

Nominations sought for The Bergey Medal

The Bergey Medal is awarded in recognition of outstanding and life-long contributions to the field of systematics of Bacteria and Archaea. Nominations may be submitted at any time to the Bergey's editorial office at bergeys@uga.edu. Nominations should include a cover letter summarizing the candidate's qualifications, the significance of their contributions to the systematics of prokaryotes, and their curriculum vitae.



Report on the meeting of Bergey's International Society for Microbial Systematics in Pune, India, 12 – 15 September 2016

BISMIS 2016 was held in the city of Pune, the cultural capital of the state of Maharashtra, India, at the Microbial Culture Collection (MCC) during the region's most revered festival, the 10-day *Ganeshotsav*. With the theme of 'Microbial Systematics and Metagenomics', the meeting was focused on the use of genomic/enviro-genomic data for the description of novel taxa. It was attended by 86 registered participants from 15 different countries. Since this was the first ever meeting of the BISMIS in India, the meeting generated a huge interest among Indian researchers, who formed the largest contingent of participants. The three and half daylong meeting comprised key events and scientific sessions.

Opening Ceremony

The meeting began with a traditional *Hindu* welcome of all the participants to MCC (now

known as the National Centre for Microbial Resource, NCMR). This was followed by a formal welcome of all participants by the BISMIS president, Brian Austin, followed by an overview of things to follow by the Convener of the meeting, Kamlesh Jangid. A brief presentation on the status of microbial systematics in India was then delivered by Yogesh Shouche, the Co-Chair of the Organizing committee.



With the objective of reaching out to young researchers in this field, a collection of chapters was put forth leading to the genesis of "BISMIS 2016 - a *souvenir*". These were written by the

expert speakers specifically for the students and faculty in academia on topics that they would benefit most from and those that would generate the curiosity in these young minds and motivate them to learn more about the subject. The *Souvenir* was released by Brian Austin, Peter Kämpfer and Yogesh Shouche. The *Souvenir* will act as a ready reference of the status of this field for students and faculty alike who could not attend the meeting.

This was followed by the Opening Address on “Taxonomy of Prokaryotes - New Challenges in a Global World” by Peter Kämpfer. The discussion following the opening address set the stage for a very successful meeting over the next three days. The opening address was followed by the Welcome mixer for all participants, sponsors and volunteers at the Melange, a rooftop lounge at the Hotel where nearly all BISMIS participants were staying. At the mixer, all delegates were greeted with drinks, bollywood music and a live cricket telecast on the big screen in the background along with a sampling of delicious Indian cuisine.

Scientific Sessions

A total of six scientific sessions were held during the meeting. With two sessions held on each day, a total of eight invited keynote talks and 22 oral presentations were delivered.

Session 1 - Genomic/Metagenomic Description of Novel Taxa

- Keynote 1 - Use of Genome Sequence Data in Bacterial Taxonomy: Perspectives from Large Scale Analysis by Jongsik Chun
- Keynote 2 - Cultivation-Independent Genomics Approaches and Their Relevance to Microbial Taxonomy by Brian Hedlund

In addition to the two keynotes, there were seven oral presentations by David Arahall, Marike Palmer, Martha Trujillo, Maria Figueras, Jeffrey Newman, Boris Vinatzer and Kamlesh Jangid. These talks focused on genomic approaches to resolve the taxonomy of difficult taxa, proposal of a single

phylogenomic metric for species identification, development of a prototype for genome-based description of taxa and the development of new algorithms for the comparison of microbial communities.

Session 2 - Cultures and Culturing of As-Yet-Uncultivated Microbes

- Keynote 3 - Community Wide Insights into Stressed Niches Using Metagenomic Approach by Rup Lal

The keynote talk was followed by two oral presentations by Monali Rahalkar and Om Prakash, who discussed the isolation of methanotrophs from rice fields and the preservation of ‘uncultured’ in the omics era, respectively.

Session 3 - The Role of Cultures in the Twenty First Century

- Keynote 4 - The Value of Cultures to Modern Microbiology by Brian Austin
- Keynote 5 - Megaculturomics of Microbial Biodiversity from Diverse Ecological Niches in India by Yogesh Shouche

The session also included four oral presentations by Svetlana Dedysh, Syed Dastager, S Krishnamurthy and Kumari Richa that were focussed on the taxonomic and biotechnological implications of the characterized diversity of various taxa.

Session 4 - Modern Approaches to Identification/Diagnosis

- Keynote 6 - Novel Insights into Microbial Systematics Based on Molecular Ecology and Comparative Genomics Approaches by Joerg Overman

Following the keynote, five oral presentations by Paul Lawson, Iain Sutcliffe, Pelin Yilmaz, Wen-Jun Li and Ch. Sasikala were delivered in this session. The topics included a focus on chemotaxonomy, attempts to unite the classification of *Bacteria* and *Archaea*, environmental adaptability of *Nocardia* and metabolomics for taxonomy.

Session 5 - Minimum Standards for the Description of New Taxa

- Keynote 7 - Modest Proposals for Unification of the Nomenclature of Cultured and Uncultured Prokaryotes by William Whitman

Two oral presentations by Stephanus Venter on 'Genealogical Concordance and Other Lines of Evidence for the Recognition and Description of Bacterial Species' and Paras Yadav on 'SMRT sequencing in bacterial genomics' followed the keynote address in this session.

Session 6 - Cyanobacterial Taxonomy

- Keynote 8 - The Current Status of Cyanobacterial Nomenclature Under the "Prokaryotic" and the "Botanical" Code by Aharon Oren

This session also included talks by Stefano Ventura and Prashant Singh, who keenly discussed a unified approach for the taxonomy of Cyanobacteria.

Poster Sessions

A total of 31 posters were displayed throughout the meeting. A team of experts, chaired by Aharon Oren evaluated the posters for the IJSEM 'Best Taxonomic Student Poster Prize' that was sponsored by the Microbiology Society.

Cultural Evening

A cultural program showcasing the mesmerizing classical music and diverse dance forms of India was held on the evening of the first full day at the National Centre for Cell Science (NCCS) campus. The event was followed by dinner and interactions between participants and NCCS faculty. The following evening was marked by an adventurous industry sponsored visit on the outskirts of Pune.

BISMiS Business Meeting

The BISMiS members meeting was held on 15 September 2016 in Raman Hall, at MCC, Pune. The meeting was open to all registered participants as well as BISMiS members. The proceedings began

with the BISMiS president, Brian Austin, thanking the organizers and all volunteers at MCC for hosting the meeting. This was followed by a discussion on increasing the member participation and to have regional contacts for increasing the memberships of the Society. The Treasurer, William 'Barny' Whitman presented the annual report on the financial status of BISMiS and expenditures incurred during various events throughout the year. Barny updated the members on the elections for the two officer positions in BISMiS. A proposal to hold the next meeting in 2018 in South Africa was put forward by Stephanus Venter that was welcomed by the attendees. The members meeting was adjourned after a thank you vote by the new President of BISMiS, Martha Trujillo.

Closing Ceremony

The proceedings of the closing ceremony were initiated by the Convener of the meeting, Kamlesh Jangid who presented a summary of the events of the previous three days. He began by thanking all who attended the meeting, Bergey's Manual Trust and other industrial sponsors, and a special thanks to all the volunteers for a very successful BISMiS 2016. Kamlesh also briefed the participants about the different proposals that were presented by various speakers to advance and improve microbial systematics. At the end, he reported that many of these ideas and the work presented at BISMiS 2016 would be released as a Special Issue of *Antonie van Leeuwenhoek*.

Aharon Oren awarded the IJSEM 'Best Taxonomic Student Poster Prize' to Jacob R Miller for his poster on "Two novel *Flavobacteriaceae* related to *Flavobacterium hydatis* and *Flavobacterium hibernum* isolated from a freshwater creek".

Barny Whitman then announced the names of the travel award recipients. The two International Travel Awards were given to Nisha Patel and Marike Palmer, while the Local Travel Award was

given to Anukool Vaishnav. These awards covered the travel, registration and hotel for the meeting days for each of the recipients.

The election of officers was held online prior to the meeting. Barny Whitman reported the results of the vote: Iain Sutcliffe, new President-Elect, and Kamlesh Jangid, Secretary.



On behalf of the Bergey's Manual Trust, Barny Whitman praised the hard work and effort taken by the organizers of BISMiS-2016 and presented the Bergey's T-shirt to Yogesh Shouche and Kamlesh Jangid.

Brian Austin was awarded the Bergey Medal for his outstanding and life-long contributions to the field of systematics of Bacteria and Archaea. The medal was presented by Svetlana Dedysh.

On behalf of the entire Society, the new President of BISMiS Martha Trujillo thanked the outgoing President Brian Austin for his services to the

Society and presented him with an engraved plaque in recognition of his hard work over the past two years.

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The award ceremony was followed by closing remarks from the Co-chairs of BISMiS 2016, Yogesh Shouche and Brian Austin, followed by a formal vote of thanks by Kamlesh Jangid. Everyone was then invited to attend BISMiS 2018 in South Africa.

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