### MR physicists to the unit of MR Physics, Department of Medical Physics, Karolinska University Hospital, Solna

The department of Medical Physics is situated at Karolinska University Hospital in Solna and Huddinge and on Södersjukhuset. Medical physics has more than 100 employees divided into three sections: Radiation Physics and Technology, Image and Functional Physics Solna and Huddinge.

The unit of MR physics belongs to Image and Functional Physics in Solna. The unit works closely with three MR departments within the hospital; Central X-ray, Childrens X-ray as well as with radiation therapy where a dedicated MRI scanner for advanced applications in radiotherapy is recently installed. All units offer state of the art equipment in which a unique combination of clinical research and methodological development offered. In total the MR-unit support six MRIs, three 1.5T and three 3T.

#### Assignment:

The MR-unit in Stockholm consists of a group of four MR physicists, including one unit leader, which are tasked to provide support to the clinical operations as well as for research projects at the Central Department of Radiology, Children's X-ray and at Radiumhemmet radiation therapy department. Among other things, Radiumhemmet right now in an intensive phase where startup of the new MRI is the focus.

The MR-unit's tasks include developing and / or improving the methodology for specific inquiries within departmental priority areas of oncology, thoracic and pediatrics. Examples of techniques used are: MR angiography, flow, perfusion, diffusion, spectroscopy, fMRI, and now also the application and integration of MRI in radiotherapy. We expect you to have experience of managing and operating research and thus can be the connecting link for the project run between MR physicists, radiologists and nurses in each department. The job also involves interacting with other units in the Image and Functional Physics (BoF) at the Karolinska University Hospital (Solna, Huddinge, Sweden) and other hospitals. The work also includes the development and / or modification of pulse sequences, image reconstruction and advanced imaging technology (cooperation with manufacturers there). The duty also assumes that you are regularly involved in both teaching at advanced university level training in MR physics within and outside the hospital.

### Type of employment:

Permanent employment, full-time.

# **Qualifications:**

We are looking for a master of engineering, certified medical physicist or equivalent where we like to see you have a higher academic degree (PhD / Associate Professor) in MR physics or related fields. Supervision, especially of graduate students is particularly meritorious, likewise you can demonstrate independence in your work. Proven experience in working with imaging MRI equipment is required. Experience with imaging techniques, image reconstruction, correction techniques or pulse programming in MR is meritorious. You have experience of interdisciplinary collaboration and benefit from others' expertise. You must be able to express yourself in speech and writing, either in English or Swedish.

# **Personal qualities:**

You will find that it is fun to meet people and to work serviceoriented. You are curious and like to constantly deepen your knowledge and skills through literature studies, research and development. You need to be able to work both independently and in groups. We place great emphasis on personal suitability and teamwork skills.

Information about the employment is provided by: Section Manager Cathrine Jonsson Tel :08-517 755 64 email: <u>Cathrine Jonsson</u> Group Leader Andreas Carlberg Tel :08-517 741 11 email: <u>Andreas Carlberg</u>

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Last day of application: 2013-09-15 refnr K-13-91357