#### The 51th annual meeting of Japan Society of Protistology Oral presentations

#### **Oral presentations**

A mechanism of crystal retention in Paramecium bursaria

oTSUKAGOSHI Ryosuke<sup>1</sup>, KODAMA Yuuki<sup>2</sup>

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Genome and transcriptome analysis of *Paramecium* symbiotic algae revealing gene expansion related to endosymbiotic relationships

oMINEI Ryuhei<sup>1</sup>, HOSHINA Ryo<sup>1</sup>, SUZAKI Toshinobu<sup>2</sup>, OGURA Atsushi<sup>1</sup>

<sup>1</sup>Department of BioScience, Nagahama Institute of Bio-Science and Technology, <sup>2</sup>Graduate School of Science, Kobe University

Does Autophagy machinery remain in obligate diatom endosymbionts in dinoflagellates? •Euki Yazaki<sup>1</sup>, Tadaaki Uehara<sup>2</sup>, Hirokazu Sakamoto<sup>3</sup>, Noboru Mizushima<sup>3</sup>, Tetsuo Hashimoto<sup>1,4</sup>, Yuji Inagaki<sup>1,4</sup> <sup>1</sup>Faculty of Life and Environ. Sci., Univ. of Tsukuba, <sup>2</sup>Grad. Sch. of Life and Environ. Sci., Univ. of

Tsukuba, <sup>3</sup>Grad. Sch. and Faculty of Medicine, the Univ. of Tokyo, <sup>4</sup>Center for Comp. Sci., Univ. of Tsukuba.

Localization of centrin-related proteins in the haptonema of haptophyte algae °YANASE Ryuji<sup>1</sup>, NOMURA Mami<sup>1, 2</sup>, SHIBA Kogiku<sup>1</sup>, INABA Kazuo<sup>1</sup> <sup>1</sup>Shimoda Marine Research Center, Univ. Tsukuba, <sup>2</sup>Dept. of Biophysics, Grad. Sch. of Sci., Kyoto Univ.

Accumulation of ciliates on a wall •NISHIGAMI Yukinori<sup>1</sup>, OHMURA Takuya<sup>2</sup>, ICHIKAWA Masatoshi<sup>2</sup> <sup>1</sup>RIES, Hokkaido Univ., <sup>2</sup>Grad. Sci., Kyoto Univ.

Effect of temperature on resting cyst formation in ciliated protozoan *Colpoda cucullus* •SHIMADA Yuto<sup>1</sup>, MATSUOKA Tatsuomi<sup>2</sup>, ARIKAWA Mikihiko<sup>2</sup> <sup>1</sup>Grad. Sch. of Integr. Arts and Sci., Kochi Univ., <sup>2</sup>Faculty of Sci. and Tech., Kochi Univ.

How do diatom-predators find their preys?

YABUKI Akinori<sup>1</sup>, ISAJI Yuta<sup>2</sup>, SUGA Hisami<sup>2</sup>, ITO Kaoru<sup>1</sup>, NAKAMURA Tamiko<sup>1</sup>, OHKOUCHI Naohiko<sup>2</sup>, FUJIKURA Katsunori<sup>1</sup>
<sup>1</sup>Department of Marine Biodiversity Research, JAMSTEC, <sup>2</sup>Department of Biogeochemistry, JASMTEC

The role of immaturin in the life-cycle phase transition of *Paramecium* •HAGA Nobuyuki Dept. of Biol. Sci., Faculty of Sci. and Technol., Ishinomaki Senshu Univ.

A novel *Chlamydomonas* mutant, *pma2*, displays abnormal cell size and flagella number •MIWA Aya, HARADA Misaki, NAITO Sayaka, HIRONO Masafumi Dept. of Frontier Biosci., Hosei Univ.

Function of the siliceous scales in the centrohelid heliozoan *Raphidiophrys contractilis* •Toshinobu SUZAKI<sup>1</sup>, Sakie OTANI<sup>1</sup>, Kento NAGAO<sup>1</sup>, Mikihiko ARIKAWA<sup>2</sup> <sup>1</sup>Dept. Biol., Grad. Sch. Sci., Kobe University, <sup>2</sup>Dept. Biol. Sci., Kochi University Fitness benefits of symbiosis for the algal endosymbiont in *Paramecium bursaria* •IWAI Sosuke, FUJITA Kyosuke, TAKANISHI Hiroki, FUKUSHI Kota Faculty of Education, Hirosaki Univ.

Identification and characterization of novel host organelle-recruitment factor of *Toxoplasma gondii* FUKUMOTO, Junpei<sup>1,2</sup>, SAKURA, Takaya<sup>1</sup>, MATSUBARA, Ryuma<sup>1,2</sup>, TAHARA, Michiru<sup>1</sup>, MATSUZAKI, Motomichi<sup>1</sup>, ONAGAMUNE, Kisaburo<sup>1,3</sup> <sup>1</sup>Dept. of Parasitol., Natl. Inst. of Microbial. Dis., <sup>2</sup>Grad. Sch. of life and Env. Sci., Tsukuba Univ., <sup>3</sup>Faculty of life and Env. Sci., Tsukuba Univ.

Study on the acquisition mechanism of resistance to actin polymerization inhibitor in *Tetrahymena* -Presence of actin homeostasis control mechanismoNUMATA Osamu, SHIMIZU Yuhta, AKASAWA Daiki, NAKANO Kentaro Grad. Sch. of life and Env. Sci., Tsukuba Univ.

Identification of chromatin remodeling factors potentially responsible for gametic pronuclei production in the ciliate *Tetrahymena thermophila* 

 oFUKUDA Yasuhiro<sup>1</sup>, AKEMATSU Takahiko<sup>2</sup>, TADA Chika<sup>1</sup>, NAKAI Yutaka<sup>1,3</sup>
<sup>1</sup>Grad. Sch. of Agric. Sci., Tohoku Univ., <sup>2</sup>Dept. of Chromosome Biol., Univ. of Vienna, <sup>3</sup>Niigata Agro Food Univ.

Fission and subsequent death of mitochondria prior to the programmed nuclear death of *Tetrahymena* •SUGIHARA Kie, ENDOH Hiroshi Grad. Sch. of Nat. Sci. and Technol., Kanazawa Univ.

Understanding ecosystem dynamics by microcosms using Protists oHOSODA Kazufumi Institute for Academic Initiatives, Osaka Univ.

### **Poster presentations**

Toward the elucidation of the giant formation mechanism in ciliate *Blepharisma*: Exploration of genes involved in the formation of new cilia

°OKITA Kazusa<sup>1</sup>, HARUMOTO Terue<sup>2</sup>, SUGIURA Mayumi<sup>2</sup>

<sup>1</sup>Dep. of Chem. Biol. and Environ. Sci., Nara Women's Univ., <sup>2</sup>Research Group of Biol. Sci., Div of Natural Sci., Nara Women's Univ.

Morphological traits and formation process of giant cells in the ciliate *Blepharisma stoltei* •ISAKA Yuki<sup>1</sup>, SUGIURA Mayumi<sup>2</sup>, HARUMOTO Terue<sup>2</sup> <sup>1</sup>Div. of Biol. Sci., Nara Women's Univ., <sup>2</sup>Research Group of Biol. Sci., Div. of Natural Sci., Nara

Women's Univ.

Exploration of *tryptophan 5-monooxygenase* (*TMO*) involved in Gamone2 biosynthesis in *Blepharisma stoltei* 

•SATO Ena<sup>1</sup>, SUGIURA Mayumi<sup>2</sup>, HARUMOTO Terue<sup>2</sup>

<sup>1</sup>Dept. of Biol. Sci., Grad. Sch., Nara Women's Univ., <sup>2</sup>Reserch Group of Biol. Sci., Div. of Natural Sci., Nara Women's Univ.

An attempt at cryopreservation of several species of ciliate *Blepharisma* °SASAKI Asumi<sup>1</sup>, SUGIURA Mayumi<sup>2</sup>, HARUMOTO Terue<sup>2</sup> <sup>1</sup>Dept. of Biol. Sci., Grad. Sch., Nara Women's Univ., <sup>2</sup>Research Group of Biol. Sci., Div. of Natural Sci., Nara Women's Univ. The seasonal dynamics of some centrohelid and actinophryid heliozoans species (Centrohelida, Actophryida) in artificial pond

oLiudmyla P. GAPONOVA

Laboratory of Preservation and Renewal of Biodiversity, Institute for Evolutionary Ecology of the National Academy of Sciences of Ukraine

An efficient method for culturing endosymbiotic algae of *Paramecium bursaria* using yeast °MAEDA Ippei<sup>1</sup>, SATOH Kenta<sup>2</sup>, SAKURADA Fumiaki<sup>2</sup>, MIURA Takashi<sup>2</sup>, IWAI Sosuke<sup>2</sup> <sup>1</sup>Grad. Sch. of Education, Hirosaki Univ., <sup>2</sup>Faculty of Education, Hirosaki Univ.

Symbiosis between the ciliate Paramecium bursaria and yeasts

•YAMANAKA Yuka<sup>1</sup>, KODAMA Yuuki<sup>2</sup>

<sup>1</sup>Crs. of Biol. Sci. and Biotech., Grad. Sch. of life and Env. Sci., Shimane Univ., <sup>2</sup>Dept. of Biol. Sci., Faculty of life and Env. Sci., Shimane Univ.

Evolution of symbiosis between an alga and a bacterium during a long-term culture of an experimental model ecosystem

•ABE Yuichi<sup>1</sup>, FUJII Yosuke<sup>1</sup>, MATSUURA Masayuki<sup>1</sup>, TSUBOI Mutsue<sup>2</sup>, MATSUMOTO Chisa<sup>2</sup>, HORISAWA Sakae<sup>3</sup>, SAKUMA You<sup>1</sup>, NAKAJIMA Toshiyuki<sup>1</sup>

<sup>1</sup>Graduate School of Science and Engineering, Ehime University, <sup>2</sup>Faculty of Science, Ehime University, <sup>3</sup>Graduate School of Engineering, Kochi University of Technology

Resource exchanges and the essential resources required from the environment in the evolution of endosymbiosis between a green alga and a ciliate: Experimental analysis using a three-species model ecosystem

MATSUDA Tatsuya<sup>1</sup>, SAKO Soichiro<sup>1</sup>, NISHIKUBO Kenta<sup>2</sup>, NAKAJIMA Toshiyuki<sup>2</sup>
<sup>1</sup>Faculty of Sci., Ehime Univ., <sup>2</sup>Grad. Sch. of Sci. and Eng., Ehime Univ.

The localization of fluorescent glucose derivatives and swimming velocities in *Tetrahymena therophila* •YANAGIDA Mio, NAKANO Hirofumi, UENO Hironori Aichi University of Education

Symbiotic Protist Composition of *Reticulitermes* Termites in the Tokara Islands °KITADE Osamu<sup>1</sup>, NODA Satoko<sup>2</sup> <sup>1</sup>Coll. of Sci., Ibaraki Univ., <sup>2</sup>Faculty of Life and Env. Sci., Univ. of Yamanashi

Shortening and extension of proboscis in the ciliate *Lacrymaria olor* •YANO Yuuki<sup>1</sup>, ISHIDA Hideki<sup>2</sup> <sup>1</sup>Crs. of Biol. Sci. and Biotech., Grad. Sch. of life and Env. Sci., Shimane Univ., <sup>2</sup>Dept. of Biol. Sci.,

Faculty of life and Env. Sci., Shimane Univ.

National BioResource Project about Pathogenic Protozoa in NEKKEN °KAZAMA Makoto<sup>1</sup>, YAGUCHI Takashi<sup>2</sup>, HIRAYAMA Kenji<sup>1</sup>, KANEKO Osamu<sup>1</sup> <sup>1</sup>Institute of Tropical Medicine (NEKKEN), Nagasaki Univ., <sup>2</sup>Medical Mycology Research Center, Chiba Univ.

A possibility to use volvox as organisms for an easy experiment in education programs and the effect its population density has on growth rate.

○Takumi OTAGAKI, ○Miru TAKEUCHI, Taki KATO, Mayu KIMURA, Yuki HATTORI Genenral Science Course of Kobe high school, 3rd grade

## JSP Symposium "Protists is so attractive for science education"

Community of Young Protistologists in JSP SHIBATA Aika Dept. of Biotechnology, College of Life Sciences, Ritsumeikan Univ

Fast and simple method for identification of marine plankton SUETOMO Yasutaka Iwakuni City Microlife Museum

Researches and Experiments on Cell Motility of Protists SONOBE Seiji Grad. Sch. Life Sci., Univ. Hyogo

Endosymbioses and Evolution of Photosynthetic Organisms MIYAGISHIMA Shin-ya Dept. of Cell Genetics, National Inst. of Genetics

# Special lecture by a winner for the Award of the Japan Society of Protistology in the Field of Protistological Research

Species diversity and Ecology of free living protists in soil environments SATOSHI Shimano Sci. Res. Cent., Hosei Univ.