

森林医学研究会企画シンポジウム（自由集会）

森林医学研究における国際的最近動向と将来像

座長：李 卿（日本医科大学大学院リハビリテーション学分野／森林医学研究会代表世話人）

— 開催趣旨 —

本研究会は、2007年3月に大阪国際交流センターで発足して以来13年経ちました。これまで以下のシンポジウムを企画・開催した。

- 1) 第77回日本衛生学会総会（2007年大阪）において「科学的視点から森林浴の癒し効果を検証する」というシンポジウム、
- 2) 第78回総会（2008年熊本）において「日本・韓国ならびに世界の森林浴研究動向」という国際シンポジウム、
- 3) 第79回総会（2009年東京）において「森林の健康影響メカニズムをさぐる」というシンポジウム、
- 4) 第81回総会（2011年東京）において「予防医学の視点から森林セラピーの健康増進・疾病予防効果を検証する」というシンポジウム、
- 5) 第82回総会（2012年京都）において「INFOM発足と森林医学研究会とのコラボレーション」という国際シンポジウム、
- 6) 第83回総会（2013年金沢）において「森林セラピーの臨床応用と個人差」というシンポジウム、
- 7) 第88回総会（2018東京）において「森林医学研究における国内外の最新動向」という国際シンポジウムをINFOM (International Society of Nature and Forest Medicine: <http://infom.org/>) と共同で開催した。

今回は森林医学研究会主催シンポジウムとして森林医学研究の最新動向と将来像について企画し、日本、ドイツ、中国及び国際的視点から発表する。

1. The Role and Activity of INFOM: Application of Forest to Health Promotion
Hiroko Ochiai, Michiko Imai, Toshiya Ochiai, Qing Li
Department of Plastic and Reconstructive Surgery, National Hospital Organization Tokyo Medical Center, Tokyo, Japan
2. Forest and Health: Current Status, Discussion, and Initiatives in Germany
Melanie H. Adamek
OPTIMUM Medien & Service GmbH Tumblingerstraße 14 80337 München, Germany
3. Research on forest therapy and development of forest therapy industry in China
Yong Chen
Hubei Provincial University, Hubei, China
4. The new trends of forest medicine research and the future development of forest medicine
Qing Li
Department of Rehabilitation and Physical Medicine, Graduate School of Medicine,
Nippon Medical School, Tokyo, Japan

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SCM1-1 INFOM の役割と活動：健康増進への森林利用

おちあい ひろこ
落合 博子¹、今井 通子²、落合 俊也³、李 卿⁴
(¹ 国立病院機構東京医療センター形成外科、² 榊ル・ベルソー、東京農業大学、³ 榊森林・環境建築研究所、⁴ 日本医科大学付属病院リハビリテーション科)

Researchers have attempted to identify the preventive effects of forests against diseases. Thus, International Society of Nature and Forest Medicine (INFOM) was formed in Japan in 2010 to advance Forest Medicine in an effort to contribute to health, welfare and integrated medical care. This scientific committee consists of approximately 20 researchers from 14 countries worldwide.

In INFOM, there are two main activities. One is : "Walking Forest Therapy Roads[®] with a doctor" since 2013. The event will allow subjects to efficiently experience the medically proven healing effects of forests through forest-based activities. And the other is : "ESD and LH for children" since 2014. Children can learn that they get relaxed and become healthy by walking in the forest, the relations with the environmental problem of multiple functions of the forest and how to use woods and how woods are used in local communities.

In addition, an annual international seminar and workshop was held for the first time in 2018. The participants learned how to conduct health checks and let people walk in a forest. The participating doctors were certified as "International Medical Specialist in Forest Medicine". There are currently 13 international medical specialists in forest medicine: 11 from Japan and 1 each from Sri Lanka, Singapore, Germany, Serbia and Finland.

INFOM is trying to use forest medicine for the treatment of the patient other than preventive medicine. It is advantageous, because medical doctors play key roles in INFOM. In addition, we aim for many people becoming able to use forest therapy for their health by becoming the insurance adaptation in the future.

SCM1-2 Forest and Health: Current Status, Discussion, and Initiatives in Germany

Dr. Melanie H. Adamek
(OPTIMUM Medien & Service GmbH Tumblingerstraße 14
80337 München, Germany)

Although Germany has a long history in naturopathy and natural remedies (phytotherapy), the terminology forest bathing and therapy have not yet been officially established. Nevertheless, two of the best-known representatives of this study are Hildegard von Bingen and pastor Sebastian Kneipp. Between 1150 and 1160, Bingen worked on two practical guides to nature and healing which still maintain great popularity today. Sebastian Kneipp (1821 to 1897) is the namesake of the world-famous Kneipp medicine, a treatment process that includes water applications, plant ingredients, exercise in nature, and nutrition recommendations. The Kneipp forest path in the spa town of Bad Wörishofen includes various stations with intriguing information about the forest, surrounding plants and various animals – all relating to his five elements theory. Generally, nature and its contribution to one's overall wellbeing remains an integral part of the German prevention, rehabilitation and health care (spa) system, often defined by „localized remedies and therapies“. Consequently, the forest itself also plays a key role. Germany has a long history in natural and environmental education exemplified by the widely popular concept of Forest Kindergartens found throughout Germany. Nevertheless, there is no established forest therapy to this day, and forest bathing and therapy as such remain in the hands of individuals and private providers with varying concepts. The formal introduction of forest therapy remains highly controversial, primarily because of the plethora of altering views and conflicting interests between so called white and green professions. The presentation Forest and Health: Current Status, Discussion, and Initiatives in Germany will give a first introduction and overview to this topic.

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SCM1-3 Research on forest therapy and development of forest therapy industry in China

Prof. Yong Chen
(Hubei Provincial University, China)

China has a vast land area. Due to different natural conditions and a wide variety of plants, the forest types are very rich. There are 124.6 million hectares of forest in China, with an average per capita area of about 0.107 hectares. China's forest stock is 9.14 billion cubic meters, about 8 cubic meters per capita, which is less than the world average. Therefore, how to use forest resources reasonably, fully tap the role of forest on human health, so as to make scientific and reasonable use of forest to achieve the purpose of forest protection, is the power and purpose of forest therapy research.

The development of forest therapy industry in China is not very uniform from the regional perspective, among which Sichuan, Hunan and Guizhou are the three provinces with the most rapid development of forest health industry, and the output value is more than 10 billion yuan. Jiangxi, Zhejiang, Beijing, Shanxi and other provinces are the second echelon of industrial development, with the output value ranging from 1 billion yuan to several billion yuan. In addition, the development of forest therapy industry in other provinces is basically in the initial stage, and has not yet generated relevant income.

From the perspective of forest therapy research, a relatively unified forest therapy standard system and talent training system have not yet been formed. The forest therapy research committee of the World Federation of traditional Chinese Medicine Societies is developing a set of forest therapy standards for more than 70 member countries that are suitable for the development of each country and have the characteristics of traditional Chinese medicine. We sincerely hope that all countries will be interested in the forest therapy industry. Many experts, scholars and enterprises have joined us, so that forest therapy really contributes to human health well-being!

SCM1-4 Shinrin Yoku in Ireland

Aran Tomac
(Health Service Executive West, Community Healthcare Organisation Area 3, Child and Adolescent Mental Health Services Clare, Republic of Ireland.)

This presentation will give you an overview and insight of the current situation of Shinrin Yoku and forest therapy in Ireland. It will provide with the information regarding new research and practice plans and developments currently under way. The Republic of Ireland government has recognised the is investing in development and protection of forests in the country to provide accessible, daily recreation in natural setting, Promote physical health & general well-being – proven medically, Focus for community activity, creativity & events, Environmental 'services' – water, biodiversity, carbon footprint reduction. There is a strong focus on ecosystem services – water & soil, biodiversity, landscape, and amenity. Government promotes sustainable forestry through various projects. From the health, mental health and wellbeing point of view the one of the most interesting projects is the NeighbourWood Scheme - Attractive woodlands developed for public use & enjoyment, near where people live; Range in size & location: small pockets in & around housing estates & public parks, larger woodlands in city greenbelts, 'green fingers' & along urban fringe, woodlands in more rural setting. Part of the neighbourhood (i.e. 'neighbourwood'), used on a daily basis by local people. Scientific evidence, research and clinical experience is the main foundation of the policy and of the development plans. Overall positive direct and indirect effects on physical health, mental health and wellbeing are primary outcome measures.

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SCM1-5 森林医学研究の最新動向及び将来像

李 卿

(日本医科大学大学院リハビリテーション学分野／森林医学研究会代表世話人)

Shinrin in Japanese means 'forest', and *yoku* means 'bath'. So *shinrin-yoku* means bathing in the forest atmosphere, or taking in the forest through our senses. This is not exercise, or hiking, or jogging. It is simply being in nature, connecting with it through our sense of sight, hearing, taste, smell and touch. *Shinrin-yoku* is like a bridge. By opening our senses, it bridges the gap between us and the natural world.

To explore the effects of forest bathing/*Shinrin-yoku* on human health, the Japanese Society of Forest Medicine was established in March 2007 in Osaka, Japan. Now it has been passed for 13 years. During the 13 years, we have organized 7 symposiums on Forest Medicine so far. In the present study, I will review the new trends of forest medicine research and the future development of forest medicine in the world.

Since 2004, I have started the research on forest medicine and got many evidences on the effects of forest bathing/*Shinrin-yoku* on human health. The book of *Shinrin-Yoku* was published by Penguin Random House UK on April 5, 2018. The book also was published in USA under the title of *Forest Bathing* on April 17, 2018 by Viking Books.

The book has been decided to translate into 1.French, 2.Spanish, 3.Dutch, 4.German, 5.Italian, 6.Russian, 7.Portuguese, 8.Hungarian, 9.Czech, 10.Slovak, 11.Polish, 12.Bulgarian, 13.Finnish, 14.Chinese Complex, 15.Danish, 16.Swedish, 17.Estonian, 18.Thai, 19.Romania, 20.Simplified Chinese, 21.Korean, 22. Slovenia, 23.Lithuania, 24.Turkish, 25. Japanese.

Why *Shinrin-Yoku/Forest bathing* is so popular in the world? Because *Shinrin-Yoku/Forest Bathing* has developed from a feeling to a science

Based on the above background, I would like to propose the following international collaborations on Forest Medicine in the future.

1. To expand the philosophy of Forest Medicine in the world.
2. To verify the preventive effects of Forest Medicine on lifestyle-related diseases in the world.
3. To establish an international certification system for Forest Medicine specialist and Forest Therapist.
4. To establish the *Shinrin-yoku/Forest bathing* as a treatment for some lifestyle-related diseases.
5. To apply the *Shinrin-yoku/Forest bathing* in rehabilitation medicine.

演者略歴

SCM1-1 落合 博子 (おちあい ひろこ)

国立病院機構東京医療センター形成外科

Dr. Hiroko Ochiai (Ph.D.,M.D.), now is a chief in Department of Plastic and Reconstructive Surgery and chief in Laboratory of Regenerative Medicine of National Hospital Organization Tokyo Medical Center, Tokyo, Japan. She has been a member of INFOM (International Nature and Forest Medicine) and became an International Medical Specialist in Forest Medicine in 2019. She has carried out several experiments about the forest medicine and published the articles so far.

SCM1-2 Dr. jur. Melanie H. Adamek

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From 1992 to 1997: Ludwig Maximilian University Munich School of Law, master and doctoral studies at the chair of public law of the LMU Munich, with Prof. Dr. jur. HansJürgen Papier (President of the Federal Constitutional Court from April 2002 to March 2010).

1997: Successful graduation: Lawyer, Dr. jur.

From 1997 to 2001: Actively practiced law with her own firm (private practice), Munich, Germany. Functioned as corporate lawyer at Wolters Kluwer Germany, as well as managing director of the specialized publishing house R. S. Schulz, Percha, Germany
2001: Private practice continued. Founder and managing director of the publishing company OPTIMUM Medien & Service GmbH, Munich, Germany. Focus: Publications for statutory health insurance. Health communication in the field of public health, especially health promotion and prevention

From 2017: Established a publishing program for effective communication strategies on topics centered around forest and health to targeted audiences, such as large players within the health care system, related professionals, as well as other interest groups

SCM1-3 Chen Yong, Ph. D.

Professor at Hubei Provincial University

The chairman of both Hubei Province Key Laboratory of Biotechnology of Chinese Traditional Medicine, National & Local Joint Engineering Research Center of High-throughput Drug Screening Technology, and Hubei Province Key Laboratory of Biotechnology of Traditional Chinese Medicine.

The member of national organic analysis committee

The president of World Federation of Chinese Medicine Societies of Forest Health Research Committee

The president of Hubei province Forest Health Research Committee.

Research interests: The safety evaluation of traditional Chinese medicine and the pharmacokinetics of traditional Chinese medicine.

SCM1-4 Aran Tomac, MD, PhD

Health Service Executive West, Community Healthcare Organisation Area 3, Child and Adolescent Mental Health Services
Clare, Republic of Ireland.

2016 – present

Consultant Psychiatrist - Child and Adolescent Mental Health Services

Health Service Executive West, Community Healthcare Organisation Area 3, Child and Adolescent Mental Health Services
Clare, Republic of Ireland.

2011 – 2016

Specialist in Child and Adolescent Psychiatry (Consultant)

Department of Child and adolescent psychiatry and psychotherapy, Clinic for Psychological Medicine, University Hospital
Centre Zagreb, Zagreb, Republic of Croatia

2009 – 2011

Specialist in Psychiatry, subspecialist training in Child and Adolescent Psychiatry

Department of Child and adolescent psychiatry and psychotherapy, Clinic for Psychological Medicine, University Hospital
Centre Zagreb, Zagreb, Croatia

2006 – 2009

Specialist in General Psychiatry (Consultant) (Full time, permanent contract)

Crisis Intervention and Suicide Prevention Centre, Department of Psychiatry, University Hospital Centre Zagreb, Republic of
Croatia.

SCM1-5 李 卿 (り けい)

日本医科大学大学院リハビリテーション学分野／森林医学研究会代表世話人

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国際自然・森林医学会副会長・事務局長

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1992年鹿児島大学医学博士、2012年日本医科大学准教授、2015年日本医師免許取得、臨床研修を経て、

2018年日本医科大学付属病院リハビリテーション学科医師

著書 1. Forest Medicine, 2012年米国出版、中国語と韓国語に翻訳

2. Shinrin-Yoku/Forest Bathing、2018年に英国と米国出版、25言語に翻訳され、30以上の国で出版

受賞 平成22年度日本医科大学賞

平成18年度日本産業衛生学会奨励賞

平成18年度日本医科大学医学会奨学賞

