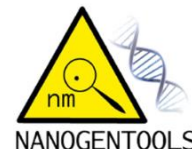


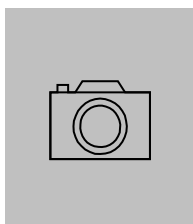


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PERSONAL INFORMATION

Emily Guggenheim



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🌐 <http://www.acenano-project.eu/>

POSITION Postdoctoral Researcher

EDUCATION AND WORK EXPERIENCE

Feb. 2017 – Current: **Research associate at the University of Birmingham.** Post-doctoral research associate position with the H2020 ACENano project, within the School of Geography Earth and Environmental Sciences. Main roles align with WP2 (Analytical optimization) and WP3 (Method Benchmarking and training). Main goals include the development and optimization of work on integrated microscopy methods (beginning with reflectance and TEM), and involvement in the extension to AFM and ToF-SIMS. Other aims include the continued development of automated processing and analysis methods for NP detection and toxicological assessment, along with investigation cellular interactions along with new *in vitro* approaches, such as lab-on-chip / organ-on-chip and miniature Air Liquid Interface (ALI) device. A variety of techniques are also required to support various work package deliverables, therefore the role includes receiving (and performing) training on a variety of analytical instruments including ICP-OES, ICP-MS, FFF, DLS, UV-Vis and NTA. Other roles include training, guidance to students and dissemination of research outputs and application for funding for projects.

Sept. 2016 – Feb 2017: **Research associate at the University of Birmingham.** Research associate position within the FP7 NanoMILE project. Main roles aligned with WP4 (Development of screening platforms for MNM's), WP3 (Life cycle evolution of MNMs) to compliment toxicity studies performed in WP4 and WP7 (NMN biokinetics and Toxicity testing). Work also involved WP10 (Dissemination work).

Education:

Sept. 2013 – Sept 2016: **PhD Physical Science of Imaging in the Biomedical Sciences.** “Development of reflectance imaging techniques and automated analysis routines for the investigation of super-paramagnetic iron oxide nanoparticle uptake into cancer cell models”. Physical Science of Imaging in the Biomedical Sciences DTC, University of Birmingham. Supervisors: Dr. Joshua Rappoport, Dr Iseult Lynch, Dr. Iain Styles and Prof. Michael Hannon.

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Sept. 2012 – Sept. 2013: **MSc Physical Science of Imaging in the Biomedical Sciences**. Physical Science of Imaging in the Biomedical Sciences DTC, University of Birmingham, UK. Grade: Distinction.

Sept. 2011 – Sept. 2012: **MSc Toxicology**. School of Biosciences, University of Birmingham, UK. Grade: Distinction

Sept. 2008 – Sept. 2011: **BSc Biochemistry**. School of Biosciences, University of Birmingham, UK. Grade: Upper-second class (2.1).

Publications: Journal Articles

Emily J Guggenheim, Peter Röttgermann, Silvia Milani, Anna Salvati, Maria Dusinska, Christelle Saout, Iseult Lynch, and Joachim O. Rädler. “Refining in vitro models for nanomaterial exposure to cells” ***Under review***

Emily J Guggenheim, Iseult Lynch and Joshua Z. Rappoport. “Imaging in focus: Reflected light imaging, techniques and applications.” ***International Journal of Biochemistry and Cell Biology***. 2017.

Emily J Guggenheim, Abdullah Khan, Jeremy Pike, Lynne Change, Iseult Lynch, Joshua Z. Rappoport. “Confocal and super-resolution reflectance imaging of metal oxide nanoparticles inside cells.” ***PloSONE***. 2016.

Julie Mazzolini, Ralf Weber, Hseuh-Shih Chen, Abdullah Khan, **Emily Guggenheim**, Robert Shaw, James Chipman, Mark Viant, Joshua Z. Rappoport. “Protein corona modulates uptake and toxicity of nanoceria via clathrin mediated endocytosis”. ***The Biological Bulletin, (Issue TBC)***. 2016.

M. Kaur¹, **Emily J Guggenheim**¹, Claudio Pulisciano¹, S. Akhbar, Rachel M. Kershal, Nikolas J. Hodges, “Cellular accumulation of Cys326-OGG1 protein complexes under conditions of oxidative stress”. ***Biochemical and Biophysical Research Communications***, 447 (1),12-18. 2014. ¹All three authors contributed equally.

Rian Griffiths. Joscelyn Sarsby, **Emily J. Guggenheim**, Josephine Bunch. “Formal Lithium fixation improves direct analysis of lipid in tissues by mass spectrometry”. ***Analytical Chemistry***, 85(15), 7146-7153. 2013.