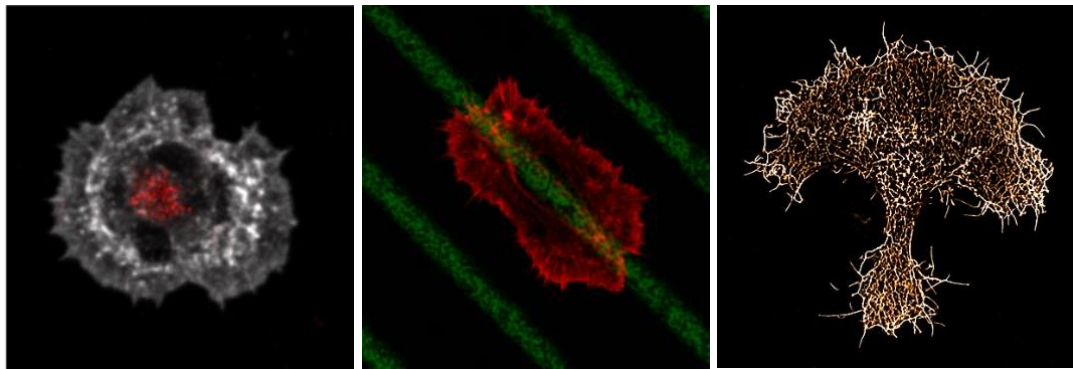


PhD student or Postdoctoral fellow position in adaptive immunity with a focus on advanced microscopy

The Lymphocyte Cytoskeleton group, headed by Dr Pieta Mattila, combines multi-disciplinary approaches, such as molecular cell biology, *in vivo* mouse models, advanced imaging as well as proteomics, to explore early B cell activation. For more information, see <https://mattilalab.utu.fi>. We are looking for a PhD student or postdoc to primarily carry out research on B cell receptor signaling and the formation of the B cell immunological synapse using various modern imaging techniques including super-resolution microscopy and micropatterned substrates. Previous experience in microscopy and/or lymphocyte cell biology will be an asset. A keen interest towards advanced microscopy including image analysis is expected.

Our group has extensive experience in various modern imaging techniques, including super-resolution imaging (for example: Mattila et al, Immunity 2013; Hernandez-Perez et al, 2020). In addition, the project will be carried out in collaboration with Dr Guillaume Jacquemet (Åbo Akademi University), who is an expert in various imaging methods and deep learning-based image analysis (see <https://www.nature.com/articles/s41467-021-22518-0>).



Our research group is located in Biocity (Turku, Finland). Biocity is a scientific hub in the heart of the Turku research campus, comprising several institutes and two universities. We are affiliated to the Institute of Biomedicine and MediCity Research laboratories of the University of Turku, as well as the Turku Bioscience center. We have an excellent microscopy infrastructure in-house (<https://bioscience.fi/services/cell-imaging/services/>) as well as close support from Turku Bioimaging community (<https://www.bioimaging.fi/>) and the Turku node of Euro-Bioimaging (<https://www.eurobioimaging.eu/>), whose headquarters is also located in Biocity. Moreover, we are part of the InFLAMES flagship project (<https://inflames.utu.fi/>) that gathers together both the immunology research and various research platforms/tools and provides excellent support to our projects.

Main duties / key activities:

- To plan and carry out research in accordance with the project aims.
- To attend research group meetings and relevant seminars.
- To form good working relationships with other members of the group as well as collaborators.
- Writing-up and publication of work in international peer-reviewed journals.
- Presentation of data at national and international meetings.
- To assist others and co-supervise undergraduate or graduate students when required.

Profile of a successful candidate:

Essential:

- Master's or PhD degree (or equivalent) in an area of the Life Sciences, with a background in molecular and cellular biology, immunology, microscopy or mass spectrometry.
- Experience with molecular and cell biology methods including tissue culture work.
- Highly motivated.
- Careful thinker.
- Ability and willingness to work in a collaborative, multi-disciplinary and international research environment.
- Willingness to share knowledge and transfer skills to other members of the group.
- Good interpersonal skills.
- Good written and verbal communication skills in English.

Desirable (especially for a postdoc):

- Evidence of ability to conduct research independently.
- Pro-actively seek innovative solutions to scientific problems.
- Experienced in working with lymphocytes and/or in modern microscopy techniques.
- Ability/willingness to conduct *in-vivo* experiments with mouse models is a plus.
- Strong publication record.

We offer:

- Strong scientific training and mentoring.
- Learn cutting-edge techniques.
- Supporting, flexible and friendly research group with a valuable collaborative network.
- High-class research environment with state-of-the-art infrastructures.
- Opportunity to contribute to supervision and teaching.
- Opportunity to establish independence with competitive funding (postdoc).

Candidates should submit the following documents as a single pdf:

1. Motivation letter
2. Curriculum Vitae (max. 2 pages, highlighting any outstanding achievements)
3. List of publications and manuscripts in preparation (if applicable)
4. Names and contact details of 2-3 references.
5. Copy of Master's / PhD degree certificate

For more information, please contact Pieta: pieta.mattila@utu.fi.