

PREFACE

The report on the 11th International Symposium on Exocrine Secretion

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INTRODUCTION

In July 2009, the 36th International Congress of Physiological Sciences (IUPS2009) was held in Kyoto, Japan. Few years prior to the 36th IUPS congress, several Japanese physiologists, including Masataka Murakami (National Institute for Natural Sciences, Okazaki) and I discussed the possibility of holding an IUPS satellite symposium in the field regarding the “Exocrine Secretion.” We also talked this matter with scientists out of country ; *i.e.*, Irene Schulz (University of Konstanz, Konstanz), David I. Cook and Anuwat Dinudom (University of Sydney, Australia), and Ivana Novak (University of Copenhagen, Denmark), and finally made decision to hold the symposium under the name of “International Symposium on Exocrine Secretion. (ISES).”

International Symposium on Exocrine Secretion (ISES) was the name given to the symposium by Dr. John A. Young (the former IUPS Commission for Gastrointestinal Physiology), which he organized in 1990 in Leura, Australia. He assigned the series number “9” (thus designating this symposium as 9th ISES) because 8 identical but variously named conferences (1-8) had been held between 1962 and 1988 before the one in Leura (9). Dr. Young hoped that these symposia on exocrine

secretion would continue to be held in the future, and it was for this reason that he called it the “ninth” (9). The 10th ISES was held in 1993 in Freiburg, Germany, having been organized by Dr. Rainer Greger (10). However, more than 15 years have passed since this last ISES. During this time a lot of knowledge has been accumulated and great progress has been made in this field. These situations also prompted us to consider holding the ISES as 11th meeting, and under the subtitle, “Exocrine Secretion-Mechanism and Disease” in order to emphasize our current understanding about the mechanisms of exocrine secretion in a broad context, and to correlate the relevance of this basic knowledge with disease.

REPORT ON RESEARCH MEETING

The 11th International Symposium on Exocrine Secretion (ISES) was organized by a chairman, Kazuo Hosoi, (the University of Tokushima, Japan), and vice chairs, Masataka Murakami, (Institute for Physiological Sciences, Japan) and Ivana Novak, (University of Copenhagen, Denmark). Other members of organizing committee are listed in Table 1.

The conference was held at Kuramoto Campus, the University of Tokushima during July 23-25, 2009. The places for symposium and poster presentations were at Nagai Memorial Hall and Information Plaza of the Graduate School of Pharmaceutical Sciences, respectively. In the opening ceremony on the 1st day, Dr. Toshihiro Aono, the president of the University of Tokushima, and Dr. Yuji Sano

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Table 1 Organizing Committee**1. Advisory Committee Members**

Barry E. Argent	First Department of Medicine, Institute for Cell and Molecular Biosciences, University of Newcastle upon Tyne, UK.
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Edward W. Gresik	Faculty of Medicine, The City University of New York Medical School, USA.
Shmuel Muallem	Department of Physiology, University of Texas Southwestern Medical Center, USA
*Ivana Novak	Department of Biology, University of Copenhagen, Denmark
Paul M. Quinton	Department of Pediatrics, School of Medicine, UCSD, USA
Irene Schulz	Department of Biology, University of Konstanz, Konstanz, Germany
Jeffrey J. Wine	Cystic Fibrosis Research Laboratory, Stanford University, USA

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David I. Cook	Department of Physiology, School of Medical Sciences, University of Sydney, Australia
Mike A. Gray	School of Cell & Molecular Biosciences, University Medical School, UK
Christoph Korbmayer	Institut für Zelluläre und Molekulare Physiologie Universität Erlangen-Nürnberg, Germany
Min Goo Lee	Department of Pharmacology, Institute of Gastroenterology, Yonsei University College of Medicine, Korea
Martin C. Steward	Faculty of Life Sciences, University of Manchester Core Technology Facility, UK

3. Domestic Committee Members (Japan)

Chikara Hirono	Department of Oral Physiology, Hiroshima University Graduate School of Biomedical Sciences
**Kazuo Hosoi	Institute of Health Biosciences, the University of Tokushima Graduate School
Kiyotoshi Inenaga	Department of Biosciences, Kyushu Dental College
Hiroshi Ishiguro	Laboratory of Human Nutrition, Nagoya University Graduate School of Medicine
Toru Ishikawa	Laboratory of Physiology, Department of Biomedical Sciences, Graduate School of Veterinary Medicine, Hokkaido University
Hiroshi Kido	Division of Enzyme Chemistry, The Institute for Enzyme Research, the University of Tokushima
Toshio Matumoto	Department of Medicine and Bioregulatory Sciences, Institute of Health Biosciences, the University of Tokushima Graduate School
Ryuji Matsuo	Department of Oral Physiology, Okayama University Graduate School of Medicine and Dentistry and Pharmaceutical Sciences
*Masataka Murakami	Nano-Structure Physiology, Center for Integrative Bioscience, NIPS, National Institute for Natural Sciences
Tetsuji Nakamoto	Department of Oral Functional Reconstruction, Kyushu Dental College
Hiroshi Shiota	Department of Ophthalmology, Institute of Health Biosciences, the University of Tokushima Graduate School
Saburo Sone	Department of Respiratory Medicine and Rheumatology, Department of Medical Oncology, Institute of Health Biosciences, the University of Tokushima Graduate School
Hiroshi Sugiya	Department of Physiology and Research Institute of Oral Science, Nihon University School of Dentistry at Matsudo
Taishin Takuma	Department of Biochemistry, School of Dentistry, Health Sciences, University of Hokkaido
Masato Yasui	Department of Pharmacology, Keio University School of Medicine

4. Local Acting Members (The host Department)

Tetsuya Akamatsu	Institute of Health Biosciences, the University of Tokushima Graduate School
Takahiro Hasegawa	Institute of Health Biosciences, the University of Tokushima Graduate School
Chenjuan Yao	Institute of Health Biosciences, the University of Tokushima Graduate School
Shinsuke Matsuo	Institute of Health Biosciences, the University of Tokushima Graduate School

** Chairman, * Vice Chair

(as a representation of Kamon Iizumi, the governor of Tokushima prefecture), a vice-director of the Department of Health Policy and Health Service, Tokushima Prefectural Government presented their message to the ISES participants. Mr. Hideki Hara, the Mayor of Tokushima City also sent the message of celebration *via* telegram.

The 11th ISES organizer planned to include 1 plenary lecture, 2 keynote lectures, and symposia and poster presentations in 6 relevant fields. The plenary lecture was delivered by professor Alan S. Verkman (University of California, San Francisco, USA) under the title of "*The many roles of aquaporins in mammalian physiology*," while 2 keynote lectures entitled "*Salivary gland and autoimmunity*" and "*The exocrine gland fluid secretion mechanism*" were given by professor Yoshio Hayashi (the University of Tokushima Graduate School, Japan) and professor James E. Melvin (University of Rochester Medical Center, USA), respectively.

All papers (oral and poster) were presented under following categories ; 1, *Development, Regeneration, and Tissue Engineering of the Glandular Tissue*, 2, *Response of the Glandular Tissue to Environmental Stress and Neural/Hormonal Control*, 3, *Aquaporin and Ion Channel/Transporter : Physiology and Disease (Symposium : Part-I & Part-II)*, 4, *Signal Transduction of the Glandular Tissue*, 5, *Membrane Trafficking and Molecular/Cellular Dynamics in the Exocrine Secretion*, 6. *Regulation of Exocrine Glands by Taste Stimulation (Ajinomoto-sponsored Symposium)*.

The ISES office received 35 symposium papers (oral presentation) and 45 papers for poster presentations besides a plenary and keynote lectures. Thirty three scientists from oversea and 117 from within the country attended the ISES. The participating countries were USA, Canada, England, Germany, Denmark, China, Korea, Australia, Russia, and Japan. During the period of the symposium, the committee members evaluated the posters. Five excellent posters, including the best one, were selected by the strict evaluation by committee members ; the poster awards were given to these presenters at the farewell party on the 3rd day. In the 3rd day afternoon the strong shower was fallen, but weather on the first and second days was very nice. The group photograph was taken on the 2nd day in front of the Nagai Memorial Hall (Fig. 1) and at the Tokushima Washington Hotel Plaza (Fig. 2). On July 26th, the ISES served the "After-Convention Tour," and those who want to attend the IUPS meeting visited several spots in Tokushima before leaving

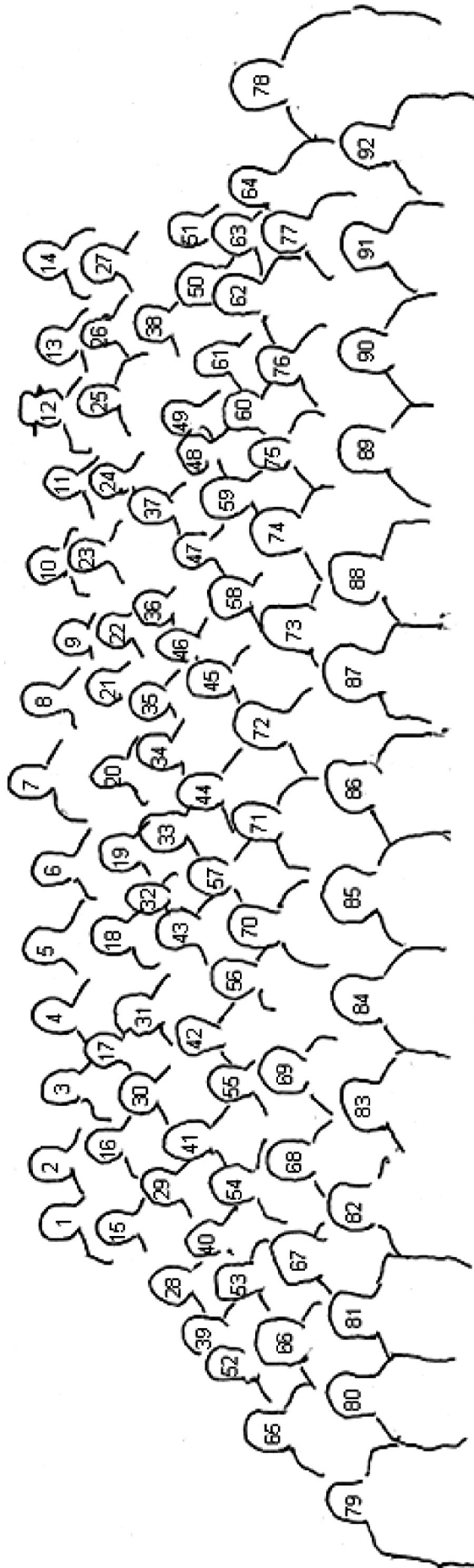
for Kyoto. The bus brought these participants to Kyoto after this excursion.

The organizing committee agreed to publish the proceedings of the 11th ISES. Fortunately, quite many participants approved to submit the proceedings, and we received 61 papers out of 83 presentations. We, the organizer, believe that this international symposium and its proceedings match expectations for presentations of the highest scientific merit and contribute to the development of new medical cures and the promotion of public health. We also hope that the tradition of this International Symposium series promoted by Dr. Young will be continued by coming generations.

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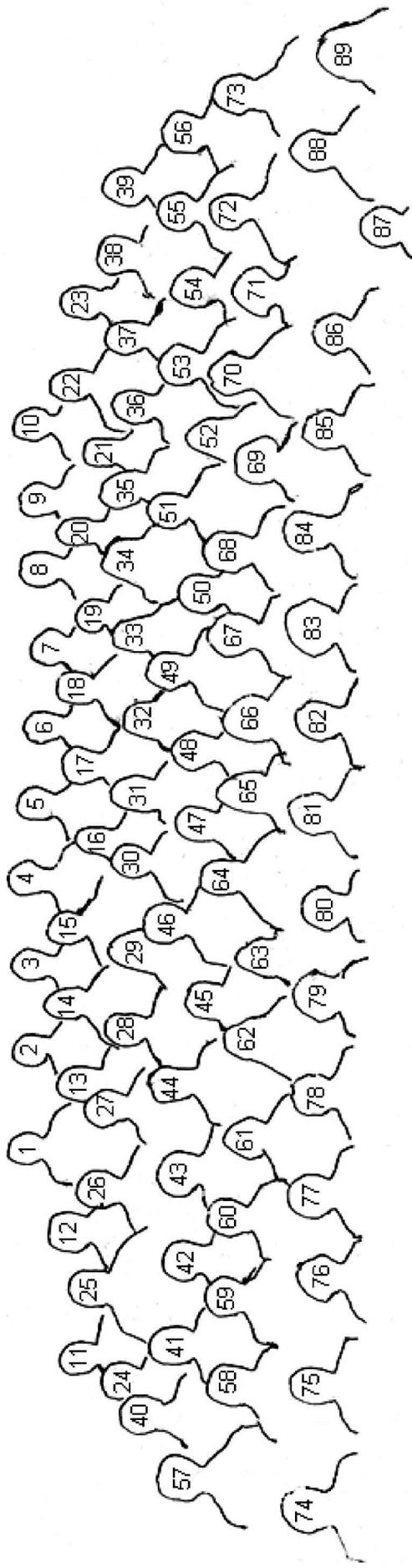




1. T Mukaiho	2. Y Kondo	3. K Satoh	4. T Hasegawa	5. T Iida	6. S Nakamura	7. AK Stewart	8. S Haerteis
9. Y Otsuki	10. Y Kitanaka	11. K Ishibashi	12. C Korbmacher	13. DI Cook	14. T Hayashi	15. M Kidokoro	16. MG Guo
17. C Wang	18. D Wang	19. S Ying	20. L Yi	21. M Tsukamoto	22. Y Sakane	23. M Yamaguchi	24. H Nakashima
25. JH Hanrahan	26. A Dinudom	27. Y Kadoya	28. T Morita	29. A Tanimura	30. A Nezu	31. J Leipziger	32. MV Sorensen
33. P Jawkhlani	34. P Potronnik	35. WA Kruger	36. S Hammami	37. M Hayashi	38. T Nakamoto	39. B Qi	40. JS Yoon
41. M Steward	42. G Chen	43. DL Bovell	44. J Putney	45. Y Sahara	46. SL Alper	47. H Ishiguro	48. K Park
49. N Koyama	50. M Kashimata	51. MA Catedral	52. S Ko	53. S Mualllem	54. MG Lee	55. Y Hieda	56. A Shitara
57. Y Hayashi	58. Y Shiba	59. C Hirono	60. H Ichikawa	61. A Inagaki	62. T Naurita	63. H Uneyama	64. N Yamada
65. T Hosoi	66. S Hashimoto	67. A Ahmad	68. C Yao	69. Y Ishikawa	70. L Tradtrantip	71. S Naruse	72. Y Seo
73. M Fukushima	74. O Katsumata-Kato	75. J Yoshigaki	76. H Sugiya	77. M Kawai	78. VA Zolotarev	79. S Matsuo	80. Y Hiroshima
81. T Akamatsu	82. K Inenaga	83. Y Hayashi	84. E Gresik	85. AS Verkman	86. K Hosoi	87. I Novak	88. M Murakami
89. IS Ambudkar	90. J Melvin	91. A San Gabriel	92. M Fukano				

Fig. 1 Group photograph taken in front of the Nagai Memorial Hall





1. A Dinudom	2. Y Mitoh	3. T Hasegawa	4. T Nakamoto	5. S Ko	6. A Tanimura	7. O Kato	8. T Mukaibo
9. S Nakamura	10. T Hayashi	11. H Sugiya	12. Y Seo	13. DI Cook	14. MV Sörensen	15. J Putney	16. B Putney
17. Y Hayashi	18. Y Sahara	19. MA Cátalan	20. Y Kondo	21. M Kidokoro	22. M Yamaguchi	23. M Hayashi	24. K Satoh
25. P Poronnik	26. C Kobmacher	27. M Steward	28. S Naruse	29. J Purejav	30. D Wang	31. L Yi	32. Y Song
33. C Wang	34. S Hammami	35. B Qi	36. H Nakashima	37. C Hirono	38. A Nezu	39. VA Zolotarev	40. WA Kruger
41. T Hosoi	42. G Chen	43. S Matsuo	44. MG Guo	45. A Ahmad	46. JS Yoon	47. C Yao	48. A Shitara
49. H Ishiguro	50. D Bovell	51. DL Bovell	52. N Koyama	53. Y Kadoya	54. M Kawai	55. Y Hieda	56. H Uneyama
57. AK Stewart	58. H Ichikawa	59. Y Shibukawa	60. J Yoshigaki	61. S Hashimoto	62. M Fukushima	63. M Fukano	64. JH Hanrahan
65. L Tradtranítip	66. Y Ishikawa	67. K Ishibashi	68. MG Lee	69. IS Ambudkar	70. M Kashimata	71. A San Gabriel	72. SL Alper
73. T Morita	74. T Akamatsu	75. K Inenaga	76. M Murakami	77. M Murakami	78. J Melvin	79. I Novak	80. K Hosoi
81. K Hosoi	82. T Aono	83. AS Verkman	84. J Leipziger	85. S Muallem	86. E Gresik	87. R Narita	88. T Narita
89. M Narita							

Fig. 2 Group photograph taken at Tokushima Washington Hotel Plaza

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