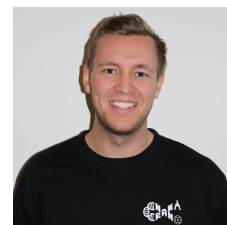


Nichlas Vous Christensen

Curriculum Vitae



PERSONAL DETAILS

Birth August 18, 1994
Gender Male
Nationality Danish
Address Møllevangs Allé 157E st.5, 8200 Aarhus N, Denmark
Phone +45 2346 4522
Mail (private) NVChristensen94@gmail.com
Mail (work) nvc@clin.au.dk

WORK EXPERIENCE

Postdoc

March 2024 -

Aarhus University, Department of Clinical Medicine

The work involves the development of NMR/MRI-based technology for use in metabolic imaging and profiling. This includes sequence development, setting up processing pipelines and designing new coil setups. More specifically the work is centered around ^{13}C and ^2H nuclei.

Contact information of employer:

Prof. Christoffer Laustsen, +45 2443 9141, cl@clin.au.dk, Palle Juul Jensens Boulevard 99, 8200 Aarhus N, Danmark

PhD student

March 2021 - March 2024

Aarhus University, Department of Clinical Medicine

Working within the field of pre-clinical MR. Projects included in the PhD revolve around pulse sequence designing, the study of leukemia cell lines using hyperpolarized ^{13}C dDNP NMR, the implementation of advanced AI tools for early diagnostics and treatment evaluation, and more.

Contact information of employer:

Prof. Christoffer Laustsen, +45 2443 9141, cl@clin.au.dk, Palle Juul Jensens Boulevard 99, 8200 Aarhus N, Danmark

Research Assistant

August 2020 - February 2021

Aarhus University, Interdisciplinary Nanoscience Center

Hired on a 4-month contract as a Research Assistant in the BioNMR group, working on a project centered around NMR data mining and analysis utilizing Machine Learning. The work is primarily done in Python with the implementation of a TensorFlow based neural network.

Contact information of employer:

Prof. Thomas Vosegaard, +45 6020 2639, tv@chem.au.dk, Gustav Wieds vej 14, 8000 Aarhus C, Denmark

EDUCATION

M.Sc. Nanoscience

August 2018 - June 2020

Aarhus University

With specialization in *Structural Biology and Biophysics*. Title of Master Thesis: "*Proton-Based Solid State NMR for Protein-Structure Determination*", which were performed in the BioNMR group of Aarhus University. Furthermore, I did an exchange semester at Utrecht University, in the period January 2019 - July 2019, which included a research project in the NMR Spectroscopy Research Group.

B.Sc. Nanoscience

August 2015 - June 2018

Aarhus University

The interdisciplinary nanoscience bachelor included courses within Chemistry, Physics, Mathematics and Molecular Biology. My bachelor project was done within the field of low-field NMR lipidomics.

PUBLICATIONS

1. Boris Gouilleux, **Nichlas Vous Christensen**, Kirsten G. Malmos, Thomas Vosegaard, "Analytical Evaluation of Low-Field 31P NMR Spectroscopy for Lipid Analysis", *Analytical Chemistry*, vol. 91, no. 4, pp. 3035-3042, 2019.
2. Karin Rosenkilde Laursen, **Nichlas Vous Christensen**, Frans AA Mulder, Jörg Schullehner, Hans Jürgen Hoffmann, Annie Jensen, Peter Møller, Steffen Loft, Anna-Carin Olin, Berit B. Rasmussen, Bernadette Rosati, Bo Strandberg, Marianne Glasius, Merete Bilde, Torben Sigsgaard, The Climate Chamber Group, "Airway and systemic biomarkers of health effects after short-term exposure to indoor ultrafine particles – A randomized controlled double-blind crossover study among mild asthmatic subjects", *Particle and Fibre Toxicology*, vol. 20, no. 26, 2023.
3. **Nichlas Vous Christensen**, Michael Vaeggemose, Nikolaj Bogh, Esben S. S. Hansen, Jonas L. Olesen, Yaewon Kim, Daniel B. Vigneron, Jeremy W. Gordon, Sune N. Jespersen, Christoffer Laustsen, "A user independent denoising method for x-nuclei MRI and MRS", *Magnetic Resonance in Medicine*, vol. 90, no. 6, pp. 2539-2556, 2023.
4. Armin Afrough, **Nichlas Vous Christensen**, Rune Wittendorff Mønster Jensen, Dennis Wilkens Juhl, Thomas Vosegaard, "Magic angle spinning effects on longitudinal NMR relaxation: ¹⁵N in L-histidine", *AIP Advances*, vol. 13, no. 11, 2023.
5. **Nichlas Vous Christensen**, Rikke Holm, Juan D. Sanchez, Esben S. S. Hansen, Mathilde H. Lerche, Jan Henrik Ardenkjær-Larsen, Christoffer Laustsen, Lotte Bonde Bertelsen, "A continuous flow bioreactor system for high-throughput hyperpolarized metabolic flux analysis", *NMR in Biomedicine*, vol. 37, no.5, 2024.
6. **Nichlas Vous Christensen**, Christoffer Laustsen, Lotte Bonde Bertelsen, "Differentiating leukemia subtypes based on metabolic signatures using hyperpolarized ¹³C NMR", *NMR in Biomedicine*, e5264, 2024.