

Molecular research as a platform for capacity building for interdisciplinary collaborative research

At the time of establishment of central Research Laboratory (CRL), the research activities of the Centre were focussed mainly on the area of congenital malformation. Insufficiency of interdepartmental collaboration was one of the lacunae identified in the previous NAAC cycle. The Centre looked upon this deficiency as an opportunity to establish itself as a nodal platform for interdepartmental research. The outcome of the strategic plan adopted by the Centre in this direction has become visible in this review period. The Centre now has collaborative projects with 14 other Departments of the Academy. This approach has opened newer opportunities to expand the spectrum of research areas. In addition, the Centre has taken up industry-academia collaboration with a start-up company for extending the scope of the initial work in the area of congenital malformation. This approach has resulted in unravelling novel genetic landscape in the congenital malformation of heart. In addition to science, this approach has also opened up newer opportunities for collaboration with institutions of excellence. The platform was able to attract and house the cell culture facility of the multi-centric Virtual National Library of Oral Cancer project sponsored by DBT and spearheaded by Prof Tapas Kundu from Jawaharlal Nehru Centre for Advanced Scientific Research.

Two applications have been filed for patent in the year 2017-18.

Date of publication *	Patent Details	Patent status	Patent number	Date of Award
10/26/2018	A method of determining the risk of developing preeclampsia using rs2200733 SNP as a genetic marker	Published	201741042925	NA
10/26/2018	Method of determining cancer risk using SNP rs45549733	Published	201841025451	NA

Molecular research works have been published in peer reviewed scientific journals indexed in international databases.

Year	Total	Scopus	PubMed	Web of Science	Impact factor > 1.0	Cumulative impact factor
2019	12	7	11	3	9	26.6
2018	7	6	5	4	4	9.37
2017	8	6	5	2	3	8.76
2016	5	2	3	0	3	11.79
2015	4	2	1	1	2	2.47
2014	2	1	1	0	1	2.19
Total	38	24	26	10	22	61.18