

PhD fellowship at the MR-Centre, Aarhus University

A position as a PhD fellow exploring the state-of-the-art MR-hyperpolarization for investigation of metabolic changes in life style related diseases is now open. The successful applicant is expected to carry out scientific research towards a PhD degree. Application deadline is May 26th, 2015.

PhD in DNP MRI, Aarhus University, Denmark

Applications are invited for a PhD position to join the newly established hyperpolarization research group at Aarhus University (AU) with the purpose of refining the hyperpolarization technology further for study programs on metabolic flux associated with dietary patterns following acute and long-term effects of different protein supplements.

The successful applicant will work on a 3-year research project, exploring the technical, chemical and physical methods of hyperpolarization for *in vivo* applications. The PhD project includes development of new robust acquisition and reconstruction protocols for metabolic imaging in swine and rodents, utilizing simultaneous polarization and injection of multiple bio-probes.

Eligible candidates should hold a Master or similar degree in a relevant discipline, including (but not limited to) physics, engineering, chemistry, nanotechnology and mathematics. The position is to be filled as soon as possible and is open for up to 3 years.

The application is expected to carry out scientific research towards a PhD degree in collaboration with Assistant Prof. Christoffer Laustsen and Prof. Hans Stødkilde-Jørgensen as their academic supervisors, incorporating the contents in the bullets below.

- Bolus tracking method development for hyperpolarised MR
- Development and validation of *in vivo* co-polarization procedures of multiple bio-tracers.
- Interlace proton and carbon imaging acquisition and reconstruction.

Note that the selected candidate will subsequently have to apply for and get approved for enrolment at the AU Graduate School of Health (<http://talent.au.dk/phd/health/>), in a separate procedure before starting.

The MR-Centre is a core facility at the Department of Clinical Medicine, AU and provides cutting-edge basic and clinical translational research based on top MR technology, <http://www.mr.au.dk>. The Dept. Clinical Medicine has more than 1.140 research employees and more than 450 PhD's. AU provides an inspiring international research environment and is consistently listed among the world's best 100 universities. Aarhus is a dynamic university city located in continental Denmark and surrounded by nature; it offers very high living standards, rich cultural and intellectual life, etc.

Additional information regarding this position can be obtained by contacting Prof. Hans Stødkilde-Jørgensen, hsj@clin.au.dk.

Applications, which should contain the applicant's CV, motivation letter, short (max 2 pages) research proposal and 2 academic references (or at least names and addresses of 2 referees), should reach Prof. Hans Stødkilde-Jørgensen, by May 26th, 2015. Note that only short-listed candidates will be contacted.