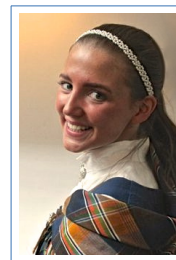


Mia Kvåle Løvmo

Curriculum Vitae

Snikkarvegen 2
2686 Lom, Norway
✉ mia.k.lovmo@ntnu.no



Employment and education

- 2016–2017 **Researcher, Scholarship from the Norwegian Research School in Medical Imaging**, The Norwegian University of Science and Technology (NTNU), Norway.
- 2009–2016 **Engineering, master of science in Nanotechnology**, NTNU, Trondheim, Masterlevel–A, Bachelorlevel–C. Specialization within Bionanotechnology.
- 2013–2014 **Exchange year during maters**, University of Colorado at Boulder, USA, GPA – 3.5 (A). Specialization within Biophysics.

Master project spring 2016 - followed by research position 2016-2017

- Title ***The effect of acoustic radiation force on the delivery of nanoparticles to tumor tissue.***
- Supervisors Prof. Catharina de Lange Davies & Postdoctoral Fellow Mercy Afadzi
- Description One of the major barriers of drug delivery to cancer tumors, the penetration of Extra Cellular Matrix (ECM), could be improved with the application of non-invasive focused ultrasound (FUS). Confocal microscopy was used to measure the effect of acoustic radiation force on fluorescent nanoparticle's penetration in an in-vitro collagen gel model. Manuscript in preparation, see section below (*).

Project fall 2015

- Title ***Diffusion of PEGylated nanoparticles in Extra Cellular Matrix (ECM) - resembled by collagen gels.***
- Supervisors Professor Catharina de Lange Davies & Postdoctoral Fellow Sylvie Lelu
- Description Diffusion of polymeric nanoparticles with varying degree of PEG surface modification was measured in collagen gels with confocal fluorescent microscopy and analysis with Raster Image Correlation Spectroscopy (RICS). Work published in paper, see section below (**).

Manuscript in preparation (*)

- Title ***Acoustic radiation force and transport of nanoparticles in tumor Extra Cellular Matrix.***
- Autors Kvåle Løvmo M, Afadzi M, Tesfamichael Yemane P, Davies CL, Schmid R, Mørch Y

Published work (**)

- Title ***PEGylation of PBCA nanoparticles, a quantitative and qualitative study (2017).***
- Autors Åslund AKO, Sulheim E, Snipstad S, von Haartmann E, Baghirov H, Starr N, Kvåle Løvmo M, Lelú S, Scurr D, Davies CL, Schmid R, Mørch Y.

Additional laboratory work experience

- Feb 2014–Mai 2014 **Lab assistant for Kristen Barthel**, LEINWAND LAB AT THE BIOFRONTIERS INSTITUTE, University of Colorado at Boulder, Boulder.

My project was dedicated to elucidate the role of the intracellular regulatory molecule miR-206 in cardiac cells stressed by hypoxia, due to the applicability to heart attacks. Detailed experience with culturing of primary cardiac myocytes and cardiac fibroblasts, induction of cell hypoxia with specialised cell culture chamber, cell RNA isolation by organic extraction and integrity and quality verification of the RNA by gel electrophoresis and profiling of gene expression with quantitative reverse transcription-based PCR (qRT-PCR).

Technical qualifications and languages

- Technical: **Advanced:** MICROSOFT-, LIBRE-, OPENOFFICE, L^AT_EX and MATLAB. **Basic:** HTML
- Languages: **Advanced:** Norwegian (Mother tongue) and English. **Basic:** German (5 years in school).

References

Professor, Ph.D. Catharina Davies, Dept. of Physics, NTNU. Mobile: (+47) 73 59 36 88, Email: catharina.davies@ntnu.no
Professor, Ph.D. Pawel Sirkorski, Dept. of Physics, NTNU. Mobile: (+47) 98 48 64 26, Email: sikorski@ntnu.no
Ph.D. Kristen Barthel, CU Boulder. Mobile: (+1) 303 492 719, Email: kristen.bjorkman@gmail.com