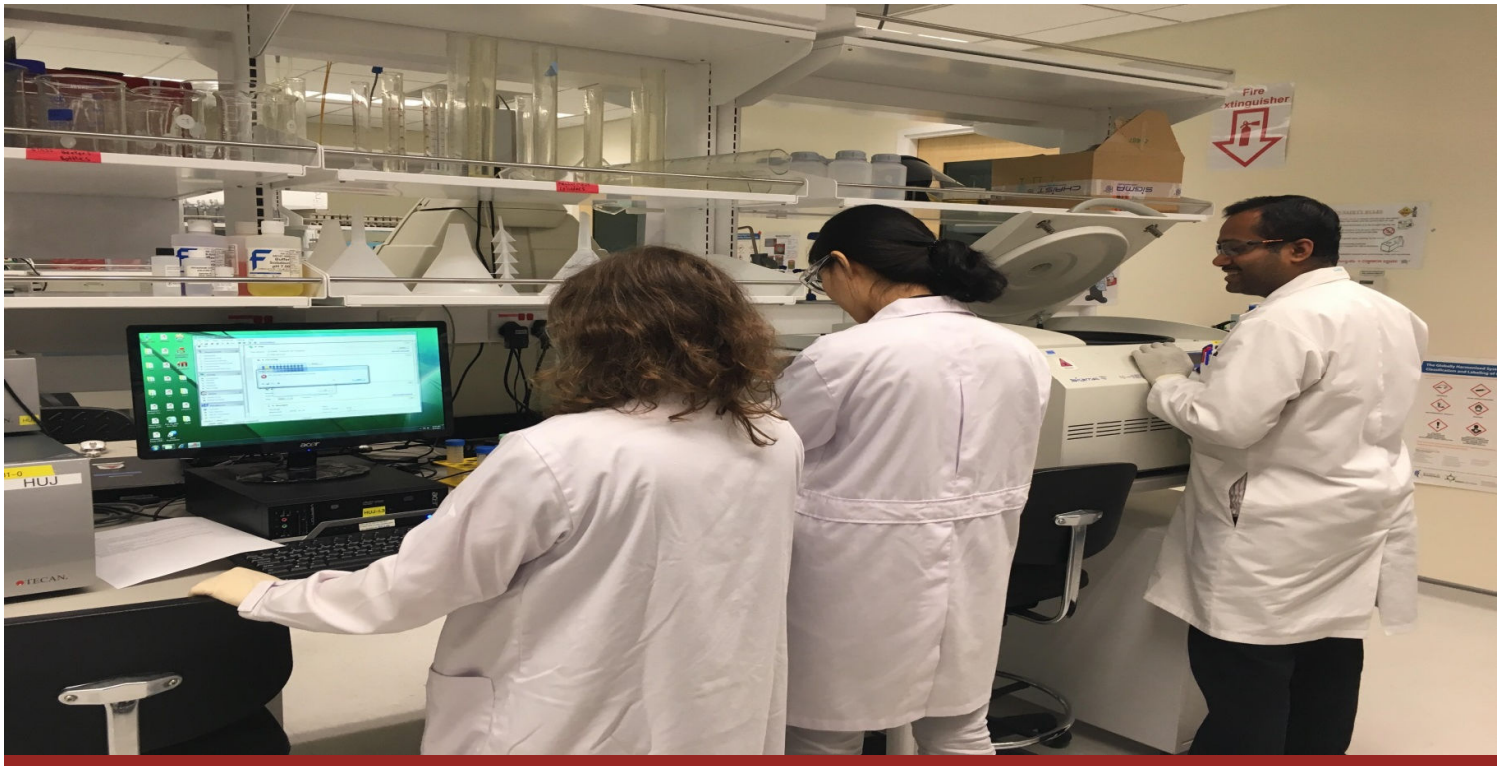
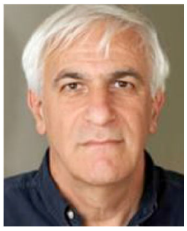
SHARE

Molecular Mechanisms Underlying Inflammatory Diseases



Programme Leaders



Prof Ehud Razin, Hebrew University of Jerusalem

Prof Paul MacAry, National University of Singapore

The Cellular and Molecular Mechanisms of Inflammation programme (MMID2) was established in July 2016 under Singapore-HUJ Alliance for Research and Enterprise (SHARE) and funded by the National Research Foundation (NRF). MMID2 is a joint research programme between The Hebrew University of Jerusalem (HUJ) and The National University of Singapore (NUS).

Research

Inflammation is the body's response to infection and injury. Inflammation is a complex, highly regulated biological response to different types of stimuli and underlies the pain, tissue damage/remodeling, oedema and loss of function associated with human diseases. As such, a better understanding of inflammatory processes is necessary to identify target molecules and new biological pathways for diagnostics, prognostics and therapeutics.

This programme brings together researchers and clinicians from Israel and Singapore, thus combining basic and translational research that will advance understanding of inflammatory process and the development of promising new drugs for inflammatory diseases.

The vision of this programme is to become a world-leading institute for inflammation research based in Singapore with sustained support from local and international funding organizations and pharmaceutical partners.

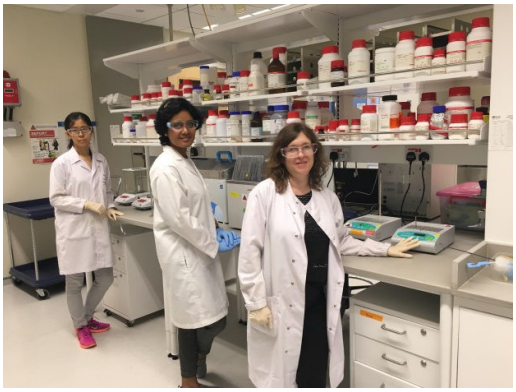
Researchers

A total of 18 researchers are working in this programme. They consist of post-doctoral fellows, research associates, research assistants and PhD students. Leading the research teams are a total of 7 Principal Investigators (PIs), 3 from NUS, and 4 from Hebrew University of Jerusalem who hold joint appointments with NUS.

Highlights

A Global Partnership

- Brings together talent from Israel and Singapore to advance a better understanding of molecular processes involved in inflammatory diseases
- Creates a network of clinicians and researchers to advance translational and clinical efforts
- Uniquely positioned to develop specific drugs for inflammation-related disease
- Provides mentorship to a new generation of Singapore researchers through post-doctoral fellowships and PhD programs
- Brings Israel's start-up nation culture of translational research and entrepreneurism to Singapore's research community.



Notable Achievements

- Discovered that Asparaginase, a widely-used chemotherapeutic agent, arrests Group A Streptococcus growth (Flesh-eating bacteria)
- A breakthrough against dengue with dengue antibody discovery
- Launched a joint NUS-HUJ PhD programme to promote training and research in biomedical science
- Established collaborations with industry including large Pharma (GlaxoSmithKline, ThermoFisher Scientific and Roche Glycart) covered by formal Research Collaboration Agreements

For more information about the NUS-HUJ-CREATE programme,
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