



Australia—India Strategic Research Fund (AISRF) Early- and Mid-Career Fellowships 2019 Grant Recipient List

The Australia–India EMCR fellowships provide support (up to A\$16,500) for Australian scientists to travel to India and work with leading researchers at major Indian science and technology organisations for between one and three months.

The fellowships also facilitate long-term science, technology and innovation collaboration between Australia and India by developing researchers' expertise in international collaboration and fostering long-term relationships between Australian and Indian researchers. This increases Australian researchers' understanding of Indian culture, particularly science and research practices and systems, while developing leadership skills as future 'science ambassadors' for Australia.

The EMCR fellowships are a component of the AISRF, a platform for bilateral collaboration in science jointly managed and funded by the governments of Australia and India.

This program is supported by the **Department of Industry**, Science, Energy and Resources.

Name and Organisation	Project	Host Institute
Dr Ulf Schmitz University of Sydney	Establishing an Australian-Indian Alliance to find cures for haematological diseases	 Indraprastha Institute of Information Technology, New Delhi Christian Medical College, Vellore
Dr Julie Ardley Murdoch University	Investigating the role of tRNA modification and other molecular determinants of root nodule bacteria tolerance to environmental stresses	 Indian Institute of Science, Bengaluru J.N. Vyas University, Jodhpur
Dr Sridevi Sureshkumar Monash University	Molecular mechanisms of epigenetic silencing caused by intronic repeat expansions.	 Indian Institutes of Science Education and Research, Mohali Indian Institute of Sciences, Bengaluru
Dr Chandan Karmakar Deakin University	Wearable sensor devices for monitoring chronic diseases	 Indian Institute of Technology Madras, Chennai
Dr Gregory Martin The University of Melbourne	Intensified primary production of protein feed and oils from microalgae	 Indian Institute of Technology, Kharagpur Reliance Industries Limited, Navi Mumbai
Dr Yixiang Gan The University of Sydney	Optimising thermal energy storage with phase change materials: with applications to solar energy storage in Australia and India	 Indian Institute of Technology Madras, Chennai Indian Institute of Technology, Bhubaneswar



Dr Dilan Robert RMIT University	Nanoscience based construction materials for unsealed roads	Jagran Lakecity UniversityMANIT University
Associate Professor Ahmed Moustafa Western Sydney University	Designing a computational model of Cortex-Basal Ganglia-Cerebellum interactions to optimize drug choice and dosage for Parkinson's disease	 Indian institute of Technology, Madras International Institute of Information Technology
Dr Md Apel Mahmud Deakin University	Robust distributed intelligent controller design for distributed energy resources in microgrids	 Malaviya National Institute of Technology Indian Institute of Technology, Bombay
Dr Laszlo Irinyi Westmead Institute for Medical Research	NGS and DNA barcoding of nonsporulating fungi	Kasturba Medical College, ManipalManipal Academy of HigherEducation
Dr Vaibhav Shah University of New South Wales	Investigating molecular biology of HIV-1 subtype C: Implications for the increasing global diversity of HIV-1 subtypes.	 Jawaharlal Nehru Centre for Advanced Scientific Research Bengaluru
Dr Douglas Tait Southern Cross University	Quantifying the role of groundwater nutrient inputs into the Indian Ocean	 Engineering Indian Institute of Technology, Kanpur
Dr Sambasivam Periyannan Australian National University	Building food security in India through rapid incorporation of resistance to devastating cereal rust diseases	 Punjab Agricultural University, Ludhiana
Dr Vini Gautam Australian National University	Nanotechnology meets Neuroscience: Novel scaffolds that engineer the growth and function of neurons to understand brain disorders	— Indian Institute of Science, Bengaluru
Dr Nisa Salim Deakin University	Multi-functional carbon fibre composites towards quality assurance, predictive maintenance and in-service damage detection	 National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram Mahatma Gandhi University, Kottayam