

# Poster Session List

## Basal bodies, assembly of the flagellar axoneme, and motility

- P-01. Che-Chia Tsao** (National University of Tainan)  
*Chlamydomonas* IC140 is essential for flagellar assembly while *B9D1* affects the level of intraflagellar transport proteins and is dispensable for structural integrity of the transition zone
- P-02. Akira Noga** (University of Tokyo)  
Dynamic interaction between cartwheel and triplet microtubules establishes the nine-fold symmetry of the centriole
- P-03. Haru-aki Yanagisawa** (University of Tokyo)  
Identification and characterization of axonemal MIPs (microtubule inner proteins)
- P-04. Winfield Sale** (Emory University)  
The flagellar N-DRC and B-tubule polyglutamylation are required for flagellar axoneme integrity and outer doublet alignment
- P-05. Susan Dutcher** (Washington University)  
The *pf23* mutant is defective in the *DYX1C1* gene and fails to assemble the majority of the inner dynein arms in the axoneme
- P-06. Jenna Wingfield** (University of Georgia)  
Sequential assembly of IFT trains as revealed by *in vivo* imaging
- P-07. Akinori Koitabashi** (Tokyo Institute of Technology)  
Isolation of a non-phototactic *Chlamydomonas* mutant that shows alternate flagellar beatings
- P-08. Toshiki Yagi** (Prefectural University of Hiroshima)  
Resurrection of flagellar bending movements in *chlamydomonas* paralyzed mutants at high pressure
- P-09. Hitoshi Sakakibara** (National Institute of Information and Communications Technology)  
Properties of the purified radial spokes of *Chlamydomonas* flagella

- P-10. Di Jin** (University of Cambridge)  
Transport of *Chlamydomonas* in an air-lift photobioreactor under gravitactic effects

## Carbon metabolism and biofuels

- P-11. Christina Marx** (Ruhr-University Bochum)  
Tools for facilitating and monitoring high transgene expression in the *C. reinhardtii* chloroplast
- P-12. Pei-Luen Jiang** (National Dong-Hwa University)  
Environmental stress on Cell Morphology and Physiology of dinoflagellate
- P-13. Marika Yamauchi** (Ochanomizu University)  
Autophagy-related gene ATG3 is essential for the cell survival of *Chlamydomonas reinhardtii* under nitrogen-starvation conditions
- P-14. Yasuyo Yamaoka** (POSTECH)  
A transcription factor which is important for the unfolded protein response regulates lipid biosynthesis in *Chlamydomonas reinhardtii*
- P-15. Jin Liu** (Peking University)  
Characterization of *Chlamydomonas* diacylglycerol acyltransferases reveals their distinct substrate specificities and functions in triacylglycerol biosynthesis
- P-16. Yuki Kasai** (Chuo University)  
*Cre/loxP* mediated selectable marker gene recycling in green microalgae
- P-17. Hanul Kim** (Pohang University of Science and Technology)  
Strategy for characterizing the putative ABC transporters functional in lipid metabolism in *Chlamydomonas reinhardtii*
- P-18. Ching-Nen Nathan Chen** (National Sun Yat-sen University)  
Production of long chain omega-3 fatty acids and carotenoids in tropical areas by a new heat-tolerant microalga *Tetraselmis* sp. DS3

## Poster Session List

**P-19. Yeongho Kim** (University of Nebraska-Lincoln)

A prokaryotic-like 1-acylglycerol-3-phosphate acyltransferase is required for triacylglycerol synthesis in *Chlamydomonas*

**P-20. Yasuyo Yamaoka** (POSTECH)

Identification of a *Chlamydomonas* plastidial 2-lysophosphatidic acid acyltransferase and its use to engineer oil content

**P-21. Masako Iwai** (Tokyo Institute of Technology)

A phosphorus starvation-inducible promoter from *Chlamydomonas reinhardtii* is effective in manipulating TAG synthesis in *Nannochloropsis* strain NIES-2145 during P starvation

**P-22. Kyohei Yamashita** (Tokyo University of Science)

Method of hydrogen photoproduction in green algae *Chlamydomonas reinhardtii* sustainable over 10 days with the optimal condition without supply of fresh cells nor exchange of the whole culture medium

**P-23. Osami Misumi** (Yamaguchi University)

Unicellular red alga *Cyanidioschyzon merolae* accumulates storage glucan and triacylglycerol under nitrogen depletion

**P-24. Hyungi Koh** (KAIST)

The evaluation of SAM methylation and UGPase activity on growth and lipid contents of diverse algal strains including *C. reinhardtii*

**P-25. Liyan Wang** (Shenzhen University)

Cloning and characterization of beta-carotene ketolase gene (*bkt2*) promoter from *Haematococcus pluvialis*

**P-26. Kamil Bakowski** (University of Copenhagen)

Lipid Droplets as a new platform for assembly of biosynthetic pathways in *Chlamydomonas reinhardtii*

**P-27. Masahiro Tamoi** (Kindai University)

Enhancement of photosynthetic capacity in *Euglena gracilis* by genetic engineering of the Calvin cycle leads to increases in biomass and wax ester production

**P-28. Takahisa Ogawa** (Shimane University)

Identification and characterization of chloroplastic and cytosolic fructose-1,6-bisphosphatases from *Euglena gracilis*

**P-29. Kaeko Kurihara** (Shimane University)

Identification of genes encoding enzymes involved in wax ester metabolism in *Euglena gracilis*

**P-30. Bolatkhan Kazykhanuly Zayadan** (Al-Farabi Kazakh National University)

Isolation of new cyanobacteria strains –fatty acids producers as prospective source for biodiesel production from different ecosystems of Kazakhstan

**P-31. Yuji Tanaka** (Shimane University)

Identification of paramylon synthase using transcriptome analysis in *Euglena gracilis*

**P-32. Shigeru Okada** (University of Tokyo)

Characterization of a bifunctional farnesol kinase-like protein from the green microalga *Botryococcus braunii* race B.

**P-33. V.M. Emmanuel Nuestro Ferriols** (University of Tokyo)

Farnesyl pyrophosphate is involved in the final steps for highly branched isoprenoid biosynthesis in the marine diatom *Rhizosolenia setigera*

**P-34. Hiromasa Nakamura** (University of Tokyo)

Effects of 2-azahypoxanthine on extracellular terpene accumulations of the green alga *Botryococcus braunii* Showa

**P-35. Naoki Sato** (University of Tokyo)

Accumulation and localization of oil bodies in *Chlamydomonas reinhardtii* and *Chlamydomonas debaryana*

**P-36. Zayadan Bolatkhan** (Al-Farabi Kazakh National University)

Microalgae Isolation and Selection from hot springs for Prospective Biodiesel Production

**P-37. Javiera Ziehe** (University of Manchester)

# Poster Session List

Identification of MYB transcription factors involved in carbon storage metabolism in *Chlamydomonas reinhardtii*

## Emerging technologies and new directions in *Chlamydomonas* biology

**P-38. Eun-Jeong Kim** (University of Nebraska-Lincoln)  
A Vasa Intronic Gene (VIG) homolog is required for RNA interference in *Chlamydomonas*

**P-39. Matt Laudon** (University of Minnesota)  
*Chlamydomonas* Resource Center

**P-40. Francisco Navarro** (University of Cambridge)  
Harnessing the regulatory potential of miRNAs to control gene expression in *Chlamydomonas reinhardtii*

**P-41. Kwangryul Baek** (Hanyang University)  
Targeted gene knockout in *Chlamydomonas reinhardtii* via DNA-free CRISPR-Cas9 ribonucleoproteins

## Evolution and diversity

**P-42. Hiroko Kawai-Toyooka** (University of Tokyo)  
Evolution of volvocine mating-type/gender-specific genes deduced from *de novo* genome sequencing of isogamous *Yamagishiella* and anisogamous *Eudorina*

## Genetic control of the life cycle

**P-43. Wenshuang Li** (Friedrich Schiller University Jena)  
Search for new interaction partners of XRN1 from *Chlamydomonas reinhardtii*

**P-44. Thamali Kariyawasam** (University of British Columbia)  
Insertional mutagenesis of *Chlamydomonas reinhardtii* in identifying genes involved in unicellular diploid development

**P-45. Dianyi Liu** (Donald Danforth Plant Science Center)  
Testing the constancy of the nuclear:cell (N:C) volume ratio in *Chlamydomonas reinhardtii*

**P-46. Dianyi Liu** (Donald Danforth Plant Science Center)

A new class of cyclin dependent kinase in *Chlamydomonas* is required for coupling cell size to cell division

**P-47. Monika Hlavová** (Institute of Microbiology CAS)  
Characterization of WEE1 regulation mutant of the green alga *Chlamydomonas reinhardtii* in the response to DNA damage

**P-48. Ivan Ivanov** (Institute of Microbiology CAS)  
The effect of sub-lethal temperature on the cell cycle in *Chlamydomonas reinhardtii*

**P-49. Kateřina Bišová** (Institute of Microbiology CAS)  
Changes in CDK activity - the cause or result of the cell cycle alterations upon temperatures shifts?

**P-50. Vilém Zachleder** (Institute of Microbiology CAS)  
Temperature shifts affect cell cycle progression in green algae

**P-51. Sunjoo Joo** (University of British Columbia)  
Global transcriptome analysis of the zygote developmental program in *Chlamydomonas reinhardtii*

**P-52. Thamali Kariyawasam** (University of British Columbia)  
Generation of *Chlamydomonas* polyploids using mutants with early zygote defects

**P-53. Ichiro Nishii** (Nara Women's University)  
Characterization of septin involved in cell cleavage of *Chlamydomonas reinhardtii*

## Light perception and photomovement

**P-54. Alberto Natali** (VU University Amsterdam)  
Over-expression of membrane proteins in *Chlamydomonas reinhardtii*: a comparative analysis of membrane proteins incorporation in thylakoids

**P-55. Takahiro Ide** (Tokyo Institute of Technology)  
Identification of the *agg1* mutation responsible for negative phototaxis in a "wild-type" strain of *Chlamydomonas reinhardtii*

**P-56. Azusa Kage** (Tohoku University)

# Poster Session List

Reassessment of gravitactic mutant strains of *Chlamydomonas reinhardtii*

**P-57. Kenneth Foster** (Syracuse University)  
How eukaryotic flagella and cilia beat

## Omics/Systems biology

**P-58. Susan Dutcher** (Washington University)  
Identification of fidelity factors for mRNA splicing

**P-59. Jihyun Lee** (POSTECH)  
Strategy for Identification of Key Regulators of Lipid Accumulation in *Chlamydomonas reinhardtii*

**P-60. Stefan Schulze** (University of Muenster)  
Insertional Mutagenesis of Mannosidase I and Xylosyltransferase Modifies the N-Glycan Composition of *Chlamydomonas reinhardtii*

**P-61. Wang Jiangxin** (Shenzhen University)  
High-throughput proteomics and metabolomics reveal butanol resistance mechanisms in *Chlamydomonas reinhardtii*

## Organelles

**P-62. Jessica Jacobs** (Ruhr-University Bochum)  
A spliceosome-like chloroplast ribonucleoprotein complex promotes group II intron trans-splicing

**P-63. Anne Sawyer** (Ruhr-University Bochum)  
Maturation and assembly of iron sulfur proteins in the *Chlamydomonas reinhardtii* chloroplast

**P-64. Yusuke Kobayashi** (Kyoto University)  
The macroevolution of chloroplast nucleoids during green plant evolution

**P-65. Mari Takusagawa** (Yamaguchi University)  
Tandem HMG-box protein homologous to major mitochondrial nucleoid protein is a component of chloroplast nucleoids of *Chlamydomonas reinhardtii*

**P-66. Masaki Odahara** (Rikkyo University)

Dynamic interplay between nucleoid segregation and genome integrity through the action of RECA and gyrases in *Chlamydomonas* chloroplasts.

## Photosynthesis

**P-67. Cuimin Liu** (Institute of Genetics and Developmental Biology, Chinese Academy of Sciences)  
Structural insight into the cooperation and functional partition of chloroplast chaperonin subunits

**P-68. Bujaldon Sandrine** (CNRS/UPMC)  
The functional accumulation of antenna proteins in chlorophyll *b*-less mutants of *Chlamydomonas reinhardtii*

**P-69. Hiroshi Kuroda** (Okayama University)  
Mutation at Asn298 of D1 subunit on photosystem II impairs S state transition

**P-70. Shin-Ichiro Ozawa** (Okayama University)  
Determination of arrangement of nine light-harvesting chlorophyll complexes in Photosystem I supercomplex by chemical cross-linking in the green algae *Chlamydomonas reinhardtii*

**P-71. Natsumi Kodama** (Okayama University)  
Immunochemical characterization of peripheral antenna complexes in BF4 and P71 mutants

**P-72. Felix Buchert** (CNRS-UPMC)  
Biochemical analysis of the dynamic interaction between auxiliary proteins and core components of the CEF supercomplex

**P-73. Luke Mackinder** (Carnegie Institution for Science)  
High-throughput protein localization and affinity purification mass spectrometry reveals the structural organization of the pyrenoid

**P-74. Vivian Chen** (Carnegie Institution for Science)  
An EPYC1 Story: Repeat protein required for Rubisco to assemble into the eukaryotic carbon-concentrating organelle

**P-75. Yousef Yari Kamrani** (National Institute for Basic

## Poster Session List

Biology)

Genetic investigation of the molecular mechanisms involved in the light stress responses of the photosynthetic machinery in *Chlamydomonas reinhardtii*

**P-76. Jose García-Cerdán** (University of California, Berkeley)

CPSFL1, a CRAL\_TRIO lipophilic binding domain protein essential for photoautotrophic growth in *Chlamydomonas reinhardtii*, modulates carotenoid accumulation in the chloroplast

**P-77. Pawel Brzezowski** (CEA Cadarache)

PSI Acceptor-side limitation and acclimation: new molecular players to light the path between the photosynthetic electron transfer chain and metabolism

### Stress/Acclimation

**P-78. Feifei Xu** (Tsinghua University)

An organelle K<sup>+</sup> channel is required for osmoregulation in *Chlamydomonas reinhardtii*

**P-79. Hancheol Jeon** (Hanyang University)

Identification of the carbonic anhydrases from the unicellular green alga *Dunaliella salina* strain CCAP-19/18

**P-80. Chisato Murota** (Tokyo University of Pharmacy and Life Sciences)

Relationship between gene expression of phosphate transporter and arsenate resistance in *Chlamydomonas*

**P-81. Chao Wang** (Shenzhen University)

Transcriptomic analysis reveals numbers transcription factors involved in high light and sodium acetate stresses in *Haematococcus pluvialis*

**P-82. Jacob Alexander Munz** (University of British Columbia)

Deciphering the transcriptional regulation of nitrogen starvation responses in *Chlamydomonas reinhardtii*

**P-83. Haruka Shinkawa** (Kyoto University)

Phosphoproteomic analysis of a mutant of YAK1-type DYRK, TAR1 under the photoautotrophic C/N-imbalanced conditions

**P-84. Chihana Toyokawa** (Kyoto University)

Suborganellar localization of chloroplast Ca<sup>2+</sup>-binding protein CAS, a novel regulator of CO<sub>2</sub>-concentrating mechanism, in *Chlamydomonas reinhardtii*

**P-85. Yuki Niikawa** (Kyoto University)

Identification of nuclear genes regulated by chloroplast calcium-sensing receptor homologue, CAS, under CO<sub>2</sub>-limiting conditions by transcriptome analyses in *Chlamydomonas reinhardtii*

**P-86. Takashi Yamano** (Kyoto University)

Cooperative bicarbonate uptake into chloroplast stroma by HLA3 and LCIA in *Chlamydomonas reinhardtii*

**P-87. Alan Itakura** (Carnegie Institution for Science)

Characterizing a novel and critical carbon concentrating mechanism (CCM) component in *Chlamydomonas reinhardtii*