**Abstract Title:** Implementing nurse led genetic counselling and awareness (NUGENA) for hereditary women's cancer in India.

Author Name: Dr Asima Mukhopadhyay, Director

Author Institute: Kolkata Gynecological Oncology Trials and Translational Research Group, Kolkata, India /UK

Abstract: Our pilot work (DST-UKIERI project 2017-2021) has shown that almost 30% of ovarian cancer patients had BRCA1/2 germline mutations; Following nurse-led genetic counselling, we noticed increase in the number of patients/their relatives identified at risk and accepting to have genetic testing done (55% to 88%). However, despite of enthusiasm amongst the at-risk healthy family members in attending the hospital-based counselling clinics, the numbers who underwent genetic testing and subsequent preventive surgery was low. We conducted subsequent pilot work (ASCO IIG 2022) on intensive training of nurses in regional centres of India and Nepal. Results showed significant interest and uptake in genetic counselling by the nurses, and six centres out of 15 have started their own nurse-led genetic clinics following completion of training. We want to continue this effort in a larger scale using concerted implementation study approaches in a different tertiary care set-up and in a wider/defined population cohort by approaching to other PIs engaged in population-based studies in the region for breast, ovarian and endometrial cancers.

The novelty of the project is that no similar studies have been performed in India before except the pilot cohort conducted by the PI through DST-UKIERI project. However, the current study proposes a structured framework using a novel implementation research methodology (EASE) to assess barriers and solutions for implementing a successful strategy and scalability for prevention of hereditary cancers. Developing nurse led training programs and biobanking of samples for future genomic research are key features. We have women the World Ovarian cancer charter champion award for this project.

Area of expertise: Gynaecological Oncology Clinician (surgeon) Scientist