

Emerging Insights on Human Histories and Past Environments in South Asia

Mohammad Firoze Quamar*, Gaurav Srivastava, Neeraj Rai, Bhavna Ahlawat

Birbal Sahni Institute of Palaeosciences, 53 University Road, Lucknow 226007, U.P., India.

*E-mail: quamar_bot@yahoo.co.in; mohdfiroze_quamar@bsip.res.in

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A three-day International Conference on ‘Reconstructing the human population histories of South Asia using archaeology and genetics’ was held, under the umbrella of “Emerging insights on human histories and past environments in South Asia”, during June 7 to 9, 2023 at the University of Kashmir, Srinagar, India. It was jointly organized by the Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow, India, and the Center of Central Asian Studies (CCAS), University of Kashmir, Srinagar, India by Neeraj Rai (BSIP), Ajmal Shah (CCAS) and Maanasa Raghavan (University of Chicago, U.S.A.), and funded by the Ministry of Culture, Government of India, New Delhi, India under Azadi ka Amrit Mahotsav. About 100 participants from India, Sri Lanka, South Korea, U.K. and U.S.A. participated and presented their research findings as oral and poster presentations. The experts are from various disciplines, such as archaeology, anthropology, population genetics, computational biology and palaeogenomics, geosciences, palaeoclimatology, palaeoecology, archaeobotany and zoo-archaeology participated. The conference was inaugurated by Meenakshi Lekhi, Minister of State for Culture, Government of India, New Delhi, India, in the august presence of Sanjeev Sanyal, Secretary to the Prime Minister Office (PMO) and Member, Economic Advisory Council to the Prime Minister, Government of India, New Delhi, India, Nilofer Khan, Vice-Chancellor, University of Kashmir, Srinagar, Tabassum Firdous, Head, CCAS, University of Kashmir, Srinagar, Nisar Ahmad Mir, Registrar, University of Kashmir, Srinagar, Partha Pratim Majumder, Founder Director, National Institute of Biomedical Genomics, Kalyani, India, Kumarasamy Thangaraj, Director and Principal Scientist, Center for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, and CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India, Neeraj Rai, BSIP, Lucknow and Ajmal Shah, CCAS, University of Kashmir, Srinagar, India. In her Presidential address, Meenakshi Lekhi emphasized the Indian-oriented research and stressed upon promoting the Indian names, such as Saraswati Civilization or Vedic Civilization for the Indus Valley Civilization (IVC) or for the Harappan Culture.

The inaugural function was followed by the keynote lectures, and technical sessions, wherein the insights on human histories and past environments in South Asia were discussed under various themes,

such as Palaeoecology and Archaeology of the Himalayas, New Frontiers in South Asian Archaeology, Human genetics histories, using ancient and modern DNA, Burzahom Archaeological Site in Srinagar, Archaeozoology: emerging insights into animal and crop domestication in South Asia, niological, anthropological insights on South Asia, as well as Palaeoenvironmental proxies and climate change in deep past and Application of geology in archaeology. The prime object of the International Congress was to better understand the evolutionary history of humans using genome-scale data from ancient and present-day humans. Moreover, understanding the dissecting patterns of past human movements and genetic admixture, as well as how these ancient demographic processes have shaped the genetic diversity and health landscapes of populations today through multi-disciplinary research was another key objective. In South Asia, there are various challenges and unanswered questions regarding complex human histories, long-standing population structure and high disease burden (as a result of ancient and historical migrations, as well as social practices, such as endogamy and consanguinity) that need to be answered considering novel scientific tools in the framework of Indian archaeological science, especially ancient DNA (aDNA).

During the valedictory function of the conference, experts from the various disciplines expressed their thoughts on the successful completion of this international congress. The conference provided an excellent opportunity to the scientists, especially to the young researchers to interact with the learned experts of various disciplines from within the country, as well as with the experts from U.S.A, U.K., South Korea, and Sri Lanka. We also hope and believe that this platform might have fostered an exchange of ideas and networking among researchers with shared goals and interests in human, animal and plant histories, as well as past environments using established and new scientific methods. Also, a white paper will be drafted by the learned organisers in collaboration with the Ministry of Culture, Government of India, that will outline the major takeaways from this conference.

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