

**Proceedings**  
**International Symposium on Medicinal and Useful Plants**  
**in Pharmaceutical and Biomedical Sciences**  
**between Japan - Nepal – Turkey - Italy**

薬学・生命科学分野における薬用・有用植物に関する4国間国際シンポジウム

**June 1-2, 2024**

主催：熊本大学薬学部

共催：4国間（日本・ネパール・トルコ・イタリア）国際シンポジウム組織委員会

組織委員長（共同）：渡邊高志、藤田美歌子

事務局：漢方・生薬「温故知新」講座組織委員会

会場：熊本大学薬学部宮本記念館（熊本市中央区大江本町5-1）

**Organizer: School of Pharmacy, Kumamoto University**

**International Symposium on Medicinal and Useful Plants in Pharmaceutical  
and Biomedical Sciences**

**between Japan - Nepal – Turkey - Italy**

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**Welcome Message**

1 June 2024

Dear Delegates:

On behalf of the Organizing Committee, I welcome you all to International Symposium on Medicinal and Useful Plants in Pharmaceutical and Biomedical Sciences between Japan - Nepal – Turkey – Italy

The foundation of the Symposium is JSPS Bilateral Joint Research Project (2016-2017) “Development of inducers of anti-viral host factors based on Turkish medicinal plants and synthetic compounds”. The Project is borderless, involving virologists, molecular biologists, medicinal botanists, natural product chemists, synthetic organic chemists, and bioorganic medicinal chemists between Japan to Nepal – Turkey - Italy sides.

The horizon of the Symposium is endless and limitless. We welcome all discipline of pharmaceutical and biomedical sciences. We welcome very active discussion from participants of many countries.

Let's kick off the global joint research with this Symposium.

**Takashi Watanabe**

Department of Medicinal Plants, School of Pharmacy  
*Kumamoto University, Japan.*

**Mikako Fujita**

Department of Bioorganic Medicinal Chemistry, School of Pharmacy,  
*Kumamoto University, Japan.*

**Stefano Dall'Acqua**

Department of Pharmaceutical and Pharmacological Sciences,  
*University of Padova, Italy.*

**International Symposium on Medicinal and Useful Plants in Pharmaceutical  
and Biomedical Sciences**

**between Japan and Nepal – Turkey - Italy**

**Date:** June 1 (Sat.) - 2 (Sun.), 2024

**Venue:** Miyamoto Memorial Hall 1F, School of Pharmacy, Kumamoto University,  
5-1 Oe-honmachi, Chuo-ku, Kumamoto 862-0973, Japan

**Organizer:** School of Pharmacy, Kumamoto University

**Organizing Chair:** Prof. Takashi Watanabe, PhD.

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**Prof. Mikako Fujita, PhD.**

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**Co-Organizer:** Stefano Dall'acqua, PhD.

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Supported by Kumamoto Organizing committee of the course on KAMPO Medicine  
and Herbal Medicine 'Learning from the past'.

Co-Organized by the Organizing Committee of the Quadripartite  
(Japan, Nepal, Turkey and Italy) International Symposium.

## **Program Schedule**

### **Day 1: June 1 (Sat.)**

#### **12:00 Reception**

#### **12:30 Opening remarks**

Prof. Takashi Watanabe

School of Pharmacy, Kumamoto University, Japan

#### **12: 45-13:00 Overview Remarks**

Dr. Stefano Dall'acqua, *University of Padova, Italy*

### **Symposium Session I.**

#### **Pharmaceutical Sciences Zone**

S-1	13:10 – 13:40	<b>Residues of By-products as Natural Phenolic Sources</b> <u>Prof. Dr. Nazim Sekeroglu</u> <i>University of Gaziantep, Turkey</i> Zoom Online Invited Lecture -1
S-2	13:40 – 14:10	<b>Reconstruction of Natural Product Scaffolding</b> <u>Emeritus Prof. Dr. Masami Otsuka</u> Department of Medicinal and Biological Chemistry <i>Kumamoto University, Japan</i>
S-3	14:10 – 14:40	<b>Plant Resources and Human Life for a Sustainable Planet: Geospatial Insights into Conservation and Management</b> <u>Prof. Dr. Takashi Watanabe</u> Department of Medicinal Plant <i>Kumamoto University, Japan</i>
S-4	14:40 – 15:10	<b>Design, Synthesis and Structural Studies on New Anti-HIV Compounds Based on a Plant Product Phytic Acid</b> <u>Dr. Belgin Sever, Dr. Halilibrahim Ciftci</u> Department of Medicinal and Biological Chemistry <i>Kumamoto University, Japan</i>
	15:10 – 15:30	Coffee Break * 20 min
S-5	15:30 – 16:00	<b>Efficient Strategies for Unraveling Precise Taxonomic Relationships among Medicinal and Useful Plants</b> <u>Ms. Eranga Pawani Witharana</u> Analytical Research Center for Experimental Sciences <i>Saga University, Japan</i>
S-6	16:00 – 16:30	<b>Medicinal and food plants: discovery and development of new ingredients for the food supplements and functional foods</b> <u>Prof. Dr. Stefano Dall'acqua</u> <i>University of Padova, Italy</i> Zoom Online Invited Lecture -2

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S-7	16:30 – 17:00	<b>Antiproliferative Activity of Saponin Compounds Isolated from <i>Aster yomena</i> against Human Gastric Cancer Cell Lines</b> <u>Mr. Dongxing Wang</u> Department of Medicinal Plant Kumamoto University, Japan
S-8	17:00 – 17:30	<b>Phytochemical Compounds of Himalayan Ethnomedicinal Plants of Nepal for Cancer Treatment</b> <u>Dr. Shyam Sharan Shrestha</u> Himalayan Research and Development Center Nepal, Kathmandu, Nepal

**Day 2: June 2 (Sun.)**

**Symposium Session II.**  
**Botanist Zone & Biomedical**

S-9	10:00 – 10:30	<b>Hepatoprotective effects of <i>Osbeckia octandra</i></b> <u>Dr. Sudarma Bogahawaththa</u> Department of Advanced Lifesciences and Food Chemistry Saga University, Japan
S-10	10:30 – 11:00	<b>Genome analysis reveals insights into the genetic diversity of edible and medicinal plants</b> <u>Associate Prof. Dr. Yukio Nagano</u> Analytical Research Center for Experimental Sciences Saga University, Japan
S-11	11:00 – 11:30	<b>Development and application of thin film device for agriculture</b> <u>Prof. Dr. Tokiyoshi Matsuda</u> Faculty of Science and Engineering Kindai University, Japan
S-12	11:30 – 12:00	<b>When Medicinal Plants meet Humanity: Traditional Spagyric medicine in Italy</b> <u>Ms. Mio Takahashi</u> Department of Environmental Humanities Ca' Foscari University of Venice, Italy
	12:00 – 13:00	Lunch Break

**Poster Presentation Session (13:00 – 14:00)**

**Coordinator; Dr. Koji Sugimura**

Department of Medicinal Plant, School of Pharmacy, Kumamoto University, Japan.

*E-mail: sugimura@kumamoto-u.ac.jp*

P-1	<b>Comparison of the Bioactivity Evaluation and Active Constituents of Fudanso, a Traditional Vegetable of the Daylily Family, and Related Plants</b> Mr. Taisei Hayashi <i>Kumamoto University, Japan</i>
P-2	<b>Studying on the constituents of aerial parts of Genus <i>Vitis</i> (Fam. Vitaceae) and the evaluation of their physiological activities</b> Mr. Yuta Hosogoe <i>Kumamoto University, Japan</i>
P-3	<b>Comparison of Evaluation of Bioactivity and Active Components in Different Growth Environments of <i>Heracleum sphondylium</i> L. var. <i>nipponicum</i> (Kitag.) H.Ohba</b> Mr. Taishi Ikagawa <i>Kumamoto University, Japan</i>
P-4	<b>Compositional Analysis of Higo Peony (<i>Paeonia lactiflora</i>) and Comparison with Marketed Products</b> Mr. Genki Hidaka <i>Kumamoto University, Japan</i>
P-5	<b>Functionality evaluation about leaf of Higo peonies (<i>Paeonia lactiflora</i>)</b> Mr. Masatomo Yamauchi <i>Kumamoto University, Japan</i>
P-6	<b>Therapeutic Significance of the Medicinal Plant <i>Ecballium elaterium</i>, a Review</b> Mr. Berkay Beyri <i>Altinbas University, Turkey</i>
P-7	<b>Pyrimidine-Based New Thiazoles as Potential Anti-Lung Cancer Agents</b> Dr. Halilibrahim Ciftci <i>Kumamoto University, Japan</i>
P-8	<b>Corn-Starch Based Gel Polymer Electrolyte for Improving of Electrochemical Double Layer Supercapacitor</b> Dr. Sirin Siyahjani Gultekin <i>Ege University, Turkey</i>
P-9	<b>Development of a Man-made Phosphoinositide with Prodrug Groups</b> Mr. Takuya Masunaga <i>Kumamoto University, Japan</i>
P-10	<b>Design, Synthesis and <i>In Vitro</i> Determination of Anticancer Effects of New Naphthalene Bearing Pyrazoline Compounds</b> Dr. Belgin Sever <i>Kumamoto University, Japan</i>

Guidelines for Poster Presentation

- Poster size: B0 Potrait, (1030 mm width x 1456 mm height)
- Venue: Conference Room of Miyamoto Memorial Hall
- Posting Date and time: June 2 (Sun.), 12:00 – 17:00 (Posters should be set up by 12:00)

**Symposium Session II. (Continue)**

**Botanist Zone & Biomedical**

S-13	14:00 – 14:30	<b>Epidemic Risk Assessment of Mosquito-Borne Infectious Diseases and Potential Use of Plants for Mosquito Control</b> <u>Prof. Dr. Mayuko Yonejima</u> Faculty of Humanities and Social Sciences <i>Kumamoto University, Japan</i>
S-14	14:30 – 15:00	<b>Biologically Active Triterpenes Found by Screening and Derivatization</b> <u>Prof. Dr. Mikako Fujita</u> Department of Medicinal and Biological Chemistry <i>Kumamoto University, Japan</i>
	15:00 – 15:30	Coffee Break
S-15	15:30 – 16:00	<b>Unveiling Nature's Pharmacy: Habitat Suitability Modeling for Medicinal Plants Using Machine Learning Techniques</b> <u>Prof. Dr. Aedla Raju</u> <sup>1</sup> Vishnu Educational Development and Innovation Centre (VEDIC), Aziz Nagar, Moinabad, <i>Hyderabad, Telangana, India</i> <sup>2</sup> BVRIT HYDERABAD College of Engineering for Women (BVRITH), Bachupally, <i>Nizampet, Hyderabad, India.</i> Zoom Online Invited Lecture-4
S-16	16:00 – 16:30	<b>Turkish Plants, Including Quercetin and Oenothien B, Inhibit the HIV-1 Release and Accelerate Cell Apoptosis</b> <u>Mr. Wright Ofotsu Amesimeku</u> Department of Microbiology <i>Kumamoto University, Japan</i>
S-17	16:30 – 17:00	<b>Medicinal Plants an Important Resource of Nepal for Future Generation</b> <u>Prof. Dr. Sangeeta Rajbhandary</u> Central Department of Botany <i>Tribhuvan University, Nepal</i> Zoom Online Invited Lecture-5

**17:00 Closing remarks**

Prof. Takashi Watanabe

School of Pharmacy, Kumamoto University, Japan