

❖ Name & Designation	: Dr. Deeksha Tripathi, Ph.D Student
❖ Address	: School of Biotechnology, JNU, New Delhi-110067
❖ Name of the International Conference/ Seminar/Symposium/ Workshop	: 114th General Meeting American Society for Microbiology- 2014
❖ Title of the abstract accepted	: Comparative analysis of glnA1 promoter of Mycobacterium bovis and Mycobacterium smegmatis; its implications on poly-γ-L-glutamine (PLG) synthesis in the cell wall
❖ Venue & Date	: Boston, Massachusetts, 17-20 May 2014.
❖ Money sanctioned	: ₹ 1,00,000/-
❖ Money reimbursed	: ₹ 95,968/-

Participation Report

**The conference ASM 2014-114<sup>th</sup> General Meeting was organized by American Society for Microbiology and sponsored by various corporate partners like BD diagnostics, Roche Diagnostics e.t.c. Conference was organized in , in Boston, Massachusetts, US. with around 10 participating countries on 17<sup>th</sup> May to 20<sup>th</sup> May. The main scientific program contained 48 sessions, including 12 plenary sessions designed to provide a view into cross-cutting, interdisciplinary research currently underway in the field and 36 afternoon symposia planned to offer in-depth coverage of cutting-edge research in particular subdisciplines. In addition, the Program includes 26 sessions that focus on the fields of diagnostic microbiology and epidemiology. There were half day and full day workshops and poster exhibition sessions (For categories from A to Z assigned for different fields). The speakers talked about various developments in the field of Microbiology**

Academic highlights of the Training/Workshops, including major recommendation and the

following:

- i) New development presented at the Training/Workshops

**Speakers gave an insight into many new developments in the field of Microbiology through their work and scientific aptitude. Certain new developments of interest are:**

- 1) **Genomic, transcriptomic and proteomic approaches are transforming all fields of microbiology. Marine and terrestrial environments; microbe-microbe, microbe-plant and microbe-animal interactions; and beneficial and pathogenic associations were investigated using 'omic techniques. The presentation discussed about proteomic approaches to improve understanding of microbial physiology. Combining hypothesis testing approaches with different 'omics approaches.**
- 2) **Antibiotic resistance among human pathogens is an ever-increasing problem with global public health implications. Fewer new antibiotics, however, are being developed to combat antibiotic resistant pathogens. The presentation discussed about the discovery of new targets and new compounds to tackle the problem of antibiotic resistance. Approaches described by the speakers harnessed knowledge from basic studies in microbiology, chemistry, and evolutionary biology. The perspectives of both academic and industry labs will also be represented.**

- ii) New development resulting from the Training/Workshops (200 words)

**The Workshops provided in-depth discussion and training on specific topics. Career development was the focus of two workshops. Another workshop discussed how high-throughput phenotyping has been applied to microbial and mammalian cell research and related how phenotype microarray datasets have been analyzed and integrated to provide a global understanding of cellular metabolic capacity. These phenotype microarray-based approaches may provide a deeper understanding of cellular metabotype. Workshops on Molecular Typing of Bacterial Pathogens discussed the overview of available molecular typing techniques and illustrated different typing methods. These also described the principles of next generation sequencing (NGS) and SNP or genome-wide gene by gene typing.**

8. Participant's contribution to the Training/Workshops (100 words)

**I, Deeksha Tripathi, presented my work entitled "Comparative analysis of *glnA1* promoter of *Mycobacterium bovis* and *Mycobacterium smegmatis*; its implications on poly- $\alpha$ -L-glutamine (PLG) synthesis in the cell wall." as a poster in the conference. My work is about *glnA1* gene coding for GS enzyme in mycobacteria that is thought to play a role in poly L glutamine in the cell**

wall of tuberculosis causing mycobacteria. In my work, I have deciphered the reason for absence of PLG layer in the cell wall of avirulent *M. smegmatis* inspite of having a *glnA1* homolog. My work was highly appreciated and I got various suggestions in order to shape up my future work.

8. Visa fees: **receipt attached and visa page also attached.**
9. If claiming the registration/training/workshop fee and accommodation charges produce original bills, vouchers. The claim should be forwarded by the competent authority. – **Bills Attached**

**-Group of Indian scientists working in the subject area (minimum 3) of the training/workshops. Please list them with addresses**

S.No.	Examiner	Address
1	Prof. J.S. Viridi	Department of Microbiology, University of Delhi south Campus, Benito Juarez Marg, Moti Bagh, New Delhi-110021
2	Prof. G.K.Khullar	Department of Biochemistry, Research block A, PGIMER Cahandigarh-160012
3	Prof. Mridula Bose	Dept. of Biotechnology, Kumaon University

**-Visits to other scientific Institutions & universities & laboratories during your participation in the training/ workshops: Not applicable**

Date: 3/6/2014

  
Signature