

Metabolomics and Proteomic Approaches Applied to Microbiomes

Guest Editors:



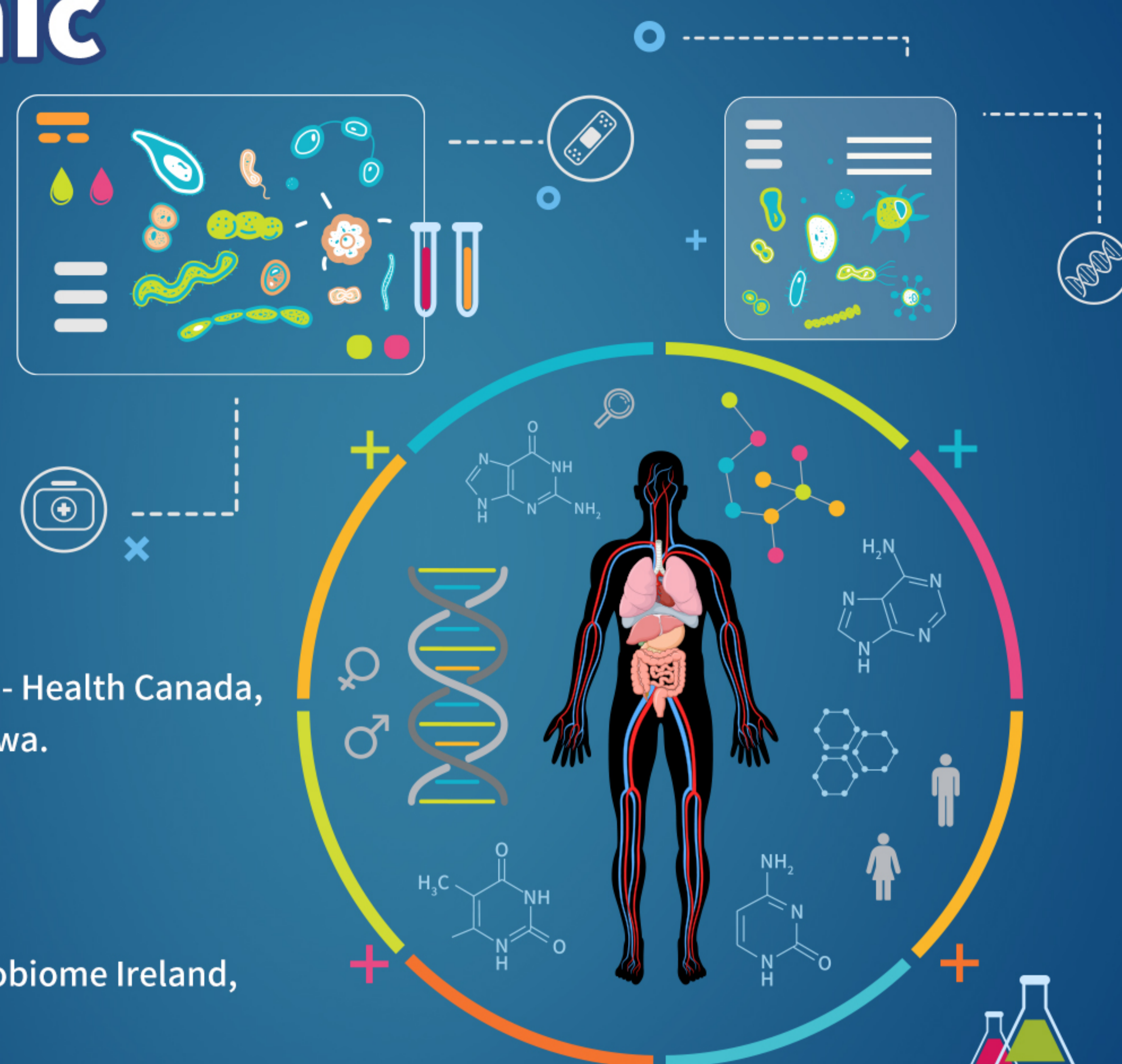
Dr. Xu Zhang

Centre for Oncology, Radiopharmaceuticals and Research, Biologic and Radiopharmaceutical Drugs Directorate, Health Products and Food Branch- Health Canada, School of Pharmaceutical Sciences, Faculty of Medicine, University of Ottawa.



Dr. Susan Anne Joyce

Faculty School of Biochemistry and Cell Biology and Investigator APC Microbiome Ireland, University College Cork, Cork, Ireland.



Special Issue Introduction:

Microbiome research is currently undergoing a transition from descriptive and association studies towards more functional and translational investigations. While next-generation sequencing (NGS)-based metagenomics has greatly contributed to our understanding of microbiomes, recent advancements in metabolomics, proteomics or metaproteomics, both in terms of technology and bioinformatics, have opened up new avenues for functional studies of microbial communities at the protein and metabolite levels with decent sensitivity, throughput and depth. High-resolution mass spectrometry (HRMS)-based proteomic and metabolomic approaches, in particular, are increasingly being utilized to characterize microbiomes of various origins. The application of these functional-omic approaches has shed light on important microbiome functionalities and the mechanisms underlying host-microbiome interactions.

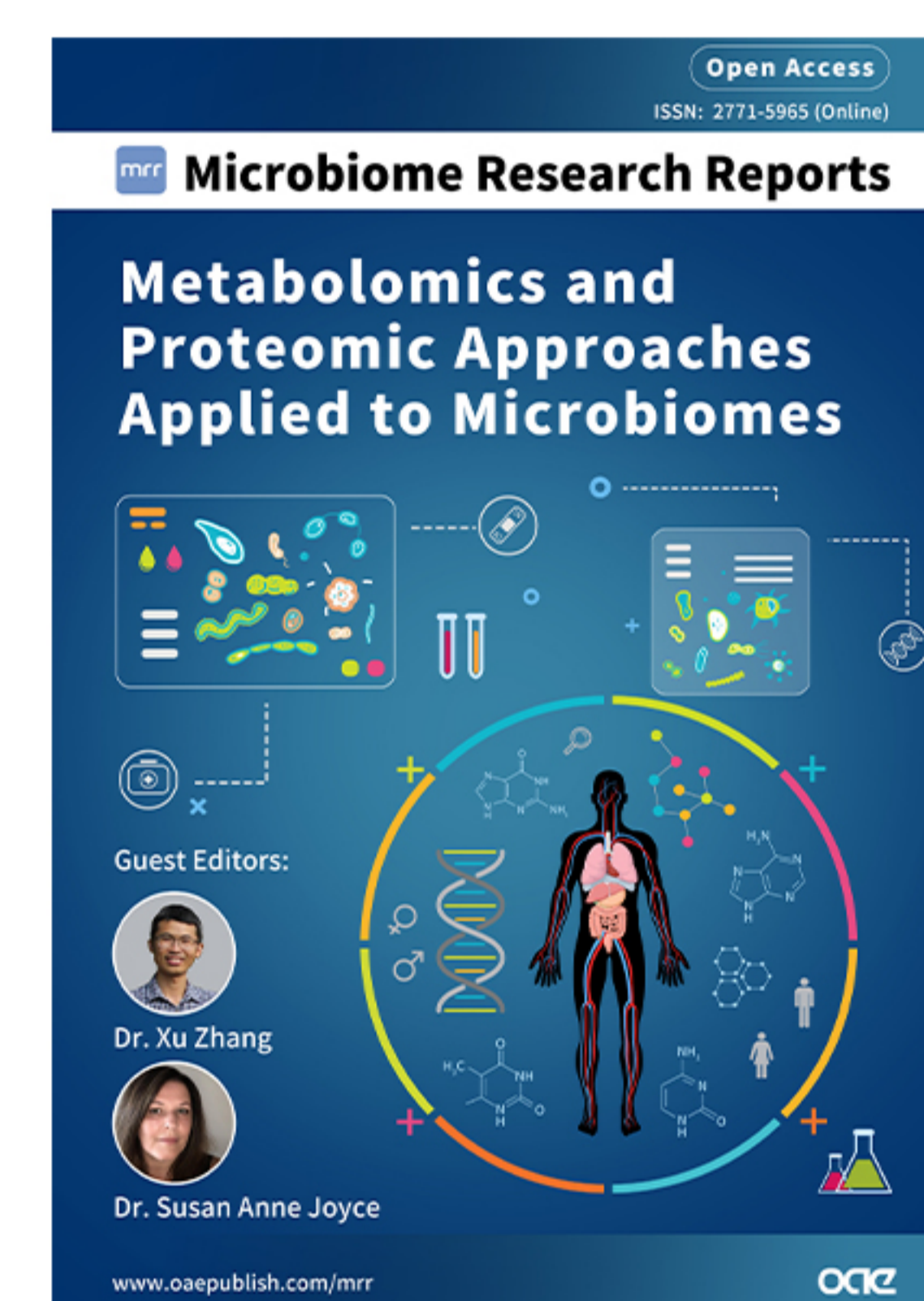
In this Special Issue, we invite submissions on all topics related to metabolomics and proteomics applied to microbiomes. This includes, but is not limited to, method development such as sample preparation methods, optimization of instrumental set-up, establishment of bioinformatic workflows, and integrative multi-omics approaches. The aim is to further enhance the applicability of proteomics and metabolomics in microbiome research. We especially encourage submissions that employ proteomics, metabolomics and beyond to address specific biological questions in *in vitro*, *in vivo*, *ex vivo* and clinical studies. These questions may involve exploring the role of microbiomes in health and diseases, drug-microbiome interactions, as well as the assessment of therapeutics targeting or derived from microbiomes.

We welcome original research articles, reviews, perspectives, opinions, and commentaries for this Special Issue.

Submission Deadline: 30 Dec 2023

Benefits to Authors:

- The first 10 manuscripts submitted to this special issue will be exempted from APCs (\$1, 200).
- Enjoy faster publication than regular submissions;
- Authors will be invited as Guest Speakers to our journal webinars. The webinar will be held via Zoom and it will also be broadcast live on Youtube and the Chinese WeChatOfficial Account, Video Account, Bilibili;
- A special interview will be provided to authors and will be promoted on the journal homepage and all media
- promotion platforms of both via the journal and publisher



Journal Introduction:

Microbiome Research Reports (MRR) is an international peer-reviewed, open access journal. The overall aim of MRR is to publish high quality researches from scientists with a common interest in microbiome/microbiota research in all its multidisciplinary aspects. The journal is founded by OAE Publishing Inc., under the guidance of our Editor-in-Chief Professor Marco Ventura (University of Parma, Italy). MRR was officially launched on July 26 2021. Looking forward to your attention and cooperation! Welcome to contact the editorial office for details, editorialoffice@mrrjournal.net.



Editorial Board team:



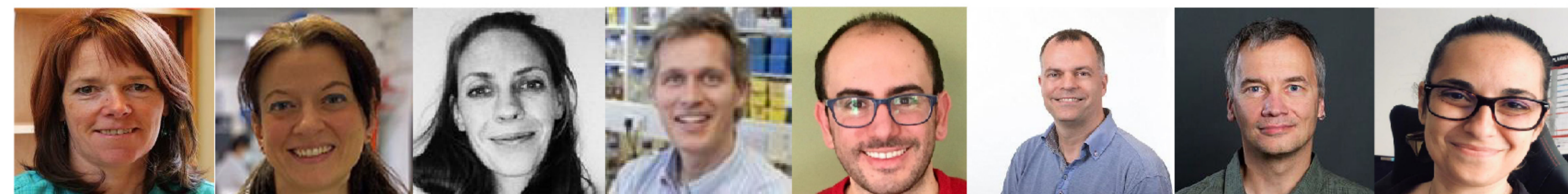
José Ángel Rufián-Henares Takane Katayama Jose Munoz-Munoz Lorena Ruiz Sudarshan A. Shetty Silvia Arboleya Gabriele A. Lugli Susan Anne Joyce



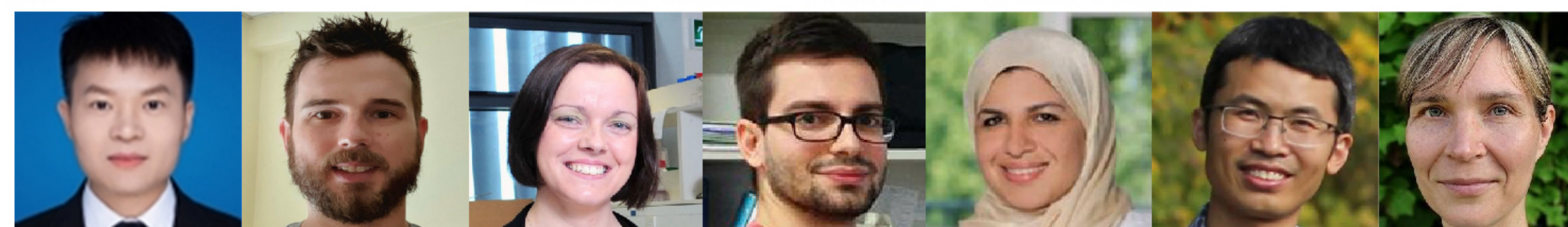
Sin-Hyeog Im Maria L. Marco Abelardo Margolles Paul Ross Christian Milani Daniele Del Rio Seppo Salminen Catherine Stanton



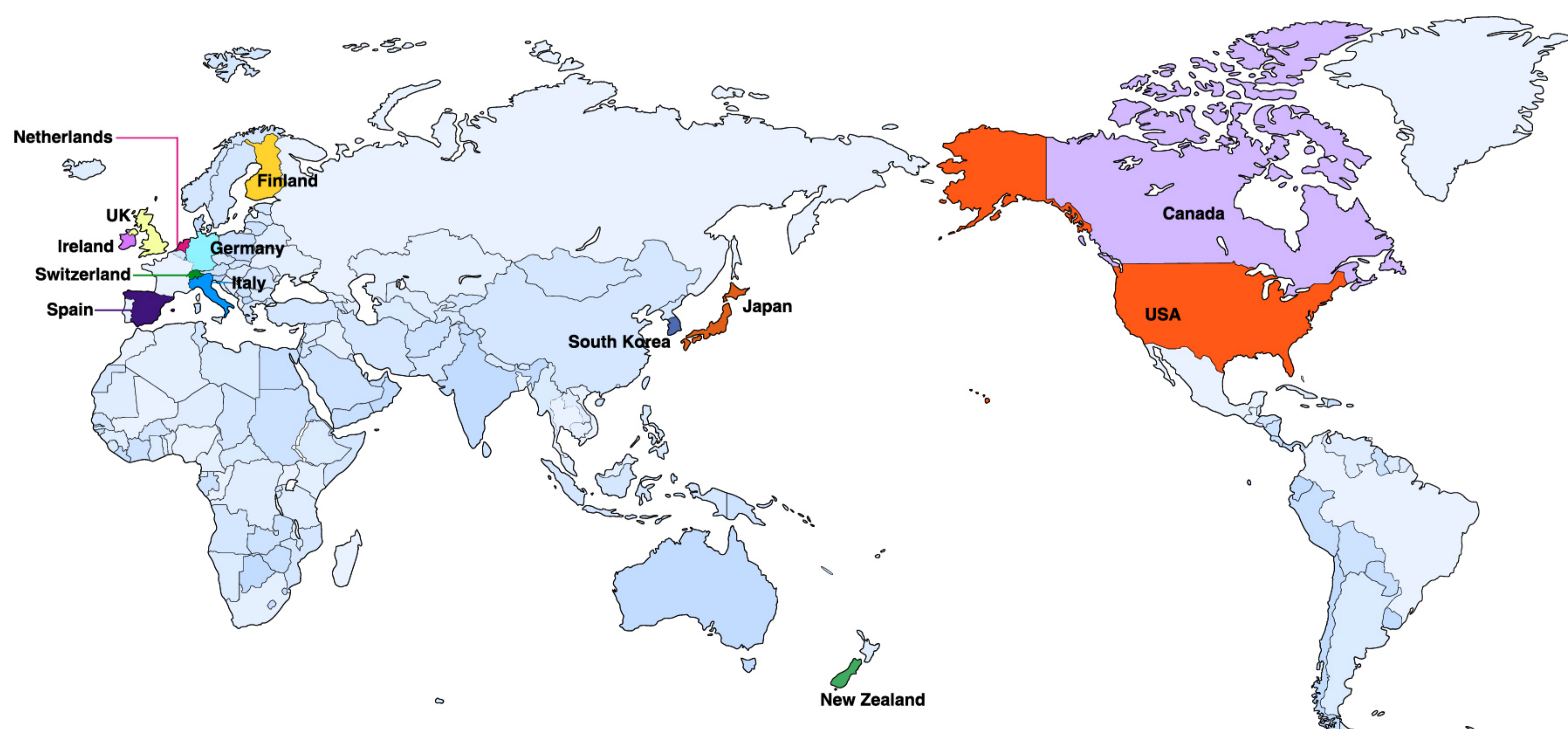
Marco Ventura Emma Allen-Vercoe Giovanni Barbara Rodolphe Barrangou Dirk Haller Miguel Gueimonde Maria C. Collado Christophe Lacroix



Karen Scott Francesca Turrone Clara Belzer Douwe Van Sinderen Pedro Mena Erwin G. Zoetendal Eric Altermann Francesca Bottacini



Bo Yang Ryan Chanyi Jennifer Mahony Leonardo Mancabelli Amira Metwaly Xu Zhang Halina E. Tegetmeyer



Scan the QR code to view the journal website

