

The Singapore Immunology Network (SigN), has been established by the Agency for Science, Technology and Research (A*STAR) with the aim of expanding immunological research in Singapore and is inviting applications for key positions.

Dendritic Cell Biology

**under the leadership of
Professor Paola CASTAGNOLI, PhD
SigN Scientific Director**

3 Post-doctoral Research Positions are available

Applicants must have a completed PhD, MD or equivalent degree. Only candidates with an extensive and relevant track record of productivity will be considered.

Dendritic cells (DC) play a key role in the immune system as they initiate and regulate immunity. The laboratory of Paola Castagnoli has been involved in the study of DC biology for the past 15 years. Future work will continue with the study of human DC biology in physiological and pathological conditions.

The current research areas are the following:

- Definition of the molecular signature of DC's progenitors (HSC-DC) during differentiation; identification of novel master genes and transcription factors expressed during the differentiation of DCs and their interaction with stromal cells.
- Transcriptomics and proteomics analyses of DC from different tissue origins in response to exogenous microbial signals or endogenous stress signals to further define DC plasticity. Validation of differentially expressed molecules and generation of monoclonal antibodies to target DC in vivo.
- Study of the role of IL2 produced by DC in a conditional DC-specific IL2 knockout mouse models during immune responses. Relevance of DC-produced IL2 during priming of CD4 and CD8 and Treg activation and in innate responses.

Interested applicants should email curriculum vitae, statement describing research accomplishments and future research goals, relevant reprints, and the names/contact information of three references to Professor Paola CASTAGNOLI Paola.Castagnoli@immunol.a-star.edu.sg

We offer:

- 3 years contract (renewable)
- An internationally competitive remuneration package.
- Funding (Full grant support for research work)
- Technical support
- Broad range of technical core facilities as services (imaging, transcriptomics, cell sorting, animal facility, etc)
- International scientific environment

