

Lucia Mori, Ph.D.

Professional appointments

- Senior scientist, deputy head and project leader of Experimental Immunology, Department of Biomedicine of the Basel University Hospital and of the University of Basel, Switzerland (1994-2024)
- Principal Investigator Singapore Immunology Network (SIgN), Biomedical Research Council (BMRC), Agency for Science, Technology & Research (A*STAR), Singapore (2010-2016)
- Member of SIgN Scientific Council (2011-2013)
- Postdoctoral scientist / Research Scientist F. Hoffmann-La Roche Pharmaceutical Research New Technologies Department, Basel, Switzerland (1988-1994)

Degrees

- Ph.D. in Microbiology “70/70 cum laude”, University of Pisa, Italy (1987)
- Fully licensed biologist, University of Pisa (1984)
- Doctor in Biology (M.Sc. equivalent) “110/110 cum laude”, University of Pisa (1983)

Fellowships awarded

- Marie Heim-Vögtlin fellowship from the Swiss National Science Foundation (1994-1998)
- Fellowship from the Italian Association for Cancer Research (1985-1987)
- Fellowship from the European Molecular Biology Organization (1985)
- Fellowship from the Italian Gruppo di Cooperazione in Immunologia (1984)

Academic experience

- Postdoctoral scientist at the CNR Center of Cytopharmacology, University of Milano, Italy (Director Prof. F. Clementi, group of Prof. P. Ricciardi-Castagnoli) (1986-1988)
Functional characterization of immortalized antigen-presenting cell lines. Mechanisms of self-tolerance in mice carrying self-reacting TCR
- Scientist at the Basel Institute for Immunology, Basel (Director Prof. F. Melchers, group of Dr. M. Steinmetz) (1985-1986)
Genomic organization and gene rearrangement of mouse TCR genes
- Student at the CNR Center of Cytopharmacology, University of Milano (group Prof. P. Ricciardi-Castagnoli) (1984)
TCR genes expressed by mouse T-cell lymphomas
- Student at the Institute of Microbiology, University of Pisa (Director Prof. G. Falcone, group of Prof. M. Campa) (1983-84)
In vitro and *in vivo* studies on immune response during bacterial infections in mice

Experience in pharmaceutical industry and biotech

Founder and Founding Chief Scientific Officer of Matterhorn Biosciences AG, Basel, Switzerland (2020-2022)

Research scientist at F. Hoffmann-La Roche Pharmaceutical Research New Technologies Department, Basel, Switzerland (1988-1994)

Teaching, supervising and mentoring

University of Basel, Switzerland:

- Advisor for ImmunoPhD Club, Immunology graduate student club (2014-2024)
- Founder and Coordinator of “Basel Immunomeetings”, weekly immunology seminars Phil-Nat Faculty (2001-2010 and 2016-2024)
- Tutor of Medical School students (2008-2009)
- Mentor undergraduate and graduate students of Experimental Immunology group of Prof. G. De Libero, Department of Biomedicine (1994-2024)

University of Milano-Bicocca, Italy - A*STAR Singapore:

- Mentor Ph.D. Research Attachment Programme A*STAR-UNIMIB (2013-2015)

Member of doctoral thesis committee of European Universities (Italy, France, Sweden, Portugal)

Scientific editorial & grant reviewing activities

Ad hoc Reviewer for Immunology journals (Nature Immunology, Science Immunology, Immunity, Journal of Immunology, Immunometabolism, Frontiers in Immunology) and Immunology sections of generalist Journals (eLife and Plos journals). Reviewer of grant and fellowship applications for funding agencies: European Commission (ERC), Switzerland (Swiss Cancer League and Swiss Cancer Research Foundation), U.K. (MRC and Wellcome Trust), Italy (FISM and FRRB), France (ARSEP), Austria (ASF), The Netherlands (ZonMw), Canada (Natural Sciences and Engineering Research Council), Australia (NMRC), Singapore (ASTAR and NMRC)

Professional affiliations

Swiss Society of Allergology and Immunology (2016-2024)

Singaporean Society of Immunology (2010-2016)

European Academy of Tumor Immunology (2016-)

Uni Basel Immunology Community (2015-)

Female Entrepreneurs Basel (2023-)

Scientific interests

The long-term research interests of Dr. Lucia Mori have centered on antigen-specific recognition by T lymphocytes and in particular on the role of T cells recognizing lipids and metabolites during autoimmune diseases, infection and cancer. The lack of antigen structural changes during immune selection and the absence of functional polymorphism in CD1 and MR1 antigen-presenting molecules, make these molecules excellent targets for novel T cell immunotherapy based on antigen recognition. Present interests are the identification of T cell signatures as relevant disease-specific biomarkers and the exploitation of CD1- and MR1-restricted T cells in novel immunotherapeutic strategies.

Publication record

Presently, Lucia Mori has published >100 papers in peer reviewed scientific journals including in generalist journals: *Science* and *PNAS*. She has published in top-tier journals in the field, including *Nature Immunology*, *Science Immunology*, *Immunity*, *The Journal of Experimental Medicine*, *Nature Reviews Immunology* and Annual Review of Immunology (IF-34.87).

Currently, her papers have been cited >8'500 times (H-index 44).

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Full publication list available at Google Scholar: Lucia Mori

Brief Biography

Lucia Mori has a Ph.D. in Microbiology and Immunology from the University of Pisa, Italy. Her background is molecular immunology. She studied the specificity of antigen recognition of T lymphocytes and T cell receptor (TCR) genes at the Basel Institute for Immunology and at the National Research Council in Milano. At Hoffmann-La Roche in Basel, she established a new experimental model to investigate the role of TCR genes in the induction of autoimmunity. In 1994 she joined the Department of Biomedicine of the Basel University Hospital, where she became interested in T cell recognition of non-peptidic antigens. She participated in the discovery of self-metabolites stimulating human TCR $\gamma\delta$ cells, and of self-lipid antigens stimulating TCR $\alpha\beta$ cells, including NKT cells. From 2010 to 2016 she lead a group studying "non classical" T cell immunity at the Singapore Immunology Network, Agency for Science, Technology & Research in Singapore. After her return to Basel, she lead the translational immunology projects at the Department of Biomedicine of the Basel University Hospital, focusing on cancer immunotherapy by "non classical" T cells. From 2020 to 2022, she acted as founding Chief Scientific Officer of Matterhorn Biosciences, a biotech company based on MR1-directed T cell therapy targeting the cancer metabolome.

Personal

Residence:

Nationality:

Place of birth:

Civil status:

Languages:

