD Box 1 (DDX1) in embryonic development**

» [Dr. Lubna Yasmin](#), Dr. Yixiong Wang, Ms. Lazina Hossain, Dr. Roseline Godbout

**Directed E. coli DnaB exterior surface mutations effect helicase conformation and regulate behavior to preserve genome stability in vivo**

» [Ms. Megan Behrmann](#), Prof. Michael Trakselis

**Uncovering an allosteric mode of action for a selective inhibitor of human Bloom syndrome protein**

» [Dr. Xiangrong\(Tina\) Chen](#)

**The roles of Hrq1 in ICL repair**

» [Mr. Robert Simmons](#), Ms. Alexandra Hurlock, Dr. Matthew Bochman

4pm

**Poster Session 3-B**

*Room 2*

**Systematically mapping G-quadruplex regulatory elements on E. coli transcripts**

» [Ms. Rachel Cueny](#), Dr. Andrew Voter, Prof. James Keck

**The structure of self-loading MCM-like helicases encoded by staphylococcal virus satellites reveals unique and conserved motions**

» Dr. Cuncun Qiaou, [Dr. Ignacio Mir Sanchis](#)

**A Mechanical Mechanism for Translocation of Hexameric and Nonstructured Helicases**

» [Prof. Ya-chang Chou](#)

**The E. coli RecBCD nuclease domain regulates DNA binding and helicase activity, but not ssDNA translocation**

» [Ms. Nicole Fazio](#), Dr. Linxuan Hao, Dr. Rui Zhang, Dr. Timothy Lohman

**The Arch domain of XPD: A regulatory multitool that is mechanistically essential for transcription and DNA repair**

» [Dr. Jochen Kuper](#), Mr. Stefan Peissert, Dr. Florian Sauer, Dr. Arnaud Poterszman, Prof. Jean-Marc Egly, Prof. Caroline Kisker

4:30pm

**Keynote 8**

*Plenary Room*

Chaired by: Mrs. Dominique Weil

4:30pm

**DHX36 function at G-quadruplexes and its connection to stress response**

» Mr. Daniel Hilbig, Dr. Stefan Juranek, [Prof. Katrin Paeschke](#)

5pm

**Oral Session**

*Plenary Room*

Chaired by: Mrs. Dominique Weil

5pm

**Revealing the dynamics of Pif1 helicase when it collides with the G4 quadruplex using single-molecule assays**

» [Dr. Jessica Valle Orero](#), Dr. Martin Rieu, Prof. Vincent Croquette, Prof. Jean-Baptiste Boule, Dr. Phong-Lan-Thao TRAN

5:20pm

**The helicase Rrm3 is essential for replication progression through leading strand G4 rich sites in saccharomyces cerevisiae**

» [Ms. Mor Varon](#), Prof. Amir Aharoni



Continued from **Thursday, 8 July**

- 5:40pm **Anyone for a PiNT? The function of the Pif1 N-Terminus**  
» [Dr. Matthew Bochman](#), Dr. David Nickens, Dr. Lata Balakrishnan
- 6pm **Business Meeting**  
*Networking and Break Area*
- 6:30pm **Keynote 9**  
*Plenary Room*  
Chaired by: Dr. Kevin Raney
- 6:30pm **Competition between SMARCAL1 and RAD52 at stalled DNA replication forks**  
» [Prof. Maria Spies](#)
- 7pm **Oral Session**  
*Plenary Room*  
Chaired by: Dr. Kevin Raney
- 7pm **A Universal Mechanism for Regulating Replisome Disassembly in Eukaryotes**  
» [Mr. Michael Jenkyn-Bedford](#), Dr. Morgan Jones, Ms. Yasemin Baris, Prof. Karim Labib, Dr. Giuseppe Cannone, Dr. Joseph Yeeles, Dr. Tom Deegan
- 7:20pm **Nanopore Tweezers reveal detailed dynamics of SF1 and SF2 helicases**  
» [Dr. Jon Craig](#), Dr. Andrew Laszlo, Prof. Maria Mills, Dr. Momcilo Gavrilov, Mr. Dmitriy Bobrovnikov, Prof. Taekjip Ha, Dr. Keir Neuman, Prof. Jens Gundlach
- 7:40pm **The dynamic human Origin Recognition Complex**  
» [Dr. Matt Jaremko](#), Dr. Ken On, Dr. Dennis Thomas, Prof. Bruce Stillman, Prof. Leemor Joshua-Tor

**Friday, 9 July**

- 2pm **Keynote 10**  
*Plenary Room*  
Chaired by: Dr. Wojciech Galej
- 2pm **RNA helicases (SARS cov RNA structure)**  
» [Prof. Anna Marie Pyle](#)
- 2:30pm **Oral Session**  
*Plenary Room*  
Chaired by: Dr. Wojciech Galej
- 2:30pm **Structure, Mechanism and Crystallographic fragment screening of the SARS-CoV-2 NSP13 helicase**  
» [Dr. Joseph Newman](#)
- 2:50pm **RIG-I's helicase domain is regulated by the intrinsically disordered CARD2-helicase linker**  
» [Mr. Brandon Schweibenz](#), Dr. Swapnil Devarkar, Dr. Jie Zheng, Dr. Bruce Pascal, Dr. Patrick Griffin, Dr. Smita Patel
- 3:10pm **Successfully completing the final stretch - helicases involved in termination of DNA replication**  
» Dr. Sarah Midgley-Smith, Dr. Juachi Dimude, Dr. Katie Jameson, Dr. Michelle Hawkins, [Dr. Christian Rudolph](#)
- 3:30pm **Coffee Break**  
*Networking and Break Area*
- 4pm **Poster Session 4-A**  
*Plenary Room*
- Engineering photo-controlled Rep helicase**  
» [Dr. Sonisilpa Mohapatra](#), Dr. Tunc Kayikcioglu, Dr. Chang-Ting Lin, Prof. Taekjip Ha





Continued from **Friday, 9 July**

**Transcription engine and factor protein stepping along DNA revealed from computational microscope**

» Dr. Liqiang Dai, Dr. Lin-Tai Da, Mr. Chao E, Dr. Chunhong Long, [Dr. Jin Yu](#)

**Human DNA Helicase B aids replication of G-quadruplexes**

» [Mr. Matthew Thompson](#), Dr. Maroof Khan Zafar, Ms. Lindsey Hazeslip, Dr. Alicia K. Byrd

**Rapid single-molecule characterisation of nucleic-acid enzymes**

» [Mr. Stefan Mueller](#), Dr. Lisanne Spenkelink, Prof. Antoine van Oijen

**Tradeoff between dissipation and uncertainty in helicases**

» [Dr. Maria Mañosas](#), Dr. Felix Ritort, Dr. Xavier Viader, Dr. Vegard Sordal, Mr. Victor Rodriguez

**Rapid helicase-SSB assisted isothermal amplification of long DNA fragments**

» [Dr. Momcilo Gavrilov](#), Dr. Chun-Ying Lee, Prof. Sua Myong, Prof. Taekjip Ha

4pm

**Poster Session 4-B**

Room 2

**The human DEAD-box helicase 3 interacts with ER-alpha and regulates its activity**

» [Dr. Martina Schroeder](#), Mrs. Jyotsna Pardeshi, Dr. Lili Gu, Dr. Niamh McCormack, Dr. Yvette Hoehn

**Proteomics Reveal Rocaglate Inhibitors of the eIF4A1 DEAD-box RNA Helicase Remodel the Translation Machinery and Translatome**

» [Dr. Jonathan Schatz](#), Dr. David Ho, Mr. Tyler Cunningham, Ms. Paola Manara, Dr. Stephen Lee

**Translation of the eIF4B mRNA drives cell division dynamics in sea urchin embryos.**

» [Mr. Florian Pontheaux](#), Dr. Julia Morales, Prof. Patrick Cormier

**G-quadruplex DNA inhibits unwinding activity but promotes liquid-liquid phase separation by the DEAD-box helicase Ded1p**

» [Dr. Jun Gao](#), Mr. Zhaofeng Gao, Ms. Andrea A. Putnam, Dr. Alicia K. Byrd, Ms. Sarah Venus, Dr. John C. Marecki, Dr. Andrea D. Edwards, Ms. Haley M. Lowe, Dr. Eckhard Jankowsky, Dr. Kevin Raney

**Correlating the conformational dynamics of the DEAD-box helicase eIF4A with translation efficiencies**

» [Dr. Anirban Chakraborty](#), Dr. Linda Krause, Dr. Alexandra-Zoi Andreou, Dr. Dagmar Klostermeier

**Dissecting the role of the eIF4E/5'-cap interaction for eIF4A activity with a model RNA**

» [Dr. Linda Krause](#), Dr. Alexandra Zoi Andreou, Dr. Dagmar Klostermeier

4:30pm

**Coffee Break**

*Networking and Break Area*

5pm

**Oral Session**

*Plenary Room*

Chaired by: Prof. Markus T. Bohnsack

5pm

**DDX6 mutations responsible for intellectual disability and dysmorphic features associated with RNA misregulation and P-body defects**

» Mrs. Marianne Benard, Mrs. Michele Ernoult-Lange, Mrs. Ada Allam, Mr. Christopher Balak, Mrs. Amelie Piton, [Mrs. Dominique Weil](#)

5:20pm

**Translation regulation by the RNA helicase Ded1 during cell stress**

» Dr. Peyman Aryanpur, Dr. Telsa Mittelmeier, [Dr. Timothy Bolger](#)





Continued from **Friday, 9 July**

5:40pm **Roles of Local DNA Conformation and Conformational Dynamics on DNA Polymerase Holoenzyme Formation in the Bacteriophage T4 DNA Replication System**

» [Dr. Patrick Herbert](#), Mr. Dylan Heussman, Mr. Jack Maurer, Ms. Maya Pande, Mr. Steve Weitzel, Prof. Peter von Hippel, Prof. Andrew Marcus

6pm **Networking Session**

*Networking and Break Area*

6:30pm **Keynote 12**

*Plenary Room*

Chaired by: Dr. Timothy Lohman

6:30pm **Structural basis for helicase-polymerase coupling in the SARS-CoV-2 replication-transcription complex**

» [Prof. Seth Darst](#)

7pm **Oral Session**

*Plenary Room*

Chaired by: Dr. Timothy Lohman

7pm **SARS CoV-2 NSP13 Helicase Displaces Proteins and Rapidly Unwinds RNA and DNA**

» [Dr. John Marecki](#), Mr. Harrison Russell, Mr. David Proffitt, Dr. Kevin Raney

7:20pm **Force-dependent stimulation of RNA unwinding by SARS-CoV-2 nsp13 helicase**

» [Dr. Keith Mickolajczyk](#), Dr. Patrick Shelton, Dr. Michael Grasso, Ms. Xiacong Cao, Ms. Sara Warrington, Dr. Amol Aher, Dr. Shixin Liu, Dr. Tarun Kapoor