Detailed schedule

June 26 (Sunday)

15:00 – 21:00	Registration in front of the Room B-1 and PC connection check
17:00 – 18:30	Dinner at the Hall Swan
18:30 – 18:35	Opening remarks (Yamada Foundation)

Keynote lectures

18:35 – 19:25	**01. George Witman** (University of Massachusetts Medical School) The *Chlamydomonas* flagellum: Model for basic biology and human disease
19:30 – 20:20	**02. Michel Goldschmidt-Clermont** (University of Geneva) Chloroplast gene expression: why so complex?
20:20 – 20:25	Announcements
20:30 – 22:30	Mixer in the Room I-J-K (Poster hanging)

June 27 (Monday)

Session 1 Emerging technology

Chair: **Michael Schroda** (Technical University of Kaiserslautern)

09:00 – 09:05	Introduction
09:05 – 09:20	**03. Andre Greiner** (Humboldt-Universitaet zu Berlin) Nuclear gene targeting in motile *Chlamydomonas* strains by employment of zink-finger nucleases
09:20 – 09:35	**04. Sung-Eun Shin** (KAIST) Genome editing with the CRISPR/Cas9 system in *Chlamydomonas reinhardtii*
09:35 – 09:50	**05. Sari Dewi Kurniasih** (Kochi University of Technology) UV-mediated *Chlamydomonas* mutants endowed with enhanced expression ability of nuclear transgenes
09:50 – 10:05	**06. Prasad Aiyar** (Friedrich Schiller University of Jena) Establishment of an aequorin based Ca^{2+} reporter assay in *Chlamydomonas reinhardtii*
10:05 – 10:20	**07. Sahradha Albert** (Max-Planck-Institute of Biochemistry) *In situ* characterization of nuclear proteasomes with cryo-electron tomography
10:20 – 10:40	Coffee break

Session 2 — Basal bodies: From cell division to ciliogenesis

Chair: **08. Susan Dutcher** (Washington University)

10:40 – 11:05 Introduction / The role of SAS4 in mitosis

11:05 – 11:20 **09. Masafumi Hirono** (Hosei University)
Dynamic interaction between cartwheel and triplet microtubules establishes the nine-fold symmetry of the centriole

11:20 – 11:35 **10. Dhivya Kumar** (University of Connecticut Health Center)
A bioactive peptide amidating enzyme is required for ciliogenesis

11:35 – 11:50 **11. Masayuki Onishi** (Stanford University School of Medicine)
Regulation of two actins and their roles in cytokinesis and other processes in *Chlamydomonas*

11:50 – 13:00 Lunch and poster hanging

13:00 – 14:00 Poster session (odd number)

14:00 – 15:00 Poster session (even number)

Session 3 — Photosynthesis-1 (Photosystems)

Chair: **Kevin Redding** (Arizona State University)

15:00 – 15:10 Introduction

15:10 – 15:25 **12. Sreedhar Nellaepalli** (Okayama University)
Characterization of an assembly apparatus of PSI-LHCI supercomplex consisting of chloroplast-encoded Ycf4 and Ycf3 in a green alga *Chlamydomonas reinhardtii*

15:25 – 15:40 **13. Martina Jokel** (University of Turku)
Alternative thylakoid electron transport pathways as a regulator of photosynthesis: from solar energy to biofuels

15:40 – 15:55 **14. Michael Hippler** (University of Muenster)
Remodeling of photosynthetic pathways as revealed by quantitative proteomics

15:55 – 16:10 **15. Alexandra Viola Bohne** (Ludwig Maximilians University)
Characterization of the one helix protein OHP2 and its role in photosystem II assembly in *Chlamydomonas reinhardtii*

16:10 – 16:30 Coffee break

Session 4 — Light perception and photomovement

Chair: **16. Ken-ichi Wakabayashi** (Tokyo Institute of Technology)

16:30 – 16:50 Introduction / Visualization and quantification of the redox potential in the *Chlamydomonas* flagella

16:50 – 17:05 **17. Noriko Ueki** (Tokyo Institute of Technology)
Eyespot-dependent determination of the phototactic sign in *Chlamydomonas reinhardtii*

17:05 – 17:20 **18. Kyriacos Leptos** (University of Cambridge)
Adaptive high-fidelity phototaxis in *Chlamydomonas reinhardtii*

17:20 – 17:35 **19. Wipavadee Sangadkit** (Syracuse University)
Responses of *Chlamydomonas* to sound and its short term memory

17:35 – 17:50 **20. Maria Mittag** (Friedrich Schiller University Jena)
Functional analysis of a CRY-DASH from *Chlamydomonas reinhardtii*

18:00 – 19:00 Dinner at the Hall Swan

Session 5 — Organelles

Chair: **Michel Goldschmidt-Clermont** (University of Geneva)

19:00 – 19:05 Introduction

19:05 – 19:20 **21. Olivier Vallon** (IBPC)
Small RNA sequencing reveals the dynamics of the transcriptomic landscape in the *Chlamydomonas* chloroplast

19:20 – 19:35 **22. Christian Fufezan** (University Muenster)
About temporal kinetics of the greening process using the y-1 mutant and quantitative proteomics

19:35 – 19:50 **23. Michal Shapira** (Ben-Gurion University of the Negev)
Redox control of chloroplast chaperones in the green algae *Chlamydomonas reinhardtii*

19:50 – 20:05 **24. Pawel Brzezowski** (CEA Cadarache)
The link between chlororespiration and tetrapyrrole biosynthesis

20:05 – 20:20 **25. Burkhard Becker** (University of Cologne)
The proteome of the contractile vacuole of *Chlamydomonas reinhardtii* and its implication for contractile vacuole function

20:30 – 22:30 Mixer with posters in the Room I-J-K

June 28 (Tuesday)

Session 6 Omics/Systems biology

Chair: **Olivier Vallon** (IBPC)

9:00 – 9:10 Introduction

9:10 – 9:25 **26. Mayra Lorenz** (Technical University of Munich)
A *Chlamydomonas reinhardtii* ORFeome resource for system-level analysis of protein-protein interactions

9:25 – 9:40 **27. Yuichi Aoki** (Tohoku University)
Gene coexpression analysis of *Chlamydomonas* by using ALCOdb

9:40 – 9:55 **28. Xiaobo Li** (Carnegie Institution for Science)
A genome-wide indexed mutant library transforms reverse genetics and forward genetics studies in *Chlamydomonas reinhardtii*

9:55 – 10:10 **29. Jianhua Liu** (Zhejiang University)
Transcriptomic profiling of *Dunaliella salina* in response to reciprocal change of salinities revealed a coherent transcriptional regulation of metabolic enzymes involved in glycerol and its potential carbon sources

10:10 – 10:30 Coffee break

Session 7 Genetic control of the life cycle

Chair: **Yoshiki Nishimura** (Kyoto University)

10:30 – 10:35 Introduction

10:35 – 10:50 **30. Jae-Hyeok Lee** (University of British Columbia)
Complex regulatory networks controlling the homeobox-dependent zygote program during the sexual development of *Chlamydomonas reinhardtii*

10:50 – 11:05 **31. Takashi Hamaji** (Donald Danforth Plant Science Center)
Identification and characterization of a *cis*-regulatory element for zygotic gene expression in *Chlamydomonas reinhardtii*

11:05 – 11:20 **32. Takuya Matsuo** (Nagoya University)
Existence of a red/violet light signaling pathway involved in resetting of circadian clock in *Chlamydomonas*

11:20 – 11:35 **33. Su-Chiung Fang** (Academia Sinica)
SUMO protease activity of SMT7 is required for MAT3-modulated cell size control in *Chlamydomonas*

11:35 – 11:50	**34. Severin Sasso** (Friedrich Schiller University) The function of a type I polyketide synthase in *Chlamydomonas reinhardtii*
11:50 – 13:30	Group photo and lunch
13:30 – 14:30	Poster session (even number)
14:30 – 15:30	Poster session (odd number)
15:30 – 15:50	Coffee break

Session 8 Assembly of the flagellar axoneme

Chair: **35. Karl Lechtreck** (University of Georgia)

15:50 – 16:10	Introduction / Exploring the role of IFT and diffusion in flagella protein transport
16:10 – 16:25	**36. Tomohiro Kubo** (University of Yamanashi) The IFT81 and IFT74 N-termini together form the main module for intraflagellar transport of tubulin
16:25 – 16:40	**37. Emily Hunter** (Emory University) The *IDA3* gene encodes a protein specifically required for transport of the flagellar inner dynein arm I1/f dynein
16:40 – 16:55	**38. Stephen King** (University of Connecticut Health Center) The ciliary outer dynein arm assembly factor CCDC103 forms molecular scaffolds through distinct dimerization and oligomerization domains
16:55 – 17:10	**39. Kazuo Inaba** (University of Tsukuba) A novel subunit of axonemal dynein contains a photoreceptor protein domain
17:10 – 17:25	**40. Susan Dutcher** (Washington University) The roles of IFT and the transition zone in the assembly of the ciliary necklace
18:00 – 19:00	Dinner at the Hall Swan

Special lectures

19:00 – 19:40	**41. Kevin Redding** (Arizona State University) Rewiring photosynthesis: Fusion of photosystem I to hydrogenase
19:50 – 20:30	**42. Arthur Grossman** (Carnegie Institution for Science) Discovering novel photosynthetic functions in *Chlamydomonas reinhardtii*
20:30 – 22:30	Voting for best posters and Mixer with posters in the Room I-J-K

June 29 (Wednesday)

Session 9 Stress/Acclimation

Chair: **Michael Hippler** (University of Muenster)

9:00 – 9:10 Introduction

9:10 – 9:25 **43. Melis Duener** (Ruhr University Bochum)
The role of the soluble guanylate cyclase CYG12 in the acclimation of *Chlamydomonas* to anaerobiosis

9:25 – 9:40 **44. Gilles Peltier** (CEA Cadarache)
The plastidial DEAD box RNA helicase CreRH22 is involved in ribosome biogenesis and is critical for high light acclimation

9:40 – 9:55 **45. Michael Schroda** (Technical University of Kaiserslautern)
Not changes in membrane fluidity but proteotoxic stress induces the expression of the chloroplast small heat shock protein HSP22E/F in *Chlamydomonas reinhardtii*

9:55 – 10:10 **46. Elena Ermilova** (Saint-Petersburg State University)
PII signalling proteins reinvented glutamine sensing during chloroplast evolution

10:10 – 10:25 **47. Karen Lina Zinzius** (University of Muenster)
Calredoxin - a novel calcium-dependent sensor-responder connected to redox regulation

10:25 – 10:40 Coffee break

Session 10 Photosynthesis-2 (Excess light, dark reactions)

Chair: **48. Giovanni Finazzi** (CEA Grenoble)

10:40 – 10:55 Introduction / Chloroplast tomography allows revisiting diatoms photosynthesis

10:55 – 11:10 **49. Lianyong Wang** (Kyoto University)
Thylakoid calcium-binding protein CAS and calcium regulate the expression of ABC-type plasma membrane bicarbonate transporter in *Chlamydomonas reinhardtii*

11:10 – 11:25 **50. Dimitris Petroutsos** (CEA Grenoble)
A blue light photoreceptor mediates the feedback regulation of photosynthesis

11:25 – 11:40 **51. Petra Redekop** (Heinrich Heine University Duesseldorf)
Role of the PsbS protein in *Chlamydomonas reinhardtii*

11:40 – 11:55	**52. Martin Jonikas** (Carnegie Institution for Science) A repeat protein links Rubisco to form the eukaryotic carbon concentrating organelle
11:55 – 12:10	**53. Anna Barbara Matuszynska** (Heinrich Heine University Duesseldorf) Mathematical model of short-term photoprotection in *Chlamydomonas reinhardtii*
12:10 – 13:30	Lunch
13:30 – 15:30	Poster viewing
15:30 –	Free time (Dinner is not included)

June 30 (Thursday)

Session 11 Biotechnology

Chair: **Gilles Peltier** (CEA Cadarache)

9:00 – 9:10	Introduction
9:10 – 9:25	**54. Fikret Mamedov** (Uppsala University) Photosystem II and H_2 production in *Chlamydomonas reinhardtii*
9:25 – 9:40	**55. Hui li** (Shenzhen University) Improved photobio-H_2 production regulated by artificial miRNAs in green alga *Chlamydomonas reinhardtii*
9:40 – 9:55	**56. Di Jin** (University of Cambridge) *Chlamydomonas* in an air-lift photobioreactor under gyrotactic effects
9:55 – 10:10	**57. Claude Aflalo** (Ben Gurion University of the Negev) Data acquisition and control system for microalgal culture in a LED-illuminated flat-panel airlift bioreactor
10:10 – 10:25	**58. Laura Stoffels** (University College London) Recombinant protein production in *Chlamydomonas reinhardtii* at pilot scale
10:25 – 10:45	Coffee break

Session 12 Carbon metabolism and biofuels

Chair: **59. James Umen** (Donald Danforth Plant Science Center)

10:45 – 11:05 Introduction / Synergism between inositol polyphosphates and TOR kinase signaling in nutrient sensing, growth control and lipid metabolism in *Chlamydomonas*

11:05 – 11:20 **60. Masataka Kajikawa** (Kyoto University)
TAG-accumulation-regulator-1 (TAR1) triggers suppression of photosynthesis and accumulation of lipid and starch under photoautotrophic and nitrogen-deficient conditions in *Chlamydomonas*

11:20 – 11:35 **61. Miriam Schulz-Raffelt** (Technical University of Kaiserslautern)
Conditional downregulation of cpSECA leads to oil accumulation in *Chlamydomonas reinhardtii*

11:35 – 11:50 **62. Kourosh Salehi-Ashtiani** (New York University Abu Dhabi)
Iterative cycles of mutagenesis and selection generates a lipid accumulating *C. reinhardtii* mutant without compromising growth kinetics

11:50 – 12:05 **63. Julie Zedler** (University of Kent)
Chlamydomonas reinhardtii as a platform for sustainable diterpene production

12:05 – 13:00 Lunch

Session 13 Evolution and diversity

Chair: **64. Hisayoshi Nozaki** (University of Tokyo)

13:00 – 13:15 Introduction / Establishing new strains of *Volvox* for future studies of biodiversity and evolution

13:15 – 13:30 **65. Shota Yamashita** (University of Tokyo)
Developmental analysis of the spheroidal colony formation in *Astrephomene* (Volvocales, Chlorophyta)

13:30 – 13:45 **66. Takako Kato-Minoura** (Chuo University)
Phylogenetic analysis of NAP, an unconventional actin of the Volvocales

13:45 – 14:00 **67. David Nelson** (New York University Abu Dhabi)
The genome, transcriptome, and phenome of *Palmellococcus saccharophilus* reveal adaptive traits of an alga with widespread domain in a desert region

14:00 – 14:20 Coffee break

Session 14 **New directions in *Chlamydomonas* biology**

Chair: **Maria Mittag** (Friedrich Schiller University Jena)

14:20 – 14:30	Introduction
14:30 – 14:45	**68. Josep Vilarrasa-Blasi** (Carnegie Institution for Science) Identification and characterization of water sensing mechanisms in plants
14:45 – 15:00	**69. Naoki Sato** (University of Tokyo) Ordered motion from chaos: Inverted bioconvection in *Chlamydomonas reinhardtii*
15:00 – 15:15	**70. Daniel Schaeme** (Friedrich Schiller University) Interactions between *Chlamydomonas reinhardtii* and other microorganisms
15:15 – 15:30	**71. Tomohito Yamasaki** (National institute for basic biology) The RNA binding protein DUS16 plays an essential role in primary miRNA processing in *Chlamydomonas reinhardtii*
15:30 – 15:45	**72. Benjamin Engel** (Max Planck Institute of Biochemistry) Exploring the molecular landscape of *Chlamydomonas* with in situ cryo-electron tomography
15:45 – 16:15	Poster awards and announcements
16:15 – 17:00	Poster viewing
17:00 – 17:30	Poster removal
18:00 – 21:00	Banquet at the Hall Sakura

July 1 (Friday)

Morning	Departure