

# CURRICULUM VITAE

## PERSONAL INFORMATION

Family name, First name: Beckwith, Marianne Sandvold  
Date of birth: 12.04.1987  
Nationality: Norwegian  
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## EDUCATION

- 2018 PhD, defended 21.03.2018  
Centre of Molecular Inflammation Research (CEMIR), Norwegian University of Science and Technology (NTNU), Trondheim, Norway.  
*Title: Targeted correlative light and electron microscopy in the study of host-pathogen interactions*
- 2013 M.Sc in Nanotechnology  
Department of Physics, The Faculty of Technology and Natural Sciences, NTNU, Trondheim, Norway  
*Title: Technical aspects of ion milling and electron imaging of epoxy embedded samples for FIB-SEM tomography.*
- 2007 Baccalauréat général scientifique, Lycée Edouard Herriot, Lyon, France

## CURRENT AND PREVIOUS POSITIONS

- 2023 - Senior engineer at the Cellular and Molecular Imaging Core (CMIC), NTNU, Trondheim, Norway
- 2019 - 2023 EMBL interdisciplinary postdoc (EIPOD), funded by EU (MSCA) and EMBL (European Molecular Biology Laboratory), Heidelberg, Germany.
- 2018 - 2019 Post doctoral fellow  
CEMIR, NTNU, Trondheim, Norway
- 2013 - 2018 PhD Candidate  
CEMIR, NTNU, Trondheim, Norway
- 2012 Summer intern  
NTNU and FFI (Norwegian Defense Research Establishment), Trondheim, Norway  
*Topic: FIB-SEM of epoxy nanocomposites*
- 2010 Summer intern  
Faculty of Mathematics and Natural Sciences, Department of chemistry, University of Oslo (UiO), Oslo, Norway. *Topic: crystallization of amino acids*
- 2009 - 2010 Part time assistant at NTNU NanoLab, Trondheim, Norway

## TEACHING ACTIVITIES (Role: trainer and/or lecturer)

- 2022 Workshop on advanced Correlative Light and Electron Microscopy, Sweden
- 2021 EMBO practical course: Advanced Electron Microscopy for cell biology, Norway
- 2019 EMBO practical course: Volume Electron Microscopy, Germany
- 2019, 2021 Predoc course for PhD students at EMBL, Germany
- 2014 - 2016 Two lectures per year in the course “Nanomedicine” – Topic: Electron microscopy for biomaterial characterization, NTNU, Trondheim, Norway

## PRACTICAL COURSES (taken as participant)

2020 – 2021 LEAP: Leadership and Excellence for Aspiring Postdocs. Mentoring and coaching program  
2020 Python workshop, Image analysis  
2014 EMBO practical course: correlative light and electron microscopy. Bristol, UK.  
2013 EMBO practical course: electron microscopy and stereology in cell biology. Heidelberg, Germany.

## PROJECT MANAGEMENT EXPERIENCE

2010 – 2011 UKA-11 – Deputy Head  
2007 – 2009 Different positions (including head of the board) in Timini, the student organization for Nanotechnology students at NTNU.

## LANGUAGES

|           |   |                               |
|-----------|---|-------------------------------|
| Norwegian | – | Native proficiency            |
| English   | – | Full professional proficiency |
| French    | – | Professional proficiency      |
| German    | – | Elementary proficiency        |

## CAREER BREAKS

05.2017 - 01.2018 Parental leave  
02.2015 - 09.2015 Parental leave

## LIST OF ACADEMIC PUBLICATIONS (\*shared first author)

- Sitarska, E., Almeida, S.D., **Beckwith, M.S.** et al. Sensing their plasma membrane curvature allows migrating cells to circumvent obstacles. *Nat Commun* **14**, 5644 (2023). <https://doi.org/10.1038/s41467-023-41173-1>
- Cortese M, Lee J-Y, Cerikan B, Neufeldt C.J., Oorschot V.M.J., Köhrer S., Hennies J., Schieber N.L., Ronchi P., Mizzon G., Romero-Brey I., Santarella-Mellwig R., Schorb M., Boermel M., Mocaer K., **Beckwith M.S.**, Templin R.M., Gross V., Pape C, Tischer C., Frankish J., Horvat N.K., Laketa V., Stanifer M., Boulant S., Ruggieri A., Chatel-Chaix L., Schwab Y, Bartenschlager R., Integrative Imaging Reveals SARS-CoV-2-Induced Reshaping of Subcellular Morphologies. *Cell Host & Microbe* (2020), doi: 10.1016/j.chom.2020.11.003
- **Beckwith M.S.\***, Beckwith K.S.\* et al. Plasma membrane damage causes NLRP3 activation and pyroptosis during *Mycobacterium tuberculosis* infection. *Nat Commun* **11**, 2270 (2020), doi: 10.1038/s41467-020-16143-6
- Meås H.Z.\*, Haug M.\*, **Beckwith M.S.** et al. Sensing of HIV-1 by TLR8 activates human T cells and reverses latency. *Nat Commun* **11**, 147 (2020), doi: 10.1038/s41467-019-13837-4
- **Beckwith M.S.** et al. Seeing a mycobacterium-infected cell in nanoscale 3D: Correlative imaging by light microscopy and FIB/SEM tomography. *PLoS ONE* 2015 ;Volum 10:e0134644.(9)
- Magnus Ø.O.; Lilledahl M.B.; **Beckwith M.S.** et al. Biochemical and Structural Characterization of Neocartilage Formed by Mesenchymal Stem Cells in Alginate Hydrogels. *PLoS ONE* 2014 ;Volum 9.(3) s. e91662-