Developing a center for genetic research and capacity building of early-career scientists in Sri Lanka

Warnakula L\textsuperscript{1}, Skandhakumar R\textsuperscript{1}, Madanayake R\textsuperscript{1}, Jayaweera K\textsuperscript{1}, Abeysinghe MRN\textsuperscript{1}, Sumathipala A\textsuperscript{1,2}

1. Institute for Research and Development, Sri Lanka
2. Research Institute for Primary Care & Health Sciences, Faculty of Medicine & Health Sciences Keele University, UK

Introduction and objectives

Genetics plays an important role in health research. Shortage of infrastructure limits the genetics research output from within the country.

Moreover poor practical and analytical skills decrease employability and engagement of early career scientists in genetics research.

Method

The Institute for Research and Development’s genetics laboratory was established in 2007 in collaboration with King’s College London, UK.

Student-centered training program on “practical skills in molecular biology and genetics” was initiated in 2015; conceptualizing the “learn-by-doing” to provide a comprehensive training to young researchers. Registration of Tertiary and Vocational Education Commission of Sri Lanka was obtained to assure high quality of the program.

A six month free internship program has been in effect since 2016 to provide early career scientists with an exposure to real world research. This program is in accordance with the Sri Lanka Qualifications Framework developed by the Ministry of Higher Education.

Results

A state of the art laboratory has been developed to perform genetic research within the country as opposed to exporting genetic material abroad. 26 students have been trained to date. 03 students have completed the internship program. Students’ feedback and employability showed the overall success and positive outcome of the program.

Conclusion

Local infrastructure for cutting edge genetics research is vital, however should not only be limited to equipment, but include human resources as well.

Capacity building leads to the development of a critical mass of much needed researchers in the country.