

目 次

第5回アジアマイコプラズマ学会
会 長：泉川欣一（医療法人栄和会泉川病院）
第38回日本マイコプラズマ学会学術集会
会 長：桑野剛一（久留米大学医学部）
会 期：2011年10月19日（水）～21日（金）
会 場：長崎県医師会館

■総 説

- 1 成人マイコプラズマ・ニューモニア肺炎..... 1
医療法人栄和会泉川病院 泉川 欣一
- 2 *Mycoplasma pneumoniae* 感染における初期宿主応答..... 7
久留米大学医学部 感染医学講座 基礎感染医学部門 桑野 剛一
- 3 マイコプラズマ感染と胃粘膜病変..... 15
杏林大学医学部感染症学 神谷 茂

■Joint Congress of The 5th Meeting of the Asian Organization for Mycoplasmaology (AOM) The 38th Meeting of the Japanese Society of Mycoplasmaology (JSM)

【Greetings】

- 1 Kinichi Izumikawa 23
President, the 5th Meeting of the Asian Organization for Mycoplasmaology (AOM)
Director, Medical Corporation Eiwakai, Izumikawa Hospital
- 2 Koichi Kuwano..... 24
President, the 38th Meeting of the Japanese Society of Mycoplasmaology (JSM)
Professor, Division of Microbiology, Department of Infectious Medicine Kurume University School of Medicine
- 3 Yimou Wu..... 25
President, the Asian Organization for Mycoplasmaology (AOM)
Professor, Pathogenic Biology Institute, Medical College, University of South China Hengyang
- 4 Shigeru Kamiya..... 26
President, the Japanese Society of Mycoplasmaology (JSM)
Professor and Director, Department of Infectious Diseases, Kyorin University School of Medicine

【Special Program】

Welcome Speech

Nagasaki as the starting point of the development of modern medicine in Japan..... 27

Shigeru Kohno

Director of Nagasaki University Hospital

Emmy Klieneberger-Nobel Award Lecture

New developments in molecular biological research on plant-pathogenic mollicutes
: a tiny phytoplasma with a reduced genome tricks a giant plant industry..... 28

Shigetou Namba

Graduate School of Agricultural and Life Sciences, The University of Tokyo

Kitamoto Award Lecture

Biological activities of mycoplasmal lipoproteins / lipopeptides..... 29

Ken-ichiro Shibata

Laboratory of Oral Molecular Microbiology, Department of Oral Pathobiological Science,

Hokkaido University Graduate School of Dental Medicine

【Luncheon Seminar】 Sponsor : Taisho Toyama Pharmaceutical Co., Ltd

Mycoplasma pneumoniae pneumonia - Clinical features and current problems 30

Katsunori Yanagihara

Department of Laboratory Medicine, Nagasaki University Hospital

【Symposium】

Molecular biological studies on phytoplasmal pathogenicity..... 31

Kenro Oshima, Nami Minato, Chihiro Miura, Yutaro Neriya, Takuya Shiraishi,
Kyoko Sugawara, Misako Himeno, Shigeyuki Kakizawa and Shigetou Namba

Department of Agricultural and Environmental Biology,

Graduate School of Agricultural and Life Sciences, The University of Tokyo

Plant phloem-restricted fastidious bacteria '*Candidatus liberibacter asiaticus*' causes citrus greening disease that is the most serious threats to the world citrus production..... 32

Shin-ichi Miyata, Hiroshi Kato, Kenta Tomimura, Toru Iwanami

National Institute of Fruit Tree Science, NARO

Influence on the respiratory tract of the *Mycoplasma pneumoniae* pneumonia as a manifestation factor of bronchial asthma..... 33

Hidehiro Watanabe, Tomonori Uruma, Tokuroh Tsunoda, Hiroshi Ishii, Gen Tazaki, Tetsuri Kondo

Department of Respiratory Medicine, Tokai University Hachioji Hospital, Tokai University School of Medicine

Is it possible to diagnose *Mycoplasma pneumoniae*-infection earlier? 34

Kazuhiro Matsuda

Keio University School of Medicine, M Bio Technology Incorporation

Imaging and serological diagnosis of early stage of *Mycoplasma pneumoniae*..... 35

Hiroshi Tanaka¹⁾, Kazuhiro Matsuda²⁾

¹⁾Third Department of Internal Medicine, Sapporo Medical University School of Medicine

²⁾National Institute of Advanced Industrial Science and Technology and M Bio Technology Inc.

Clinical analysis of fulminant *Mycoplasma pneumoniae* pneumonia with hypoxia..... 36

Koichi Izumikawa¹⁾, Kinichi Izumikawa²⁾, Shigeru Kohno¹⁾

¹⁾Department of Molecular Microbiology and Immunology, Nagasaki University Graduate School of Biomedical Sciences

²⁾ Izumikawa Hospital, Nagasaki, JAPAN

Animal model of macrolide-resistant *Mycoplasma pneumoniae* infection..... 37

Satoshi Kurata¹⁾, Haruhiko Taguchi²⁾, Tsuguo Sasaki³⁾, Shigeru Kamiya¹⁾

¹⁾Department of Infectious Diseases, Kyorin University School of Medicine

²⁾Department of Immunology, Kyorin University Faculty of Health Sciences

³⁾Pharmaceuticals and Medical Devices Agency

Erysipelothrix rhusiopathiae: a missing link between firmicutes and mollicutes? 38

Yoshihiro Shimoji

National Institute of Animal Health, Research Institute for Biological Sciences, Tokyo University of Science

Virulence factors of *Ureaplasma parvum*..... 39

Itaru Yanagihara, Kaoru Uchida, Kumiko Nakahira, Fumiko Nishiumi

Department of Developmental Medicine, Research Institute, Osaka Medical Center for Maternal and Child Health

Placental features of chorioamnionitis colonized with *Ureaplasma* species in preterm delivery..... 40

Kazuya Mimura^{1,2)}, Taeko Hasegawa^{2,3)}

¹⁾Department of Obstetrics and Gynecology, Osaka University Graduate School of Medicine

²⁾Department of Developmental Medicine, Osaka Medical Center and Research Institute for Maternal and Child Health

³⁾Department of Central Clinical Laboratory, Kansai Medical University Hirakata Hospital

How to decipher AUA codon in <i>Mycoplasma mobile</i>	41
Takaaki Taniguchi ¹ , Kenjyo Miyauchi ¹ , Daisuke Nakane ² , Makoto Miyata ² , Akira Muto ³ , Susumu Nishimura ⁴ , Tsutomu Suzuki ¹	
¹ Dept. Chem. Biotech., Grad. Sch. Eng., Univ. of Tokyo	
² Dept. Biol., Grad. Sch. Sci., Osaka City Univ.	
³ Fac. Agr. and Life Sci., Hirosaki Univ.	
⁴ Lab. Animal Resource Center, Tsukuba Univ.	
Direct electron microscopy of <i>Mycoplasma</i> in solution using the atmospheric SEM.....	42
Yuusuke Maruyama ^a , Nakane Daisuke ^b , Sachie Abe ^a , Hidetoshi Nishiyama ^c , Takayuki Nishizaka ^d , Mitsuo Suga ^e Makoto Miyata ^b and Chikara Sato ^a	
^a Biomedical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST)	
^b Graduate School of Science, Osaka City University	
^c Advanced Technology Division, JEOL Ltd	
^d Department of Physics, Gakushuin University	
Structural dynamics of Gli349 and Gli521 isolated from the gliding machinery of <i>Mycoplasma mobile</i> studied by high-speed atomic force microscopy.....	43
Noriyuki Kodera ¹ , Yu-hei Tahara ² , Makoto Miyata ² , Toshio Ando ¹	
¹ Department of Physics & Bio-AFM Frontier Research Center, Kanazawa University	
² Department of Biology, Graduate School of Science, Osaka City University	
<i>In vivo</i> anti- and pro-tumor activities of the mycoplasmal lipopeptide FSL-1 and <i>Mycoplasma pneumoniae</i> cells.....	44
Ken-ichiro Shibata, Kazuto Kiura, Akira Hasebe	
Divisions of Oral Molecular Microbiology, Department of Oral Pathobiological Science, Hokkaido University Graduate School of Dental Medicine	
Host immune response in gnotobiotic model of <i>Mycoplasma pneumoniae</i> inducing pneumonia.....	45
Haruhiko Taguchi ¹⁾ , Ken Arae ¹⁾ , Satoshi Kurata ²⁾ , Shigeru Kamiya ²⁾	
¹⁾ Department of Immunology, Kyorin University Faculty of Health Sciences	
²⁾ Department of Infectious Diseases, Kyorin University School of Medicine	
Cytoadherence-dependent induction of inflammatory responses by <i>Mycoplasma pneumoniae</i>	46
Takashi Shimizu, Yutaka Kida, Koichi Kuwano	
Division of Microbiology, Department of Infectious Medicine, Kurume University School of Medicine	
[General Presentation (Oral)]	
A novel mouse model reveals a mechanism for lung inflammation caused by <i>Mycoplasma pneumoniae</i> antigens ...	47
Takeshi Saraya ¹ , Koh Nakata ² , Kazuhide Nakagaki ³ , Natsuki Motoi ² , Masami Kaji ² , Yasunori Fujioka ⁴ , Daisuke Kurai ¹ , Hiroo Wada ¹ , Haruyuki Ishii ¹ , Haruhiko Taguchi ⁵ , Satoshi Kurata ⁵ , Shigeru Kamiya ⁵ , Hajime Goto ¹	
¹ Department of Respiratory Medicine, ⁴ Pathology, and ⁵ Medical Microbiology, Kyorin University School of Medicine	
² Niigata University Medical & Dental Hospital, Bioscience Medical Research Center	
³ Department of Animal Science, Nippon Veterinary Life Science University, Medical Research laboratories	
Three dimensional structure of the attachment organelle of <i>Mycoplasma pneumoniae</i> visualized by electron cryotomography.....	48
Lisa Matsuo ¹ , Akihiro Kawamoto ² , Takayuki Kato ² , Keiichi Namba ² , Makoto Miyata ¹	
¹ Graduate School of Science, Osaka City University	
² Graduate School of Frontier biosciences, Osaka University	
Morphology of isolated MvspI, a surface protein possibly involved in antigenic variation of <i>Mycoplasma mobile</i> , a	

fish pathogen.....	49
Jun Adan-Kubo ¹ , Shu-hei Yoshii ¹ , Hidetoshi Kono ² , Makoto Miyata ¹	
¹ Department of Biology, Graduate School of Science, Osaka City University	
² Computational Biology, Quantum Beam Science, Japan Atomic Energy Research Institute	
“Chopped head” of <i>Mycoplasma mobile</i> -Isolation of gliding machinery.....	50
Daisuke Nakane, Makoto Miyata	
Graduate School of Science, Osaka City University	
Sialylated oligosaccharide recognized by <i>Mycoplasma mobile</i> and <i>Mycoplasma pneumoniae</i> leg proteins.....	51
Taishi Kasai ¹ , Daisuke Nakane ¹ , Hideharu Ishida ² , Hiromune Ando ² , Makoto Kiso ² , Makoto Miyata ¹	
¹ Graduate School of Science, Osaka City University	
² Graduate School of Agriculture, Gifu University	
Gliding machinery of <i>Mycoplasma mobile</i> observed by negative-staining electron microscopy.....	52
Hiroki Yamamoto, Makoto Miyata	
Graduate School of Science, Osaka City University	
Involvement of SOCS-1-mediated degradation of Mal in the suppression of TLR2-mediated signaling by DC-SIGN-mediated signaling.....	53
Makoto Ohtani ^{1,2} , Naoho Tanizume ^{1,2} , Akira Hasebe ¹ , Ken-ichiro Shibata ¹	
¹ Divisions of Oral Molecular Microbiology, ² Oral and Maxillofacial Surgery, Department of Oral Pathobiological Science, Hokkaido University Graduate School of Dental Medicine	
 [General Presentation (Poster)]	
A study of comparative genomics in mycoplasma and acholeplasma: different parasitic strategies in different host ranges.....	54
Yuko Sasaki ¹ , Jun Ishikawa ²	
¹ Dept. Bacteriology II	
² Dept. Bioactive Molecules; National Institute of Infectious Diseases	
Development of allele-specific primer PCR for a swine TLR2 SNP (C406G→P136A) and comparison of the frequency in pigs between Japan and the Czech Republic.....	55
Yoshihiro Muneta ¹ , Yu Minagawa ¹ , Masahiro Kusumoto ² , Hiroki Shinkai ³ , Hirohide Uenishi ³ , Igor Splichal ⁴	
¹ Research Team for Advanced Biologicals, National Institute of Animal Health,	
² Safety Research Team, National Institute of Animal Health, National Agriculture and Food Research Organization	
³ Division of Animal Sciences, National Institute of Agrobiological Sciences	
⁴ Department of Immunology and Gnotobiology, Institute of Microbiology of Academy of Sciences of the Czech Republic	
Roles of the Src family kinase Lck in Toll-like receptor 2 signaling triggered by stimulation with a mycoplasma derived lipopeptide.....	56
Naoho Tanizume ^{1,2} , Akira Hasebe ¹ , Makoto Ohtani ^{1,2} , Kenichiro Shibata ¹	
¹ Divison of Oral Molecular Microbiology, ² Divison of Oral & Maxillofacial Surgery, Department of Oral Pathobiological Science, Hokkaido University Graduate School of Dental Medicine	
Transformation of <i>Mycoplasma mobile</i>	57
Isil Tulum, Atsuko Uenoyama, Makoto Miyata	
Graduate School of Science, Osaka City University	
Inflammatory response and intrauterine fetal death in pregnant mice induced by MBA from the clinical isolate of <i>Ureaplasma parvum</i>	58
Kaoru Uchida ¹ , Kumiko Nakahira ¹ , Takashi Shimizu ² , Itaru Yanagihara ¹	
¹ Department of Developmental Medicine, Research Institute, Osaka Medical Center for Maternal and Child Health	
² Department of Infectious Medicine, Division of Microbiology, Kurume University School of Medicine	
Lipoprotein MslA, a novel mycoplasma virulence factor, is a polynucleotide binding protein	59

Yumiko Higa, Karim Mardani, Idan Ben-Barak, Philip F. Markham, Glenn F. Browning
Asia-Pacific Centre for Animal Health, Faculty of Veterinary Science, The University of Melbourne

The administration of methylprednisolone to 4 patients with mycoplasma pneumonia and persistent fevers... 60

Kyoko Furumoto¹⁾, Mariko Takahara¹⁾, Kousei Araki¹⁾, Yousuke Yasui¹⁾, Yoshiaki Ide¹⁾,
Keiichi Yamamoto¹⁾, Makoto Yonemaru²⁾

¹⁾*Pediatrics of Isehara-Kyodo Hospital*

²⁾*Pulmonary medicine of Isehara-Kyodo Hospital*

Negative-staining electron microscopy of Gli521 and Gli349 involved in *Mycoplasma mobile* gliding..... 61

Tahara Yuhei, Makoto Miyata

Graduate School of Science, Osaka City University

Whole surface image of *Mycoplasma mobile*..... 62

Wu Heng Ning, Makoto Miyata

Department of Biology, Graduate School of Science, Osaka City University

【第38回日本マイコプラズマ学会総会記録】	63
【日本マイコプラズマ学会役員】	64
【日本マイコプラズマ学会総会 歴代総会長】	65
【日本マイコプラズマ学会歴代理事長・歴代北本賞受賞者・歴代ベストプレゼンテーション受賞者】	66
【日本マイコプラズマ学会会則】	68
【賛助会員】	71
【原稿作成にあたってのお願い】	72
【投稿に際してのお願い】	73
【編集後記】	74