

❖ Name & Designation	: Ms. Mou Ganguly, Research Fellow.
❖ Address	: Dept. of Zoology, University of Calcutta, Kolkata.
❖ Name of the International Conference/ Seminar/Symposium/ Workshop	: Microbiology and Infection 2014.
❖ Title of the abstract accepted	: Involvement of the <i>Helicobacter pylori</i> plasticity region genes in the development of gastroduodenal diseases in India.
❖ Date & Venue	: 508 th October 2014. Dresden, Germany.
❖ Money sanctioned	: ₹ 69,717/-
❖ Money reimbursed	: ₹ 83,398/- (Due to hike the fare of air travel an additional ₹ 13,681/- were sanctioned)
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Participation Report

ORGANIZATION OF TRAINING / WORKSHOP (No. of participating countries, no. of session etc.) (100 words):

The conference **MICROBIOLOGY AND INFECTION 2014-4th JOINT CONFERENCE OF THE DGHM AND VAAM** was held at the International Congress Center in Dresden, Germany from 5th -8th October, 2014. Participants came from around 25 countries (like Germany, U.S.A, India, Pakistan, U.K, Russia, China etc.) to make the conference successful.

On 5th October the conference started at 3.00 p.m by the inaugural speech of Dr. G. Rodel followed by award session and welcome reception. On 6th October, there are 3 types of sessions like oral session, plenary session, poster session-1 and working group session. I presented my work entitled "**Involvement of the *Helicobacter pylori* plasticity region genes in the development of gastroduodenal diseases in India**" in the poster session on October 6, 2014. On 7th October there are two additional session like workshop session, Ph.D award ceremony and mixer. On 8th October there are two sessions - oral and working group session. The conference ended with the prize giving ceremony for the best poster presenter.

By attending the International Conference "**Microbiology and Infection-4th Joint Congress of DGHM and VAAM**" at International Congress Centre of Dresden, Germany from 5th-8th October 2014, my knowledge about the *Helicobacter pylori* pathogenesis and host-pathogen interaction has been broadened immensely. Throughout the conference, progressive discussions with eminent scientist about the microbial pathogenesis and the probable strategies for their eradication encourage me to continue my research work. Apart from this, my current research knowledge of understanding about the spectrum of *H. pylori* mediated diseases with their probable causes of development, different away of progression, diagnosis, potential targets for therapy, available drugs with different mode of affectivity, advantage and limitation over one another, presented in the conference has been boosted. This will help me in terms of development of new drugs against this pathogen, establishment of animal models to explore toxicity and bioavailability, routes of administration, and metabolism. I also have learned a lot about new molecular biology techniques from the discussions with the fellow oral and poster presenter in the conference. Taken together, all these topics discussed in the conference have opened several new windows and experimental strategies which can be utilised in my future research work.

Participant's contribution to the Training/Workshops/ Conferences (100 words):

I presented my important findings entitled "**Involvement of the *Helicobacter pylori* plasticity region genes in the development of gastroduodenal diseases in India**" in the "Microbiology and Infection 2014, 4th Joint Conference of the DGHM & VAAM" at Dresden, Germany during **October 5-8, 2014**. Recently, there has been a considerable interest in strain-specific genes outside the *cag* pathogenicity island, especially genes in the plasticity regions for understanding the association of *H. pylori* with diseases. Recent studies showed that certain genes in this region may play important roles in the pathogenesis of *H. pylori*-associated diseases. My research work emphasized the role of selected genes (*jhp0940*, *jhp0945*, *jhp0947* and *jhp0949*) in the plasticity region in relation to risk of *H. pylori*-related diseases in Indian population. My study showed that the presence of *jhp0945*, *jhp0947* and *jhp0949* were significantly associated with symptomatic expressions whereas *jhp0940* seems to be negatively associated with the disease status. IL-8 production and apoptotic cell death were significantly higher in *H. pylori* strains containing *jhp0945*, *jhp0947* and *jhp0949* than the strains lacking those genes. My results suggest that *jhp0945*, *jhp0947* and *jhp0949* could be a useful prognostic markers for the development of peptic ulcer in Indian subcontinent. Attending scientists and research scholars appreciated my work and long discussions were held. This finding will soon be communicated to International Journal.