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In Memory of Professor Joon Young Song

Sung-Ae Kim, Myung Jin Lee and Young Wook Ryoo[†]

Department of Dermatology, School of Medicine, Keimyung University, Daegu, Korea



Photograph of Professor

Joon Young Song

Professor Joon Young Song was a dermatologist who exhibited extraordinary dedication to medical education in the Daegu-Gyeongbuk region. After graduating from Kyungpook National University School of Medicine in 1958, he obtained his dermatology specialist certification in 1962. From 1966 onwards, Professor Joon Young Song guided future generations at Keimyung University Dongsan Hospital for 33 years. He also conducted research in mycology and leprology and, notably, dedicated his life to treating patients with leprosy in the Daegu-Gyeongbuk region. Professor Joon Young Song contributed to the development of mycology and leprology in Korea, following the footsteps of Professor Soon Bong Suh in the Daegu-Gyeongbuk region.

Key Words: Joon Young Song, Medical mycology

I INTRODUCTION

Professor Joon Young Song was a dermatologist who served as chair in the Dermatology Department at Keimyung University Dongsan Hospital and was a professor at Keimyung University School of Medicine. He was born in 1933 and graduated from Kyungpook National University School of Medicine in 1958. After completing his master's degree at Kyungpook National University Graduate School of Medicine in 1960, Professor Song obtained his Doctor of Medicine degree in 1966. Between 1958 and 1961, he trained as a resident in the Department of Dermatology at Kyungpook National University School of Medicine Hospital. From 1966 to 1999, he served as a professor in Dongsan Christian Hospital, which was renamed as Keimyung University Dongsan Hospital in 1980, and in Keimyung University School of Medicine,

where he dedicated his time to the education of future generations of dermatologists and to research and treatment in the fields of mycology and leprosy. Furthermore, Professor Song played a pivotal role in the advancement of the Korean Dermatological Association and Keimyung University Dongsan Hospital. This biography is written to honor the life and academic achievements of Professor Song.

II. CAREER

Between 1958 and 1961, while training as a resident in the Department of Dermatology at Kyungpook National University School of Medicine Hospital, Professor Song conducted outreach treatment of patients with leprosy. After serving as a military physician, he worked as a full-time physician in The

Phone: +82-53-258-4561, Fax: +82-53-258-4566, e-mail: ryoo111@dsmc.or.kr

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[†]Corresponding: Young-Wook Ryoo, Department of Dermatology, School of Medicine, Keimyung University, 1095 Dalgubeol-daero, Dalseo-gu, Daegu 42601, Korea.



Leprosy Mission Hospital from 1965 to 1966. Following the establishment of Department of Dermatology in Dongsan Christian Hospital in July 1966, Professor Song was appointed as the first department chair, marking the beginning of the history of the Department of Dermatology in Keimyung University School of Medicine. Professor Song trained on the latest knowledge on leprosy and mycology in the Department of Dermatology at the University of Pennsylvania Hospital and Medical Center in 1971 and conducted shortterm training on leprosy treatment and management as a Sasakawa Foundation scholarship student in the Japan Leprosy Research Institute in 1977. From 1973 to 1987, he also served as the mandatory department chair of Daegu Aerak Health Hospital, a leprosy treatment and nursing institution established by missionaries. Therefore, after serving as the head professor and department chair from his first appointment in 1966 until 1981, Professor Song honorably retired after holding the positions of assistant professor, associate professor, and professor in the department for 33 years from 1966 to 1999. After retirement, he served in the Korean Hansen Welfare Association and spent the rest of his life traveling around the Daegu-Gyeongbuk region, providing mobile treatment for patients experiencing difficulty accessing medical care.

III. ACADEMIC ACHIEVEMENTS

1. Academic achievements in mycology

In 1961, Professor Song conducted a survey on tinea capitis in students attending elementary school in Ulleungdo¹ and reported several cases such as "Two cases of cutaneous sporotrichosis" in 1964 and "The observation of airborne fungi" in 1965, which investigated fungi falling in the air by altitude using an airplane. He published an article entitled "Antifungal effects of griseofulvin to various dermatophytes" in 1965, "A case of multiple fungous infection of the skin"⁵ in 1965, and "A case of cutaneous candidiasis similar to impetigo"⁶ in 1985. Professor Song's other publications in mycology include "Tinea corporis occurring in one family caused by *Trichophyton verrucosum*" in 1989, "Clinical and mycological studies on dermatophytosis during a 6-year period"8 in 1993, "Three cases of fixed cutaneous sporotrichosis confined to the face" in 1993, and "A case of primary disseminated cutaneous aspergillosis in chronic active hepatitis" in 1995. Even after his retirement, Professor Song continued to conduct research in collaboration with the Dermatology Department of a University Hospital in the Daegu area at Jesus Clinic. His last published paper was entitled "The compliance of oral antifungal therapy in patients with toenail onychomycosis in the Daegu area: comparison between terbinafine continuous therapy and itraconazole pulse therapy", published in 2002¹¹.

2. Academic achievements in leprology

In the 1950s, leprosy was an important disease that resulted in physical disability and deformity due to the invasion of skin and nerve tissues by leprosy bacilli, leading to the isolation of patients from society. During the Japanese colonial period, patients with leprosy were collectively treated in isolated locations such as Sorok Island. In the Daegu-Gyeongbuk region, with the assistance of the United Kingdom, the Gura Mission and Aerakwon not only implemented treatment and prevention measures for leprosy but also worked towards the protection of rights, welfare, and rehabilitation of patients with leprosy. Professor Song began his work on the treatment and research involving patients with leprosy in the Gyeongbuk region early in these two institutions. Starting with an article entitled "Therapeutic effects of D.D.S for leprosy on the basis of bacillary index" in 1962, he published articles entitled "Curative effect of tubercin-3 on two severe cases of lepromatous leprosy" 13 in 1975, "T-lymphocyte distribution in peripheral blood of lepromatous leprosy" 14 in 1977, and "Distribution of T-lymphocyte and immunoglobulin in peripheral blood of healthy household contacts of leprosy patients" 15 in 1979. Other articles of Professor Song are "Fractional quantitation of serum beta-lipoprotein in lepromatous leprosy"16 in 1979, "A case of lepromatous leprosy with nodular lepromata on the sclera" in 1979, "Histocompatibility antigens in leprosy" 18 in 1980, "Trial of immunotherapeutic approach with tubercin-3 on lepromatous leprosy" 19 in 1981, "Recent trends of leprosy patients in dermatologic clinics (1976~1979)"20 in 1981, "Serum testosterone levels in leprosy patients²¹ in 1981, "Serum angiotensin-converting enzyme levels in leprosy patients"22 in 1984, "Levels of urinary neopterin in patients with lepromatous leprosy and patients with erythema nodosum leprosum"23 in 1988, "A case of borderline tuberculoid leprosy with type 1 reaction"²⁴ in 1990, "Serum lipid peroxide in leprosy patients" in 1992, and "HLA phenotypes in Korean lepromatous leprosy patients" 26 in 1993. Professor Song also published the following articles on the application of polymerase chain reaction, latest research technique of the time, in leprosy: "A case of histoid leproma with Mycobacterium leprae detected in the peripheral blood by polymerase chain reaction"27 in 1994, "Detection of Mycobacterium leprae in tissue and blood by polymerase

chain reaction"²⁸ in 1994, and "Clinical analysis of patients who completed MDT treatment"²⁹ in 1996.

3. Academic achievements in molecular biology and diverse diseases

Professor Song published numerous articles based on molecular biology experiments and notable cases of diverse dermatological disorders, including "IgE level in atopic dermatitis"30 in 1981, "Computerized tomogram (C. T) & ultrasonographic study on metastatic tracing of malignant melanoma"31 in 1981, "A case of tuberculosis cutis orificialis following pulmonary and intestinal tuberculosis "32 in 1981, "A study of serum levels of zinc in acne vulgaris³³ in 1982, "Serum angiotensin converting enzyme levels in syphilis patients"34 in 1984, "Clinical study on neonatal birthmark"s³⁵ in 1984, "Ultrastructural study of epidermal cells exposed to distilled water and saline in rat"36 in 1984, "Composition of triglycerides of sebaceous glands in patients with osmidrosis and hyperhidrotic patients"37 in 1985, "Changes in lipids and apoprotein moieties of serum high density lipoprotein in patients with liver cirrhosis" in 1985, "Determination of high density lipoprotein cholesterol in psoriasis patients³⁹ in 1986, "Ultrastructural changes of hair follicles induced by cyclophosphamide in the rat" in 1987, "The results of prick test in patients with urticaria "41 in 1987, "A study of dermal mast cells number in end stage of renal failure"42 in 1988, "Analysis of extracellular matrix mRNAs in keloid fibroblast cultures"43 in 1990, "Localization of collagen mRNA in keloid tissues by in situ hybridization" 44 in 1990, "Levels of urinary and serum IgE in patient with atopic dermatitis" in 1990, "Detection of human papillomavirus DNA by in situ hybridization using biotinylated DNA probes in condylomata acuminata"46 in 1990, "A case of basal cell epithelioma treated with modified Mohs surgery"47 in 1990, "Clinical evaluation of etretinate and PUVA combination therapy in psoriasis⁴⁸ in 1990, "Expression of extracellular matrix genes in scleroderma fibroblast cultures"49 in 1991, "Collagen mRNA expression detected by in situ hybridization in keloid tissue"⁵⁰ in 1991. "Expression of type IV collagen and laminin genes by skin fibroblasts in culture"⁵¹ in 1992, "Increased expression of the epidermal growth factor receptor gene in psoriasis" ⁵² in 1992, "TGF-β mRNA expression in cultured fibroblasts ⁵³ in 1992, "Laminin B1 mRNA expression in squamous cell carcinoma of the skin"54 in 1993, "Increased immunoreactivity of Interleukin-6 in psoriatic skin"⁵⁵ in 1993, "Modulation of collagen gene expression by colchicine" 56 in 1993, "A clinical study of 225 patients with generalized vitiligo" ⁵⁷ in 1993, "Epidemiologic study of epidermolysis bullosa in Korea" in 1993, "Cytomolecular biologic characterization of c-myc, erbB, and EGF receptor in squamous cell carcinoma" ⁵⁹ in 1994, "Immunoreactivity of epidermal growth factor receptors in melanocytic lesions⁶⁰ in 1994, "Expression of p53 protein in squamous cell carcinomas of human skin"61 in 1994, "Effect of xirradiation on survival and extracellular matrix gene expression of cultured keloid fibroblasts"62 in 1994, "Decreased expression of collagen and fibronectin genes in striae distensae tissue"63 in 1994, "Mutant p53 protein expression in keratoacanthoma and squamous cell carcinoma⁶⁴ in 1994, "Expression of epidermal growth factor receptor in epidermal tumors" 65 in 1994, "A case of infantile digital fibromatosis treated with skin graft"66 in 1995, "A study of the clinical effect of treatment of nevus flammeus using the pulsed dye laser (SPTL-1)"⁶⁷ in 1995, "Regulation of Interleukin-4 on collagen gene expression by systemic sclerosis fibroblasts in culture"68 in 1996, and "Interferon-y upregulates the stromelysin-1 gene expression by human skin fibroblasts in culture"⁶⁹ in 1998. Professor Song conducted molecular biological research on skin cancer, fibroblasts, and collagen in collaboration with younger professors until retirement.

IV. ASSIGNMENTS IN THE ACADEMY, KEIMYUNG UNIVERSITY DONGSAN HOSPITAL, AND KEIMYUNG UNIVERSITY SCHOOL OF MEDICINE

1. Assignments within the Academy

Professor Song served as the Vice President of the Korean Dermatological Association from 1984 to 1987 and was elected as the 34th President of the Korean Dermatological Association from 1988 to 1990, contributing to the development of the association. Between 1996 and 1998, Professor Song served as the second President of the Korean Mycological Society and founded the Korean Journal of Medical Mycology. Professor Song served as the President of the Korean Leprosy Association from 1990 to 1992 and as the Vice President of the Korean Leprosy Welfare Association from 1995 to 2005. He was a member of the Daegu-Gyeongbuk branch of the Korean Leprosy Welfare Association from 1974 to 1991 and served as the Head of the Daegu-Gyeongbuk branch of the Korean Leprosy Welfare Association from 1991 to 2005. Between 1976 and December 1995, Professor Song treated approximately 130,000 patients with leprosy across the four regions of Gyeongsangnamdo, Miryang-gun, Geochang-gun, Changnyeon-gun, and Hapcheon-gun, seeing patients every Thursday over the



course of 20 years. In recognition of his contributions, Professor Song received the Order of Civil Merit, Dongbaek Medal in April 1992. Even after retirement, he continued to provide mobile treatment for patients with leprosy until 2016, spending his last years in service.

2. Assignments in the Keimyung University Dongsan Hospital and Keimyung University School of Medicine

Following his initial appointment as the Chiar of the Department of Dermatology in Dongsan Christian Hospital in 1966, Professor Song held various positions until his retirement in 1999, leading the development of the hospital and school. He served as the Dean of Daegu Dongsan Nursing College from December 1972 to October 1980, the Dean of Keimyung University School of Medicine from September 1986 to March 1989, the Director of Keimyung University Dongsan Hospital from January 1985 to August 1986, and the Director and Vice Chancellor of Keimyung University Dongsan Medical Center from March 1989 to 1990. Professor Song successively held key positions, contributing to the overall management of the medical center. He was the only individual at Keimyung University who served as the Dean of the Nursing College, the Dean of the School of Medicine, the Director of the Hospital, and the Director of the Medical Center.

V AWARDS AND MEMBERSHIP

1. Awards

Professor Song has been acknowledged for his contributions to academia and local communities, particularly in the areas of education and healthcare. His accolades include various commendations, merit awards, and medals. He received the Minister of Health and Social Affairs Commendation Award (No. 153) in 1976, the Presidential Commendation Civil Merit Medal (No. 2822) in 1985, and the Order of Civil Merit, Dongbaek Medal (No. 11156) in 1992. Professor Song also received commendations from the President of the Korean Dermatological Association in 1973, 1974, and 1990 and from the members of the Korean Dermatological Society in January 1990. Other commendations given to Professor Song are from the county mayors of Miryang, Geochang, Hapcheon, and Changnyeong in Gyeongnam in 1979, 1983, and 1984 and from the President of the Korean Leprosy Association in 1993. Professor Song received numerous merit awards from the President of Dong San Christian

Hospital in Daegu between 1977 and 1990 and received a merit award from the members of the Korean Mycological Society in 1998. Notably, he received the 2nd International League of Dermatological Societies Award in 2005 and the Kung Sun Oh Memorial Award in 2014.

2. Membership

Professor Song was a member of the American Academy of Dermatology, the Society for Investigative Dermatology, the International Leprosy Association, the Japanese Society for Investigative Dermatology, the Korean Medical Association, the Korean Dermatological Association, the Korean Society for Medical Mycology, the Korean Leprosy Association, and the Korean Society of Investigative Dermatology.

VI. CLOSING REMARKS

Reflecting on Professor Joon Young Song's life reveal his substantial contribution to progress in diverse fields within the nascent Korean medical community, serving as a physician, scholar, and educator. He remained committed to his patients, visiting them as a physician at the end of his life, and was revered as a dedicated mentor. His contributions within the field of dermatology are noteworthy, and his achievements will continue to inspire future generations.

CONFLICT OF INTEREST

In relation to this article, we declare that there is no conflict of interest.

ORCID

Sung-Ae Kim: 0000-0002-6040-6630 Myung Jin Lee: 0000-0001-9226-6110 Young Wook Ryoo: 0000-0002-2477-6263

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