ICMR International Travel Support for Non-ICMR Scientist

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Name & Designation

Address

: Dr. Mithun Sikdar, Assistant Anthropologist (Physical)

: Anthropological Survey of India, Western Regional

Centre, Udaipur-313001.

❖ Name of the International Conference/ : 13th International Congress of Human Growth and

Seminar/Symposium/ Workshop

Clinical Auxology-2014.

Title of the abstract accepted

: Early environment, epipenetic, nutritional status and future burden of non-communicable diseases among a

tribal population of Northeast India.

Date & Venue

: 17-20th September 2014, Maribor, Slovenia.

Money sanctioned

: Rs 1,00,000/-

Money reimbursed

: Rs 79,925/-

Participation Report

Organization of Training/Workshops (No. of participating Countries, No. of Session etc, (Not more than 100 words)

Being a servant of Anthropological Survey of India, Ministry of Culture it was my privilege to visit Maribor, Slovenia, the European Capital of Culture (2012) for attending the XIII International Congress of Human Growth and Clinical Auxology. The Congress was organized by the Department of Pediatrics, University Medical Center, Maribor, Slovenia along with The International Association for the Study of Human Growth and Clinical Auxology (ISGA). The patronage of Borut Pahor, President of the Republic of Slovenia, the Mayor dr. Andrej Fistravec, City Municipality of Maribor and Slovenian Academy of Sciences and Arts added new dimensions to the Congress.

It was represented by nineteen countries with more than one hundred scholars. I represented India alone. There were 77 scientific lectures with a number of poster presentations. There were 12 sessions altogether with very interesting topics delivered in two different halls (Hall Minarik and Hall Priol) simultaneously. Tough I had to restrict myself to single hall during interactions for one lecture or the other; all the sessions had a very high standard of presentations. The sessions include:

- a) Infant and preschool growth
- b) Mathematical Modeling (Session I and II)
- c) Bone health and Growth
- d) Nutrition (Session I and II)
- e) Obesity
- f) Growth and Population Health
- g) Environment, Growth and later consequences
- h) Temporal Changes: Causes and Consequences
- i) Early Growth and Later Health
- i) Growth in children with chronic conditions

(i) New Development presented at the Training/Workshops

The Congress served as a single platform to accumulate wider perspectives of knowledge on child health through human growth research.

The Congress gained its momentum with the J.M. Tanner lecture: Healthy Human Growth: The challenge for the 21st Century by Prof. Noel Cameron, Department of Human Biology, Loughborough University. Citing different ongoing phenomena of transition in life his discussion revolved round the critical research areas that focus on identifying and reducing health risk among the children. Quoting recent citations from the *Nature* journal he stressed on supporting mothers to secure public health in future.

The presentation of Prof. T.J.Cole from UCL Institute of Child Health, London is worth mentioning. His LMS method for child growth is well accepted by World Health Organisation for constructing child growth reference throughout the world. His introduction to the new method of **SITAR** will no doubt add different dimensions of child health throughout the world.

The EMGF (Extended Mechanistic Growth Function) method was suggested as alternative to LMS method by Prof. Elena Spada, Department of Clinical Sciences and Community Health, Milan, Italy.

I found the paper on Correlation Models for Conditional Growth by Prof. Mathieu Roelants, Department of Public Health and Primary Care, Belgium much interesting. His idea on the conditional change in the standard deviation score (SDS) to apply for tracking growth velocity is a remarkable approach to identify children with recurrent malnutrition.

Construction of lowered BMI cut-offs for the people having South-Asian origin by Jeroen de Wilde, Community Health Service, Netherlands may suggest us to construct Indian specific BMI reference for Indian children for preventive health assessment in future.

One of the posters on the changes in the prevalence of underweight among Polish school children by Dr. A. Gomula and her colleagues showed continuous effort of Poland since 1966 towards documenting the health status of their children based on growth data on decadal basis. Such thematic issues can also be initiated in India with the help of local as well as central administration.

New Development resulting from the Training/Workshops (200 words)

The multidisciplinary approach to deal with the issue of child health in terms of changing environmental situations was well recognized in the Congress. It enhanced the domain of methodological thinking which will no doubt add new dimensions towards the outcome of different scientific projects. The opportunity to discuss the experimental models of different scholars also gave new impetus to the related issues. The congress also helped to interact and socialize with the scientists with different socio-cultural background. The congress no doubt expanded the dimension of thinking in a number of new research areas like Multimodial Treatment Study of children with ADHD, influence of probiotics on mammary gland and milk microbiota etc. Last but not the least, the importance of lifestyle as well as culture dependent behavioural practices was also well recognized in the congress. It helped to understand that the more we know about the lifestyle of a population, their cultural prescription and prohibition, the more we can identify the underlying causes of the public health problems.

Cultural as well as physical environment of India is changing with time. With this transition (we can refer it as *cultural transition*) our main focus should be to conduct decadal surveys on child growth (survey on auxological change) to see the time trend in the physical development. This will no doubt help the policy makers to update the standards of developmental stages in Indian children. India has over 440 million children and about 27 million children are born each year. With a healthy growth of every child we will no doubt add to the national economy in near future.

Visit to other Scientific Institutions & Universities & Laboratories during your participation in the Training/Workshops

(Information in detail, wherever applicable is to be given in separate sheet)

The scientific session used to start at 8:50 am morning and ended up at 21:00 pm daily and there was a provision for dinner in the Congress center after the scientific session. As such there was a very tight schedule to visit scientific institutions of interest. However on 19th September the Organiser arranged a visit to the Military Museum of Slovenian Armed Forces, Maribor. Therefore we had a chance to visit the Museum after the scientific sessions was over. The museum collects, documents, preserves, studies, examines and presents museum material related to life and work of the Slovenian army. The Museum portrays different historical periods that shaped the present image of Slovenia, its inhabitants and army. It also monitors and documents the Slovenian army development. Collections include museum objects, archive and library material, visual art works and photographs.

(ii) Name of the publication in case your work is recommended for publications

The Abstract Proceedings has been published by the University Medical Center, Maribor with an ISBN Number: **978-961-6909-34-1**, with Prof. Martin Bigec as the Editor—in-Chief along with other member like Prof. Tomaz Krencnik and Prof. Lawrence M. Schell.

8. Participants contribution to the training/Workshops (100 words)

I presented my oral paper on "Early environment, epigenetics, nutritional status, developmental plasticity and future burden of metabolic diseases among a tribal population of Northeast India" on 20th September 2014. I proposed a hypothesis on *Environmental Shock* based on the sudden increase of non-communicable diseases in the countries under socioeconomic and nutrition transition. It was well appreciated by the Chairman of the session Prof. Lawrence Schell form State University of New York, Albany, USA along with the other members. After my presentation the interaction with Prof. James Walker from JTW Research Institute, USA; Prof. Jeroen A. De. Wilde from Netherlands, Prof. M. Kobayashi from Japan, Prof. Maria Kaczmarek from Poland on my paper was very fruitful.