

The 47th annual meeting of Japan Society of Protistology

Oral presentations

Structure and function of oligosaccharide chains in mating pheromone (Gamone1) of *Blepharisma*

- Terue Harumoto¹, Yoshikazu Yamagishi², Shoko Iwasaki³, Mayumi Sugiura¹, Mayumi Kobayashi^{3,4}, Hideo Iio²
¹Division of Natural Sciences, Nara Women's University, ²Graduate School of Science, Osaka City University,
³Graduate School of Humanities and Sciences, Nara Women's University, ⁴DC2 (JSPS)

The diversity of mating pheromone gamone1 leading speciation in ciliate *Blepharisma*

- Mayumi Kobayashi^{1,2}, Mari Takusagawa³, Mayumi Sugiura⁴, Terue Harumoto⁴
¹Graduate School of Natural Science and Ecological Awareness, Nara Women's University,
²Research Fellow of Japan Society for the Promotion of Science,
³Graduate School of Medicine, Applied Molecular Bioscience, Yamaguchi University,
⁴Division of Natural Sciences, Research Group of Biological Sciences, Nara Women's University

Molecular analyses of the Odd-mating type specific ciliary membrane protein, PcMSP: intragenic structure and intracellular localization of the polypeptide

- Yuta Chiba, Nobuyuki Haga
Department of Biological Sciences, Senshu University of Ishinomaki

A novel mechanism of rapid axopodial contraction in heliozoon *Raphidiophrys contractilis*

- Risa Inoue, Motonori Ando
Laboratory of Cell physiology, Graduate School of Education, Okayama University

A study of spontaneous curvature of isolated membrane of *Amoeba proteus* and three-dimensional curvature of a living cell

- Yukinori Nishigami¹, Atsushi Taniguchi², Shigenori Nonaka², Seiji Sonobe³, Masatoshi Ichikawa¹
¹Graduate School of Science, Kyoto University, ²National Institute for Basic Biology,
³Graduate School of Science, University of Hyogo

Predation mechanism of a suctorian, *Hypophrya* sp.

- Go Kobashigawa, Tohru Yoshihisa, Seiji Sonobe,
Grad. Sch. Life Sci., Univ. Hyogo

Extension and contraction mechanism of the proboscis of a ciliate, *Lacrymaria olor*

- Ryuji Yanase, Tohru Yoshihisa, Seiji Sonobe
Grad. Sch. Life Sci., Univ. Hyogo

Myosin like protein from gliding diatom

- Nozomi Yamaoka¹, Yasutaka Suetomo², Tohru Yoshihisa¹, Seiji Sonobe¹
¹Department of Life Science, University of Hyogo, ²Iwakuni City Microlife Museum

Toxicities of protozoan pigments for chemical defense extracted from the ciliate *Blepharisma japonicum* and *Climacostomum virens*-blepharismisin and climacostol

- Masayo Terazima¹, Hideo Iio², Terue Harumoto³
¹Department of Registered Dietitians, Faculty of Health and Welfare, Tokaigakuin University,
²Department of Material Science & Chemistry, Osaka City University,
³Division of Natural Sciences, Faculty of Science, Nara Women's University

Phormidium, cyanobacteria in soil, activates the roots of vegetable crops

- Ikuko Shihira-Ishikawa¹, Yoshiaki Nakayama², Yasutaka Hanada³, Hiroshi Abe²
¹Center for Advanced Photonics, ²Tokyo University of Agriculture, ³Hirosaki University

Distribution and ecology of *Aulographis japonica* (Phaeodaria, Aulacanthida, Aulacanthidae) around Japan

- Yasuhide Nakamura¹, Rei Somiya², Ichiro Imai¹, Akihiro Tuji³, Fabrice Not⁴, Noritoshi Suzuki⁵
¹Graduate School of Fisheries Sciences, Hokkaido University,
²Graduate School of Fisheries Science and Environmental Studies, Nagasaki University,
³Department of Botany, National Museum of Nature and Science,
⁴Station Biologique de Roscoff, Centre National de la Recherche Scientifique (CNRS),
⁵Graduate School of Science, Tohoku University

Gliding motility and host cell invasion of foodborne disease-causing protist, *Sarcocystis fayeri*

- Takaya Sakura¹, Michiru Tahara¹, Ryuma Matsubara^{1,2}, Akinori Yamano^{1,2}, Shinji Izumiyama¹, Kenji Yagita¹,
○Kisaburo Nagamune^{1,3}
¹Department of Parasitology, National Institute of Infectious Diseases,
²Graduate School of Life and Environmental Sciences, University of Tsukuba,
³Faculty of Life and Environmental Sciences, University of Tsukuba

Diversity of growth and development abilities in cellular slime molds at low temperatures

●Hidenori Hashimura, Kei Inouye
Graduate School of Science, Kyoto University

Eccentric mitochondrial genome found in diatom parasite *Hemistasia phaeocysticola*

●Akinori Yabuki
Basic Research Area, Department of Marine Biodiversity Research, Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Regulation of maltose rereleasing in symbiotic *Chlorella*; *Chlorella variabilis* isolated from *Paramecium bursaria*

●Aika Shibata¹, Fumio Takahashi², Masahiro Kasahara², Nobutaka Imamura³
¹Graduate School of Life Sciences, Ritsumeikan University,
²Department of Biotechnology, College of Life Sciences, Ritsumeikan University,
³Department of Pharmacy, College of Pharmaceutical Sciences, Ritsumeikan University

The inheritance of mating types in a strain with two mating types in *Paramecium caudatum*

●Akira Yanagi
Department of Human Education, Faculty of Human Studies, Ishinomaki Senshu University

Suprachromosomal chromatin structure during micronuclear division in *Paramecium caudatum*

●Toshiro Sugai, Osamu Numata
Life and Environmental Sciences, University of Tsukuba

Microtubule dynamics during conjugation in *Tetrahymena* II; A study of mechanism of crescent formation

Yasuharu Kushida¹, Masakatsu Takaine², Toshiro Sugai², Kentaro Nakano², ●Osamu Numata²
¹Department of Cell Physiology, the Jikei University School of Medicine,
²Faculty of Life and Environmental Sciences, University of Tsukuba

Functional genomics using transcriptome data of *Paramecium bursaria*

●Hideo Dohra¹, Yuuki Kodama², Haruo Suzuki³, Manabu Sugii⁴, Tatsuya Kitazume⁵, Katsushi Yamaguchi⁵,
Shuji Shigenobu⁵, Masahiro Fujishima³
¹Research Institute of Green Science and Technology, Shizuoka University,
²Faculty of Life and Environmental Science, Shimane University,
³Graduate School of Science and Engineering, Yamaguchi University,
⁴Media and Information Technology Center, Yamaguchi University, ⁵National Institute for Basic Biology

Molecular phylogenetic analyses of immaturin

●Nobuyuki Haga¹, Yasuhiro Takenaka², Toshinori Usui¹, Yuta Chiba¹, Tomoaki Abe¹
¹Department of Biological Sciences, Senshu University of Ishinomaki,
²Department of Diabetes and Endocrinology, Saitama Medical University

Quantitative verification of Vorticellidae contraction by well known theory of peptide α -helix- random coil transition

●Hiroshi Asai
Advanced Research Institute for Science and Engineering in Waseda University

Selection processes in early stages of the evolution of endosymbiosis between an alga and a ciliate using an experimental model ecosystem

●Toshiyuki Nakajima, Toshiyuki Matsubara, Yoichiro Ohnishi
Department of Biology, Ehime University

Timing of differentiation of a perialgal vacuole membrane enclosing a symbiotic *Chlorella* in early infection process between *Paramecium bursaria* and alga

●Masahiro Fujishima¹, Junpei Yamashita¹, Yuuki Kodama²
¹Graduate School of Science and Engineering, Yamaguchi University,
²Faculty of Life and Environmental Science, Shimane University

Role of SAS-6 self-association in assembly of the cartwheel and centriole

Akira Noga¹, Michel Steinmetz², Manuel Hilbert², ●Masafumi Hirono¹
¹Department of Biological Sciences, University of Tokyo, ²Laboratory of Biomolecular Research, Paul Scherrer Institute

Poster presentations

Observation of the histone modification in *Tetrahymena thermophila*

●Akifumi Maruyama^{1,2}, Masaaki Iwamoto², Yasushi Hiraoka^{1,2,3}, Tokuko Haraguchi^{1,2,3}
¹Graduate School of Science, Osaka University, ²Advanced ICT Research Institute, NICT,
³Graduate School of Frontier Biosciences, Osaka University

Effects of high-light stress on the endosymbiotic algae in *Paramecium bursaria*

●Yoshiki Fujimori¹, Takashi Miura², Sosuke Iwai¹
¹Faculty of Education, Hirosaki University, ²Graduate School of Education, Hirosaki University

Structural analysis of a Type-I mitochondrial plasmid in *Paramecium caudatum*

○Tatsuya Maeda, Hiroshi Endoh
Grad. Sch. of Natural Sci. and Technol., Kanazawa Univ.

Partitioning of the symbiotic algae at the host cell division in *Paramecium bursaria*

○Kenji Fujiwara, Sosuke Iwai
Faculty of Education, Hirosaki University

Nickel ion-inducible genes, *NCI16* and *PcGST1*, and oxidative stress in *Paramecium caudatum*

○Yasuhiro Takenaka¹, Nobuyuki Haga², Ikuo Inoue¹, Takuya Awata¹, Shigehiro Katayama¹
¹Department of Diabetes and Endocrinology, Saitama Medical University,
²Department of Biological Sciences, Faculty of Science and Technology, Senshu University of Ishinomaki

The role of HCN channel in the escape reaction of *Paramecium*

Shinobu Izutani¹, Emi Ohta¹, Takashi Tominaga², ○Manabu Hori¹
¹Dept. Biosci., Fac. Sci, Yamaguchi Univ., ²Inst. Neurosci., Tokushima BUNRI Univ.

Velocity analysis of the IFT particles using *Chlamydomonas* flagellar mutants

Takuya Takamura, ○Hironori Ueno
Molecular Function & Life Sciences, Aichi university of Education

A simple mechanism for maintaining the endosymbiotic algae: some insights from growth analysis of *Paramecium bursaria*

Takuro Tamura, ○Sosuke Iwai
Faculty of Education, Hirosaki University

Special symposium “Crossover of Protistology”

(Organized by JSP activation committee)

Ecological roles of protists within microbial loop in freshwater and marine systems

○Shin-ichi Nakano
Center for Ecological Research, Kyoto University

Bacterial horizontal gene transfer in microbial ecosystem: perspective of gene dynamics in aquatic ecosystem

○Kazuaki Matsui
Laboratory of Environmental Biological Science, Faculty of Science and Technology, Kinki University

Diversity of mitochondrial genome structure of apicomplexan parasites

○Kenji Hikosaka
Department of Microbiology and Immunology, Teikyo University School of Medicine

Evolution of algal plastids via endosymbiotic events

○Yoshihisa Hirakawa
Faculty of Life and Environmental Sciences, University of Tsukuba

Symposium for high school teachers (public)

(By cooperation of the Grant-in-Aid for Scientific Research on Innovative Areas “Matryoshka-type evolution”)

Parasitism, symbiosis, and matryoshka ~endosymbiosis and evolution~

○Kisaburo Nagamune^{1,2}
¹Department of Parasitology, National Institute of Infectious Diseases,
²Faculty of Life and Environmental Sciences, University of Tsukuba

Special lecture by a winner

for the Award of the Japan Society of Protistology in the Field of Protistological Research

Mating types, syngens, and the species concept in *Paramecium*

○Yuuji Tsukii
Lab. Biol., Sci., Hosei University

Special poster presentation by a winner for the Encouragement Award for Young Protistologists

Studies on mechanisms of sol-gel conversion in amoeboid locomotion using a model system

○Yukinori Nishigami
Graduate School of Science, Kyoto University