

Candidate for Chair

Professor Edward Moore

Candidate Statement

Current position: Professor of Bacteriology, Department of Infectious Disease, University of Gothenburg; Microbiologist and Curator/Director, Culture Collection University of Gothenburg (CCUG), Department of Clinical Microbiology, Sahlgrenska University Hospital, Gothenburg, Sweden.

PhD in Microbiology from University of Houston (USA), working in the labs of Profs Peter Jurtshuk. and George E. Fox. Jurtshuk studied oxidative metabolism; Fox, working with Carl Woese, established the use of rRNA sequences for reconstructing phylogenetic relationships of microorganisms. My research philosophy still reflects those early influences. I have held research and academic positions in the USA, Germany, Scotland and, since 2004, Sweden. CV and publications: www.researchgate.net/profile/Edward_Moore.

I have been ICSP representative for the Swedish Society for Microbiology (SFM) since 2017 and served on the Executive Board as Vice-Chair from 2020 – 2023. I want to see the efforts and accomplishments of the last term continued; for that reason, I am standing for Chair of the EB-ICSP.

I propose that the next term of the ICSP should continue with revisions of The Code that were not included in the 2022 revision. The ICSP should consider how to confront restrictions imposed through the CBD and Nagoya Protocol on access of microorganisms, understanding how such restrictions may be important for some countries but negatively impacting research and microbial systematics. An additional consideration for the ICSP is the impact of the IJSEM. If confirmed by election to Chair the EB-ICSP, I will try to continue and expand the active role of the ICSP in microbial systematics that Iain Sutcliffe and others carried forward during the last three years.

Conflict of Interest: I declare no known conflict of interest.

Candidate for Vice Chair

Dr Célia M. Manaia

(Célia Maria Manaia Rodrigues C31F-553B-6365| CIÊNCIAVITAE cienciavitae.pt).

Candidate Statement

I started my research and work in bacterial taxonomy in the early 1990s under the supervision of Prof. Milton Costa. Although the main focus of my most recent research has been on bacterial ecology and the spread of antibiotic resistance in the environment, the background of bacterial taxonomic concepts has been always present. The interplay between phylogeny, physiology and ecology has been central to our approach to investigating this public health issue. As an independent researcher, I have had the opportunity to co-author the description of >25 new species and genera, contribute to 19 reviews of genera for Bergey's Manual, and serve on the editorial boards of the International Journal of Systematic and Evolutionary Microbiology (2020-) and Systematic and Applied Microbiology (2023-). In 2020, I was

appointed by the Portuguese Society of Microbiology as a delegate member of the ICSP, a committee whose work I feel is essential and underappreciated by colleagues working in other areas of microbiological research.

On the basis of my background and current interests, I would like to express my availability and willingness to stand for election to one of the following two positions: Vice-Chair or Full Member ('without portfolio').

Conflict of Interest: As required by Article 16 of the ICSP Statutes, I declare that I have no conflict of interest for these positions.

Candidate for Executive Secretary

Professor Aharon Oren

Candidate Statement

I confirm my willingness to stand for re-election to the position of Executive Secretary of the ICSP for the period September 2023-August 2026. Below you will find a summary of my relevant experience.

Born – 1952, Zwolle, the Netherlands

M.Sc. – 1974 - University of Groningen

Ph.D. – 1979 - The Hebrew University of Jerusalem

Post-doctoral studies – 1982-1984 - the University of Illinois at Urbana-Champaign

Faculty member of the Hebrew University of Jerusalem – 1984-2022, since 1996 as full Professor, since May 2022 Professor Emeritus

Earlier functions in the ICSP (representing the Israel Society for Microbiology):

- 1986-present: Member of the subcommittee on Taxonomy of *Halobacteriaceae*/Halobacteria, secretary since 1994
- 1991-present: Member of the Subcommittee on the Taxonomy of Photosynthetic Prokaryotes
- 2008-present: Member of the Subcommittee on Taxonomy of *Halomonadaceae*
- 1999-2002: Co-opted member ICSP
- 2002-2008: Chair, ICSP
- 2008-2014 and 2020-present: Executive Secretary, ICSP

- 2001-2012: Editor IJSEM
- 2012-2017: Editor-in-Chief, IJSEM
- 2013-present: List Editor and nomenclature reviewer, IJSEM
- 2019-present: Editor-in-Chief, the International Code of Nomenclature of Prokaryotes

- 2016-2022: Editor, Bergey's Manual of Systematics of Bacteria and Archaea
- 2018-present: Editor – Systematic and Applied Microbiology
- 2020-2022: Trustee, Bergey's Manual Trust

Awards:

Fellow of the American Academy of Microbiology (2000)

Doctor Honoris Causa - University of Osnabrück, Germany (2010), Charles University Prague Czech Republic (2015), University of Ljubljana, Slovenia (2018), Babeş-Bolyai University, Cluj-Napoca, Romania (2019)

Honorary Member – Academia Română, Bucharest, Romania (2016)

Recipient of the Bergey Award (2020)

Research interests: Adaptation of microorganisms to life at high salt concentrations. Physiology, biochemistry, and taxonomy of halophilic microorganisms. The microbial ecology of solar salterns. The microbiology of the Dead Sea. Prokaryote taxonomy and nomenclature

h-index (Google Scholar): 94, i-10 index: 391 (as of 14 April 2023)

Conflict of Interest: I have no conflicts of interest to declare.

Candidate for Secretary of Subcommittees on Taxonomy

Professor Stephen On
Lincoln University, New Zealand

Candidate Statement

I wish to be considered to serve again as Secretary for Subcommittees on the ICSP Executive Board.

In 2020, following my delegation as NZMS representative to the ICSP, I applied to be on the ICSP Executive Board as Secretary for Subcommittees. Not only because of my passion for the potential of these specific groups of experts that would undertake active research into the field, but also the opportunity to shape the statutes that govern the rules of prokaryotic nomenclature. *Subsequently I have served in this role during the 2020-2023 term, and as a member of the Publications Committee and Education and Outreach groups.* I have been an active contributor to the Executive Board, participating in monthly meetings (at night!), contributing to the revised version of the forthcoming International Code of Prokaryotic Nomenclature, reviewing the current status of Subcommittees (doi: 10.1099/ijsem.0.005046.), and even holding the first ever online meeting across *all* Subcommittees (report to be submitted shortly)! I strongly believe that Subcommittees are a vital entity of the ICSP and seek another term to further promote their visibility and development. I would also welcome the opportunity to further develop activities in the Education and Outreach programme, which I played a key role to establish.

My passion for Subcommittees stems from my activities in the ICSP Subcommittee for the taxonomy of *Campylobacter* and related bacteria in 1995. In 1997, I was elected as Secretary; and in 2007, I became Subcommittee Chair, a position that I still hold. Since my involvement, the Subcommittee has published not only Minutes of our meetings, but also taxonomic recommendations (2001, DOI:10.1099/00207713-51-2-719) and two sets of Minimal standards (2000, DOI:10.1099/00207713-50-6-2231; 2017, DOI:10.1099/ijsem.0.002255). The latter were the first such standards to include taxon-specific guidelines for whole genome sequence analyses. Members actively collaborate on pertinent research topics, of which among the most recent has been the close examination of a proposal for *Arcobacter* that we demonstrated to be flawed (2021 doi: 10.1099/ijsem.0.005133; 2020, doi: 10.1016/j.syapm.2020.126108).

My passion for taxonomy is displayed in >170 articles that have included development, evaluation and application of many phenotypic and genotypic taxonomic methods; descriptions of 18 new species or subspecies; and reclassifications or revisions of existing taxa. Specific studies of 16S rRNA-gene based phylogenies (summarised in doi: 10.1046/j.1365-2672.2001.01349.x.) and more recently whole genome sequences (see above) have helped characterise both the advantages *and* disadvantages with these techniques, which then have implications for taxonomic descriptions.

A passion for the field underpins my interest in serving again in this critical role. It would be a privilege to continue to serve the Committee at this crucial time.

Conflict of Interest: I declare no known conflict of interest.

Candidate for Treasurer

Dr Preben Nielsen

Candidate Statement

As science manager in Novozymes A/S, Copenhagen Denmark I have been working with industrial microbiology in association with one of the largest private held microbial collections. Primary activities have been in relation to *Bacillota* (previously Firmicutes). Contribution to Taxonomy started with PhD project supervised by FG Priest, Edinburgh & Dagmar Fritze DSMZ, Braunschweig with Characterization of alkaliphilic strains of *Bacillus*, which led to description of nine new species (species recently reclassified and assigned to the genera *Alkalihalobacillus*, *Lentibacillus*, *Sutcliffeiella*, *Salipaludibacillus*, *Evansella* and *Shouchella*). During industrial career involved in description of species of various bacterial species/genera (*Cellulophaga baltica* & *Cellulophaga fucicola*, *Pseudomonas frederiksbergensis*, *Caldicellulosiruptor kristjanssonii*, *Spongiibacter marinus*, *Bacillus plakortidis* (*Shouchella oshimensis*) & *Bacillus murimartini* (*Alkalicoccobacillus murimartini*), *Spongiispira norvegica*). Has served as Treasurer for the ICSP EB from 2020-2023 and represented the Danish Microbiology Society in the ICSP from 2017 to present.

Conflict of Interest: I declare no known conflict of interest.

Candidates for Member-at-Large (Member without portfolio), in alphabetical order.

Dr Richard Hahnke (delegate of the German Society of Hygiene and Microbiology)

Candidate Statement

Current position and affiliation: Curator, Leibniz Institute DSMZ - German Collection of Microorganisms and Cell cultures GmbH, Baunschweig, Germany.

During my career as a scientist, I have learned that making progress and producing scientific publications of excellent quality can only be achieved based on an excellent education and not by simply adapting rules. I have had the chance to see and learn many aspects, including the impact of taxonomy on issues dealing with science, industry and health.

As curator I dedicate my time for the cultivation, preservation and authentication of various Gram-negative bacteria and ammonium oxidizing bacteria. As microbiologist I contributed to systematics by cultivating, identifying and characterizing (physiology and genomics) different taxa within the Bacteria and Archaea, mainly *Flavobacteriaceae*, aerobic *Actinomycetes*, *Natrialbaceae* and *Gammaproteobacteria*.

In addition to species descriptions, I have investigated how whole-genome phylogeny can contribute to a better understanding of the differentiation of taxa within the *Bacteroidetes* and *Actinomycetes*.

Apart from the mission of taxonomists to shed light on the diversity of microorganisms, we should not forget the considerable impact of taxonomy on risk assessment and risk mitigation of microorganisms (risk groups, dual-use, pathogens) as well as restrictions based on access and benefit sharing (Convention on Biological Diversity, Nagoya Protocol, local laws).

Conflict of Interest: Employment as a curator in the culture collection at the Leibniz Institute DSMZ might be seen as conflict of interest. However, my position is as a nominated full member of the ICSP by the German Society for Hygiene and Microbiology (DGHM).

Dr Célia Manaia

Candidate Statement

Please see above statement accompanying the candidate for Vice Chair.

Dr Mitsuo Sakamoto (delegate of the Federation of Microbiological Societies of Japan)

Candidate Statement

Current position and affiliation: Curator of Anaerobic Bacteria & Lactic Acid Bacteria, Japan Collection of Microorganisms (JCM, RIKEN BioResource Research Center), Japan. I have been a member of the ICSP taxonomic subcommittee on Gram-negative Anaerobic Rods since 2011.

I received my Ph.D. from Tokyo University of Agriculture, Japan in 1997 under the supervision of Prof. Kazuo Komagata (ICSP Life Member; deceased). I have published more than 180 research and review articles on microbial taxonomy and applied microbiology (see [Mitsuo Sakamoto \(researchgate.net\)](#)). My work at JCM involves the identification and classification of intestinal bacteria, and collection, preservation, and distribution of varieties of anaerobic bacteria as a curator. Microorganisms are taxonomically studied based on their phenotypic, chemotaxonomic, and genetic characteristics. I have described many novel genera, such as *Adlercreutzia*, *Amedibacillus*, *Amedibacterium*, *Faecalimonas*, *Lawsonibacter*, *Mesosutterella*, *Parabacteroides*, *Parolsenella*, *Tannerella*, etc. My interest in taxonomy and nomenclature is based on my long-term professional experience as a taxonomist, interested in bacterial identification, classification, and nomenclature with the wish to identify them and reveal their role in the human gut. In all my activities, I learned about the impact of bacterial taxonomy and hence the importance of preserving it as a common and standardized language across languages and various fields of expertise.

If I would be elected to become the ICSP Executive Board, I would like to preserve nomenclature as the standardized language, while addressing changes whenever a deficiency needs to be cured or when scientific advances indicate improved systematics. My mission could be the evaluation of the impact of changes on a wider public, identifying ways forward towards a better-harmonized adoption of the evolving code.

Conflict of Interest: I declare no known conflict of interest.

Dr Yogesh Shouche

Candidate Statement

Dr Yogesh Shouche is the founder and head of National Centre for Microbial Resource [(NCMR, previously known as Microbial Culture Collection (MCC)] since 2008. The NCMR was established to house a large collection of bacteria collected (in a mission mode) from many different ecological niches of India and today it is the largest collection of microorganisms in the world under a single roof. The collection also has a good representation of fungi and archaea. He established a team of researchers at NCMR with expertise in various taxonomic groups such as Anoxygenic Photosynthetic bacteria and anaerobes to mention a few. He and his team have described more than 50 novel taxa belonging to diverse taxonomic groups. For the last few years he has also taken a lead to resolve issues related to India's Biodiversity law and the need for deposition in culture collections under the rule 30 (a) of International Code of Nomenclature of Prokaryotes. He has served one term on the Executive Board and was Vice Chair of the working group formed to address this issue. He has also been active in the issue of sharing of Digital Sequence Information and has published papers in these areas with global partners (1,2). He is also a member of Executive Board of World Federation of Culture Collections.

His interest in microbial diversity has led him study wide range of ecological niches in India from extreme habitats to the human microbiome using both culture dependent and culture independent approaches. In these exercises he has developed in depth knowledge about a wide variety of bacteria belonging to many different taxonomic ranks. He is a leading microbiologist studying the human microbiome in India and showed that Indian human microbiome is unique.

Microbial taxonomy currently places a strong emphasis on genome data and Dr Shouche is a leading expert in this field. His group is presently very actively engaged in genome sequence analysis of a large number of genomes including environmental microbiomes. He is presently Professor of Biology at Azim Premji University at Bangalore India.

1. Scholz AH, Freitag J, Lyal CHC, Sara R, Cepeda ML, Cancio I, Sett S, Hufton AL, Abebaw Y, Bansal K, Benbouza H, Boga HI, Brisse S, Bruford MW, Clissold H, Cochrane G, Coddington JA, Deletoille AC, García-Cardona F, Hamer M, Hurtado-Ortiz R, Miano DW, Nicholson D, Oliveira G, Bravo CO, Rohden F, Seberg O, Segelbacher G, **Shouche Y**, Sierra A, Karsch-Mizrachi I, da Silva J, Hautea DM, da Silva M, Suzuki M, Tesfaye K, Tiambo CK, Tolley KA, Varshney R, Zambrano MM, Overmann J. Multilateral benefit-sharing from digital sequence information will support both science and biodiversity conservation. *Nat Commun.* 2022 Feb23;13(1):1086. doi: 10.1038/s41467-022-28594-0.
2. da Silva M, Desmeth P, Venter SN, **Shouche Y**, Yurkov A. How legislations affect new taxonomic descriptions. *Trends Microbiol.* 2023 Feb;31(2):111-114. doi: 10.1016/j.tim.2022.10.010.

Conflict of Interest: I declare no known conflict of interest.