PROGRAM

MONDAY, April 24—7:00 PM

**Welcome Remarks**

**Gert Jansen**  
Erasmus MC, Rotterdam, the Netherlands

**KEYNOTE SPEAKER**

*Mechanisms of centrosome homeostasis*  
Tim Stearns, Roberta Sala, Miranda Stratton, Jennifer T. Wang  
[35'+10']  
Presenter affiliation: Stanford University, Stanford, California.  

MONDAY, April 24—7:45 PM

**SESSION 1**  
CENTRIOLES AND CENTROSOMES

**Chairperson:** Monica Bettencourt Dias, Instituto Gulbenkian de Ciência, Oeiras, Portugal

*Towards cell-free reconstitution of cartwheel assembly*  
Pierre Gönczy, Paul Guichard, Virginie Hamel, Niccolò Banterle, Maeva Le Guennec, Adrian Nievergelt, Georg Fantner, Isabelle Flückiger, Veronika Nemciková  
[25'+5']  
Presenter affiliation: Swiss Federal Institute of Technology Lausanne (EPFL), Lausanne, Switzerland.  

*Drosophila Plk4 organises a centriole origin of replication (CORE) whose activity sets daughter centriole length*  
Mustafa Aydogan, Alan Wainman, Saroj Saurya, Thomas Steinacker, Jordan W. Raff  
[25'+5']  
Presenter affiliation: University of Oxford, Oxford, United Kingdom.  

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C. elegans SAS-7 is required for the recruitment of γ-tubulin to the outer surface of centrioles at the late step of centriole assembly
Nami Haruta, Chihiro Yoshii, Shinsuke Uchiya, Eisuke Sumiyoshi, Masahiro Terasawa, Asako Sugimoto [15'+5']
Presenter affiliation: Tohoku University, Sendai, Japan.

Cep85 is a STIL-interacting protein that modulates centriole duplication
Presenter affiliation: Mount Sinai Hospital, Toronto, Canada; University of Toronto, Toronto, Canada.

TUESDAY, April 25—9:00 AM

SESSION 2  CILIA GROWTH AND MAINTENANCE I

Chairperson: Antonina Roll-Mecak, National Institute of Neurological Disorders and Stroke, NIH, Bethesda, Maryland, USA

The centrosome-cilium complex
Gregory Mazo, Bryan Tsou [25'+5']
Presenter affiliation: Memorial Sloan Kettering Cancer Center, New York, New York.

Superresolved molecular architecture at the base of primary cilia
T Tony Yang, Weng Man Chong, Won-Jing Wang, Meng-Fu Bryan Tsou, Jung-Chi Liao [25'+5']
Presenter affiliation: Academia Sinica, Taipei, Taiwan.

Mass production of basal bodies for multiciliogenesis
Huijie Zhao, Qingxia Chen, Yaping Li, Xiumin Yan, Xueliang Zhu [25'+5']
Presenter affiliation: Chinese Academy of Sciences, Shanghai, China; ShanghaiTech University, Shanghai, China.

Coffee / Tea Break
Mechanisms of centriolar remodeling and basal body positioning in *C. elegans* ciliogenesis
Inna V. Nechipurenko, Cristina Berciu, Daniela Nicastro, Piali Sengupta [25'+5']
Presenter affiliation: Brandeis University, Waltham, Massachusetts.

Three Greek gods and cilia
Sudipto Roy [25'+5']
Presenter affiliation: Institute of Molecular and Cell Biology, Singapore.

TUESDAY, APRIL 25—11:40 AM

Workshop: FEI EM and Bio-Protocols

TUESDAY, April 25—2:00 PM

SESSION 3 POSTER SESSION I

Dynamic tracking of centriole elongation reveals key aspects of how centrioles grow in *Drosophila* embryos
Mustafa G. Aydogan, Alan Wainman, Saroj Saurya, Thomas L. Steinacker, Zsofia A. Novak, Janina Baumbach, Nadine Muschalik, Jordan W. Raff
Presenter affiliation: University of Oxford, Oxford, United Kingdom.

Mutations in PIH1D3 cause X-linked primary ciliary dyskinesia with outer and inner dynein arm defects
Presenter affiliation: Radboud University Medical Center, Nijmegen, Netherlands.

The roles of type 3 adenylyl cyclase in neuronal cilia
Matt Strobel, Daniel Storm, Liyan Qiu, Yuxin Zhou, Ashley Sterpka, Xuanmao Chen
Presenter affiliation: University of New Hampshire, Durham, New Hampshire.
Exploration of axonemal dynein assembly pathways through primary ciliary dyskinesia model mice and endogenous protein tagging
Daniel O. Dodd, Girish Mali, Petra zur Lage, Margaret Keighren, Alex von Kreigsheim, Andrew Jarman, Pleasantine Mill
Presenter affiliation: Institute of Genetics and Molecular Medicine at The University of Edinburgh, Edinburgh, United Kingdom.

Intraflagellar transport (IFT) protein IFT52 recruits IFT46 to the basal body and flagella
Bo Lv, Lei Wan, Michael Taschner, Xi Cheng, Lorentzen Esben, Kaiyao Huang
Presenter affiliation: Key Laboratory of Algal Biology, Institute of Hydrobiology, Chinese Academy of Sciences, Wuhan, China.

Dissection of the tubulin incorporation in C. elegans sensory cilia
Zeran Jia, Jiayu Sun, Guangshuo Ou
Presenter affiliation: Tsinghua University, Beijing, China.

ESCRT machinery is involved in ciliogenesis by regulating ciliary vesicle trafficking
Eunji Jung, Joon Kim
Presenter affiliation: Korea Advanced Institute of Science and Technology, Daejeon, South Korea.

The role of ADSS1-mediated primary cilia in skeletal muscle development
Soo Mi Ki, Ji Eun Lee
Presenter affiliation: Sungkyunkwan University, Seoul, South Korea.

Role of IFT46 gene in the kidney
Je Yeong Ko, Bo Hye Kim, Do Yeon Kim, Hwa Yeon Cha, Jong Hoon Park
Presenter affiliation: Sookmyung Women's University, Seoul, South Korea.

IFT46 plays crucial roles in neural and cilia development
Chowon Kim, Nayoung Lee, Youni Kim, Hongchan Lee, Hyun-Shik Lee
Presenter affiliation: School of Life Sciences, Kyungpook National University, Daegu, South Korea.
<table>
<thead>
<tr>
<th>Title</th>
<th>Presenters</th>
<th>Affiliations</th>
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<tbody>
<tr>
<td>Function-driven discovery of disease genes in zebrafish using DanioNet</td>
<td>Ji Hyun Kim, Hongseok Shim, Chan Yeoung Kim, Insuk Lee, Ji Eun Lee</td>
<td>Presenter affiliation: Sungkyunkwan University, Seoul, South Korea.</td>
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<tr>
<td>Molecular mechanism of loss of primary cilia in pancreatic ductal adenocarcinoma</td>
<td>Tetsuo Kobayashi, Yu Mashima, Ayano Shoda, Brian D. Dynlacht, Hiroshi Itoh</td>
<td>Presenter affiliation: Nara Institute of Science and Technology, Ikoma, Japan.</td>
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<td>Peroxiredoxin1, a novel regulator of pronephros development, influences retinoic acid and Wnt signaling by controlling ROS levels</td>
<td>Hyun-Kyung Lee, Kyeongyeon Park, Youngeun Jeong, Hyun-Shik Lee</td>
<td>Presenter affiliation: Kyungpook National University, Daegu, South Korea.</td>
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<td>Unravelling the assembly process of centriole organelles</td>
<td>Qiuhong Li, Ioannis Vakonakis</td>
<td>Presenter affiliation: University of Oxford, Oxford, United Kingdom.</td>
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<td>Centriole translocation and degeneration during ciliogenesis in C. elegans neurons</td>
<td>Wenjing Li</td>
<td>Presenter affiliation: Tsinghua University, Beijing, China.</td>
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<td>Regulation of mammalian neural patterning by the inositol phosphatase Inpp5e</td>
<td>Chao Lin, Tamara Caspary</td>
<td>Presenter affiliation: Emory University, Atlanta, Georgia.</td>
</tr>
<tr>
<td>Functional analysis of Zika envelope protein in C. elegans ciliated neurons</td>
<td>Qirong Lin, Guangshuo Ou</td>
<td>Presenter affiliation: Tsinghua University, Beijing, China.</td>
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<tr>
<td>Building a multipurpose insertional mutant library for forward and reverse genetics in Chlamydomonas</td>
<td>Xi Cheng, Gai Liu, Wenting Ke, Lijuan Zhao, Bo Lv, Xiaocui Ma, Nannan Xu, Xiaoling Xia, Xuan Deng, Chunlei Zheng, Kaiyao Huang</td>
<td>Presenter affiliation: Key Laboratory of Algal Biology, Institute of Hydrobiology, Chinese Academy of Sciences, Wuhan, China.</td>
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Examination of the Tubulin code hypothesis in C. elegans neuronal cilia
Liyang Liu, Guangshuo Ou
Presenter affiliation: Peking University, Beijing, China.

Autophagy-mediated neuronal ciliogenesis is essential for human cortical lamination
Sang Min Park, Jae Seok Lim, Suresh Ramakrishna, Se Hoon Kim, Woo Kyeong Kim, Junehawk Lee, Hoon-Chul Kang, Jeremy F. Reiter, Dong Seok Kim, Hyongbum Kim, Jeong Ho Lee
Presenter affiliation: KAIST, Daejeon, South Korea.

Roles of Ana1 in Drosophila spermatogenesis
Hélène Rangone, Jingyan Fu, Marco Gottardo, Giuliano Callaini, David M. Glover
Presenter affiliation: University of Cambridge, Cambridge, United Kingdom.

Interlinking cell division and ciliogenesis
Trinadh Venkata Satish Tammana, Damayanti Tammana
Presenter affiliation: Institute of Bioinformatics and Applied Biotechnology, Bengaluru, India.

Cryo-electron tomography of centriole and rootlet assembly in Naegleria gruberi
Hugo G. van den Hoek, Sahradha Albert, Stefan Geimer, Jürgen M. Plitzko, Wolfgang Baumeister, Benjamin D. Engel
Presenter affiliation: Max Planck Institute of Biochemistry, Martinsried, Germany.

Role of the cytoplasmic dynein-2 intermediate chain WDR60
Laura Vuolo, Nicola L. Stevenson, David J. Stephens
Presenter affiliation: University of Bristol, Bristol, United Kingdom.

Tethering of an E3 ligase by PCM1 regulates the abundance of centrosomal KIAA0586/Talpid3 and promotes ciliogenesis
Lei Wang, Kwanwoo Lee, Ryan Malonis, Irma Sanchez, Brian D. Dynlacht
Presenter affiliation: New York University School of Medicine, New York, New York.
The transition fiber protein FBF1 is required to assemble both sensory cilia and sperm flagellar in Drosophila
Zimao Wu, Yanan Hou, Qing Wei
Presenter affiliation: Shanghai Institute of Plant Physiology and Ecology, Chinese Academy of Sciences, Shanghai, China.

A calmodulin gene plays an essential role in acid-induced deflagellation in Chlamydomonas reinhardtii
Qiong Wu, Yinwen Liang, Junmin Pan
Presenter affiliation: MOE Key Laboratory of Protein Sciences, School of Life Sciences, Tsinghua University, Beijing, China.

The glial actin cytoskeleton regulates neuronal ciliogenesis in C. elegans
Hao Zhu, Yan Zhang, Guangshuo Ou
Presenter affiliation: Tsinghua University, Beijing, China.

The cytoplasmic tail of rhodopsin triggers rapid rod degeneration in kinesin-2 mutants
Dong Feng, Zhe Chen, Kuang Yang, Shanshan Miao, Bolin Xu, Yuns Kang, Haibo Xie, Chengtian Zhao
Presenter affiliation: Ocean University of China, Qingdao, China; Qingdao National Laboratory for Marine Science and Technology, Qingdao, China.

IFT54 regulates IFT20 stability but is not essential for tubulin transport during ciliogenesis
Xin Zhu, Yinwen Liang, Junmin Pan
Presenter affiliation: MOE Key Laboratory of Protein Sciences, School of Life Sciences, Tsinghua University, Beijing, China.

TUESDAY, April 25—4:30 PM

Chinese Tea and Beer Tasting
KEYNOTE SPEAKER

The tubulin code regulates ciliary microtubule ultrastructure, intraflagellar transport, and extracellular vesicle biology
Maureen Barr, Malan Silva, Natalia Morsci, Christopher Rongo, David Hall, Robert O’Hagan  [35’+10’]
Presenter affiliation: Rutgers University, Piscataway, New Jersey. 41

SESSION 4  CILIA FUNCTION

Chairperson: Guangshuo Ou, Tsinghua University, Beijing, China

The transition zone as a leaky membrane diffusion barrier
Jensen L. Jensen, Chunmei Li, Kwangjin Park, Michel R. Leroux  [25’+5’]
Presenter affiliation: Simon Fraser University, Vancouver, Canada. 42

Centrosomal anchorage regulates mechanical features of progenitors and cortical size
Wei Shao, Zhizhong Li, Song-Hai Shi  [25’+5’]
Presenter affiliation: Memorial Sloan Kettering Cancer Center, New York, New York; Weill Cornell Medical College, New York, New York. 43

Role of motile and immotile cilia in left-right symmetry breaking
Hiroshi Hamada, Takahiro Ide, Katsura Minegishi, Katsutoshi Mizuno, Wang K. Twan  [25’+5’]
Presenter affiliation: RIKEN, Kobe, Japan. 44

Polycystin ion channels in primary cilia
Paul G. DeCaen, Xiaowen Liu, David E. Clapham  [15’+5’]
Presenter affiliation: Northwestern University, Chicago, Illinois. 45
SESSION 5  CENTRIOLE AND CENTROSOME BIOGENESIS

Chairperson:  Bryan Tsou, Memorial Sloan-Kettering Cancer Center, New York, New York, USA

New partnerships of core centriole duplication proteins
David M. Glover  [25'+5']
Presenter affiliation: University of Cambridge, Cambridge, United Kingdom.  46

The role of the basal body in cilia formation and length control
Bahtiyar Kurtulmus, Bohan Uddin, Elmar Schiebel, Gislene Pereira  [25'+5']
Presenter affiliation: University of Heidelberg, Heidelberg, Germany.  47

Novel function of Drosophila Ana1 in centriole integrity
Jingyan Fu, Hélène Rangone, Marco Gottardo, Giuliano Callaini, David Glover  [15'+5']
Presenter affiliation: China Agricultural University, Beijing, China.  48

Coffee / Tea Break

Spindle pole focusing by the microcephaly protein ASPM
Ami Ito, Gohta Goshima  [15'+5']
Presenter affiliation: Nagoya University, Nagoya, Japan.  49

Rootletin prevents Cep68 from VHL-mediated proteasomal degradation to maintain centrosome cohesion
Huilong Yin, Lu Zheng, Wei Li, Li Yuan  [15'+5']
Presenter affiliation: University of Chinese Academy of Sciences, Beijing, China.  50

Structure and function of centrosomal linkers
Robert Mahen, Paul French, Ashok R. Venkitaraman  [15'+5']
Presenter affiliation: Imperial College London, London, United Kingdom; University of Cambridge, Cambridge, United Kingdom.  51

Regulation of centrosome maturation by localized RNA
Mark Antkowiak, Guadalupe Sepulveda, Ingrid Brust-Mascher, Bo Huang, Li-En Jao  [15'+5']
Presenter affiliation: University of California, Davis, Davis, California.  52
SESSION 6  CILIAR GROWTH AND MAINTENANCE II

Chairperson:  Susana Godinho, Barts Cancer Institute, London, United Kingdom

Differential regulation of core ciliary base components underlies cilia diversity
Swadhin C. Jana, Susana Mendonça, Pedro Machado, Sasha Werner, Monica Bettencourt-Dias  [25'+5']
Presenter affiliation: Instituto Gulbenkian de Ciencia, Oeiras, Portugal.  53

Ciliary Pi(4,5)P2 dictates fall of primary cilia and rise of cell cycle
Takanari Inoue  [25'+5']
Presenter affiliation: Johns Hopkins University, Baltimore, Maryland.  54

Functional exploration of the IFT-A complex in intraflagellar transport and ciliogenesis
Bing Zhu, Xin Zhu, Limei Wang, Yinwen Liang, Qianqian Feng, Junmin Pan  [25'+5']
Presenter affiliation: Tsinghua University, Beijing, China; Qingdao National Laboratory for Marine Science and Technology, Qingdao, China.  55
SESSION 8  CILIA AND CENTROSOME DISEASES

Chairperson:  Takanari Inoue, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

A central role for cilia in the complex genetics of congenital heart disease
Xiaoqin Liu, Nikolai Klena, George Gabriel, Molly Schwartz, Czamecki Peter, Ying Shan, Michael Wang, Daniel Weeks, Jagesh Shah, Cecilia W. Lo [25'+5']
Presenter affiliation: University of Pittsburgh, Pittsburgh, Pennsylvania. 56

The complex genetics and pathogenesis of renal ciliopathies
Sophie Saunier [25'+5']
Presenter affiliation: INSERM UMR 1163, Paris, France. 57

Non-cell autonomous invasion mediated by centrosome amplification
Teresa Arnandis, Susana A. Godinho [25'+5']
Presenter affiliation: Barts Cancer Institute - Queen Mary University of London, London, United Kingdom. 58

Coffee / Tea Break

Linking monogenic and complex obesity to primary cilia—the Cep19 obesity protein regulates a conserved GTPase cycle coupling cargo to the IFT-B complex for ciliary transport of the BBSome and GPCRs
Tomoharu Kanie, Keene L. Abbott, Peter K. Jackson [15'+5']
Presenter affiliation: Stanford University School of Medicine, Stanford, California. 59

Primary cilia on colonic fibroblasts regulate DSS-induced colitis and inflammation associated colon carcinogenesis
Ruizhi Tang, Conception Paul, Sophie Poupeau, Jan Paul Medema, Carsten Janke, Michael Hahne [15'+5']
Presenter affiliation: L’institut de Génétique Moléculaire de Montpellier (CNRS-UMR5535), Montpellier, France; Université de Montpellier, Montpellier, France. 60
Compound library screening and drug development for ciliopathies
Joon Kim, Yong Joon Kim  [15'+5']
Presenter affiliation: KAIST, Daejeon, South Korea. 61

The Joubertome—An integrated framework of Joubert syndrome-associated proteins
Ronald Roepman, Ideke Lamers, Susanne Roosing, Minh Nguyen, Sylvia van Beersum, Jeroen van Reeuwijk, Stef Letteboer, Karsten Boldt, Marius Ueffing, Joseph Gleeson  [15'+5']
Presenter affiliation: Radboud University Medical Center, Nijmegen, Netherlands. 62

ANKS3 mutation in nephronophthisis patients leads to cilia and cytoskeleton defects in vitro and in vivo in zebrafish
Presenter affiliation: INSERM U1163 Imagine Institute, Paris, France. 63

THURSDAY, April 27—2:00 PM

SESSION 9  CILIA GROWTH AND FUNCTION

Chairperson: Jung-Cui Liao, Academia Sinica, Taipei, Taiwan

Regulation of cilium length by modulation of the IFT machinery and Golgi and endocytosis mediated protein or lipid homeostasis
Gert Jansen  [25'+5']
Presenter affiliation: Erasmus MC, Rotterdam, Netherlands. 64

How cellular effectors read the tubulin code
Antonina Roll-Mecak  [25'+5']
Presenter affiliation: National Institutes of Health, Bethesda, Maryland. 65

Spatial organization and dynamics of ciliary gating zone components
Kristen J. Verhey  [25'+5']
Presenter affiliation: University of Michigan Medical School, Ann Arbor, Michigan. 66

Coffee / Tea Break
Mechanisms underlining body curvature in zebrafish ciliary mutants
Xiaoli Zhang, Shuo Jia, Zhe Chen, Dong Feng, Chengtian Zhao
[15'+5']
Presenter affiliation: Ocean University of China, Qingdao, China; Qingdao National Laboratory for Marine Science and Technology, Qingdao, China.

Determining the interacting network of TALPID3 through proteomic studies
Amy M. Fraser, Lynn McTeir, Michael J. McGrew, Megan G. Davey
[15'+5']
Presenter affiliation: The Roslin Institute, Edinburgh , United Kingdom.

Using the developing choroid plexus paradigm to explore cilia transcriptomics
Megan G. Davey, Anirudh Patir, Sandra Poyatos, Lynn McTeir, Amy M. Fraser, Tom Freeman [15'+5']
Presenter affiliation: The Roslin Institute, University of Edinburgh, Edinburgh, United Kingdom.

Structure destabilising mutations in the same protein domain cause different ciliopathies
Nimesh Joseph, Christopher M. Johnson, Antonina Andreeva, Stefan M. Freund, Fanni Gergely, Mark van Breugel [15'+5']
Presenter affiliation: MRC-Laboratory of Molecular Biology, Cambridge, United Kingdom.

The centrosome and ciliom protein CCDC66 functions in ciliogenesis and ciliary trafficking and is regulated by centriolar satellites
Deniz Conkar, Efraim Culfa, Ezgi Odabasi, Navin Rauniyar, John R. Yates [15'+5']
Presenter affiliation: Koc University, Istanbul, Turkey.

THURSDAY, APRIL 27—6:00 PM
COCKTAILS and BANQUET
FRIDAY, April 28—9:00 AM

SESSION 10  CILIAR, CENTROSOME AND BEYOND

Chairperson: Gislene Pereira, German Cancer Research Center, Heidelberg, Germany

Assembling the ciliary necklace in *Chlamydomonas*
Susan K. Dutcher, Huawen Lin, Ursula W. Goodenough, Robyn Roth
[25'+5']
Presenter affiliation: Washington University, St Louis, Missouri.

Ciliary protein trafficking in Drosophila
Nayoung Lee, Jina Park, Yong Chul Bae, Chul Hoon Kim, Seok Jun Moon
[25'+5']
Presenter affiliation: Yonsei University College of Dentistry, Seoul, South Korea.

Dynein-driven neuronal transport in the formation of *C. elegans* sensory cilia
Guangshuo Ou [25'+5']
Presenter affiliation: Tsinghua University, Beijing, China.

Coffee / Tea Break

Ectosome release functions in flagellar membrane remodeling and cell-cell communication
Huan Long, Fan Zhang, Nannan Xu, Dennis Diener, Joel Rosenbaum, Kaiyao Huang
[15'+5']
Presenter affiliation: Key Laboratory of Algal Biology, Institute of Hydrobiology, Chinese Academy of Sciences, Wuhan, China.

A novel link between ploidy level and centrosome homeostasis in mammalian somatic cells
Kan Yaguchi, Ryo Matsui, Yuki Tsukada, Toshiaki Koda, Ryota Uehara
[15'+5']
Presenter affiliation: Hokkaido University, Sapporo, Japan.

The role of centrosome in cell motility and metastasis
Yi Luo, Miriam Barrios-Rodiles, Liang Zhang, Amy Zhang, Jeff Wrana, Laurence Pelletier
[15'+5']
Presenter affiliation: Lunenfeld-Tanenbaum Research Institute, Toronto, Canada.
Centriole amplification by mother and daughter centrioles differs in mammalian multiciliated cells
Adel Al Jord, Anne Iris Lemaitre, Nathalie Delgehyr, Marion Faucourt, Nathalie Spassky, Alice Meunier  [15'+5']
Presenter affiliation: Ecole Normale Superieure, Paris, France; CNRS, Paris, France; INSERM, Paris, France.