




Curriculum Vitae

* CV must be written in English

| Personal Information | |
|---|-------------------------------|
| Title (i.e. Pf., Dr., etc.) | Prof. |
| Name (First Name/ Middle Name /Last Name) | Jae-Ho Shin |
| Degree (i.e. MD, MSc, PhD, etc.) | PhD |
| Country | South Korea |
| Affiliation | Kyungpook National University |
| E-mail | jhshin@knu.ac.kr |
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| Educational Background | |
| <p>Professor Jae-Ho Shin holds a B.S. in Agricultural Chemistry and an M.S. in Applied Microbiology from Kyungpook National University, Korea. He earned his Ph.D. in Agricultural Chemistry from the same institution in 2001, focusing on genetic regulation in <i>Escherichia coli</i>. He then completed postdoctoral training at the University of Maryland Biotechnology Institute, where he researched DNA replication mechanisms. During his academic and training years, he gained expertise in sequencing technologies, from first-generation traditional sequencing to third-generation NGS, as well as bioinformatics for handling the resulting big data.</p> | |
| Professional Career | |
| <p>Professor Jae-Ho Shin has built his career in academia, research, and industry. Since 2007, he has served as a Professor in the Department of Applied Biosciences at Kyungpook National University, where he also took on roles as Associate Dean and Chair of the Faculty Council. In 2021, he became Director of the Graduate School of Bio-Materials Specialization and Director of the NFECC Next Generation Sequencing Core Research Support Center, focusing on advanced sequencing and data-driven research in agriculture. Beyond academia, he has held the position of CEO of microBalance Co., Ltd. since 2022, applying his research expertise in a commercial setting.</p> | |
| Research Field | |
| <p>Professor Jae-Ho Shin is leading a research group in gut microbiome research, with a focus on uncovering the roles of intestinal microbial communities, their metabolic products, and their potential for disease prevention and therapy. His work delves into the complex interactions between gut microbes and the human body, aiming to develop novel strategies for health promotion and therapeutic interventions. Additionally, Professor Shin's group expertise spans microbial biotechnology, environmental microbiology, and genomics, where he applies next-generation sequencing (NGS) and bioinformatics to explore microbial diversity and community interactions across various ecosystems. His research contributions extend to plant growth-promotion, bioremediation, and industrial applications of beneficial microbes, further enriching the fields of environmental sustainability and microbial engineering. Through these efforts, Professor Shin actively advances the scientific foundation and applications of gut microbiome studies while broadening the impact of microbiome research in agriculture and environmental science.</p> | |
| Main Scientific Publications | |
| <ul style="list-style-type: none"> - Singh, Vineet, et al. "Cultured fecal microbial community and its impact as fecal microbiota transplantation treatment in mice gut inflammation." <i>Applied Microbiology and Biotechnology</i> 108.1 (2024): 1-12. - Fentie, Eskindir Getachew, et al. "A comprehensive review of the characterization, host interactions, and stabilization advancements on probiotics: Addressing the challenges in functional food diversification." <i>Comprehensive Reviews in Food Science and Food Safety</i> 23.5 (2024): e13424. - Mahra, K., Singh, V, et al. "Gut Microbes in Polycystic Ovary Syndrome and Associated Comorbidities; Type 2 Diabetes, Non-Alcoholic Fatty Liver Disease (NAFLD), Cardiovascular Disease (CVD), and the Potential of Microbial Therapeutics." <i>Probiotics and Antimicrobial Proteins</i> (2024): 1-18. - Dwivedi, Sushmita, et al. "Significance of soy-based fermented food and their bioactive compounds against obesity, diabetes, and cardiovascular diseases." <i>Plant Foods for Human Nutrition</i> 79.1 (2024): 1-11. | |



- Singh, Vineet, et al. "Dietary regulations for microbiota dysbiosis among post-menopausal women with type 2 diabetes." *Critical Reviews in Food Science and Nutrition* 63.29 (2023): 9961-9976.
- Kim, Min-Ji, et al. "Interplays between cyanobacterial blooms and antibiotic resistance genes." *Environment International* 181 (2023): 108268.
- Jo, YoungJae, et al. "The Alteration of the Gut Microbiome during Ramadan Offers a Novel Perspective on Ramadan Fasting: A Pilot Study." *Microorganisms* 11.8 (2023): 2106.
- Singh, Vineet, et al. "Butyrate producers, "The Sentinel of Gut": Their intestinal significance with and beyond butyrate, and prospective use as microbial therapeutics." *Frontiers in microbiology* 13 (2023): 1103836.