Strategy plan for radiological research

The research efforts undertaken by Norwegian radiologists are limited in volume and fragmented in character. The funding is limited, and there are few relevant research training courses available. Only six per cent of all Norwegian radiologists have a PhD degree. At its autumn session in 2010, the Norwegian Radiological Association (NoRaFo) adopted a strategy plan for radiological research. The plan is available on the association's website.

During the last decade there has been a large increase in research efforts related to biomedical imaging techniques, and this has radically altered practices in radiological and nuclear-medicine departments. In Norwegian radiology, on the other hand, there is little research activity, the only exception being nuclear medicine. The Norwegian Society of Radiology (NSR) wanted to encourage more research, and arranged a research seminar as part of its autumn session in 2007. At this seminar, the chairman of the Research Committee of the European Society of Radiology, Gabriel Krestin, proposed two specific measures: a national research training course and a strategic plan for research. The Norwegian Society of Radiology (NSR) subsequently established its own research institute (RadForsk), and the Norwegian Association for Nuclear Medicine and Molecular Imaging (NFNM) merged with RadForsk in 2009. The first research training course was implemented in 2009, and the strategy plan was adopted at the autumn session in 2010 (1).

The process leading up to the strategy plan was directed by the Board of Directors of RadForsk (Gaute Hagen, Hans-Jørgen Smith, Nils-Einar Kløw, Anne Negård and chairman Jarle Rørvik). Four sub-groups representing various aspects of imaging research were established (basic research, preclinical-translational research and clinical research, as well as health services research). The groups' mandate was to present the status of the research field, challenges, relevant measures, collaboration between the professional groups and potential national and international partners. The group reports served as the basis for the strategy plan (1), the main points of which are summarized below.

Among radiologists, little basic research, preclinical-translational or health services research is undertaken. In clinical research, however, the activity is increasing. At the end of 2009, a total of 31 candidates were enrolled in the PhD programme. There are few radiologists who serve as active supervisors, and there are few academic positions; for the time being there is only one full professorship in this field in Norway. Several Professor II positions are kept vacant.

There is only limited cooperation between radiologists and the most active research groups in the field of imaging research. Cooperation between the university hospitals is similarly restricted. In addition, the radiological departments have only a feeble tradition of applying for external funding, and the hospitals devote only limited amounts of non-earmarked funds for research. Obtaining external funding requires high-quality project plans and applications. Undertaking proper research and putting a lot of effort into writing applications can only with difficulty be reconciled with a clinical position. Hospital departments have been reluctant to devote time to research and providing assistance with writing applications. A larger proportion of the trained specialists ought to obtain research competence in the form of publications or a completed PhD degree. As a goal, all chief consultants permanently employed at the university hospitals should be involved in research projects at the PhD level, or have completed a PhD degree. Even though many hospitals participate extensively in research activities, they should aim to increase the proportion of internally initiated projects. The increasingly close collaboration between radiology and nuclear medicine also renders inter-disciplinary research cooperation more desirable.

«Obtaining external funding requires high-quality project plans and applications»

There is considerable potential inherent in cooperation between established research groups engaged in basic medical sciences, translational research, epidemiology and health economics.

Clinical specialists with academic competence are another key resource, which through contact with patients and clinical outlook could help place image diagnostics in perspective. Furthermore, the goal should be to achieve increased cooperation between the health enterprises/universities and international partners. Increased research among radiologists and physicists could help increase the number of Master's theses from radiographers, which would be another positive contribution to research in the radiological departments. Radiological topics in projects for medical students' term papers or research schools could contribute to recruitment in the field, and attract increased attention to research on biomedical imaging techniques.

Academic positions in the field of radiology and nuclear medicine must be held by qualified colleagues. Time must be devoted to active supervision, and financial incentives must be provided. Doctors with an interest in research must be provided with the time and opportunity for funding of research projects. The goal of increasing the number of our colleagues engaged in research requires that measures be taken at various levels, such as establishing research projects for medical students (term papers/research schools). Research should be included in specialist training. Furthermore, research competence must be given weight to in the appointment of chief consultants in university hospitals and must be reflected in salary levels. The large potential inherent in cooperation between professional groups interested in imaging research should be exploited. The interest is there, but requires provision of common arenas and joint projects by way of establishing interdisciplinary research courses at the national and international level.

RadForsk, NoRaFo and the Norwegian Association for Nuclear Medicine and Molecular Imaging should have a key role in facilitating cooperation between the universities and the hospital owners.

Conclusion

Through its strategy plan for research in the field of radiology and nuclear medicine, RadForsk has laid the foundation for an increase and improvement in imaging research. An action plan is currently being elaborated. A stronger emphasis on internally initiated research and stronger cooperation between professional groups and institutions can bring us forward. The plan should govern the efforts to achieve more and better research among doctors in NoRaFo and the Norwegian Association for Nuclear Medicine and Molecular Imaging.

Jarle Tor Rørvik
jarle.rorvik@helse-bergen.no
Radiological Department
Haukeland University Hospital

Nils-Einar Kløw
Department of Cardiology and Cardiac Radiology
Oslo University Hospital, Ullevål

Jarle Tor Rørvik (b. 1954) is a specialist in radiology, Professor and Director of the Radiological Research Institute – RadForsk.
Stated conflicts of interest: None.

Nils Einar Kløw (b. 1954) is a specialist in radiology, Chief Consultant and Chairman of the Norwegian Radiological Association – NoRaFo.
Stated conflicts of interest: None.

References

1. Norsk radiologisk forenings strategiplan. http://radiologforeningen.no/img/wysiwyg/File/radforsk/Strategiplan%20for%20forskning%20140310jr.pdf (10.4.2011).

Received 17 March 2011, first revision submitted 29 April 2011, Approved 16 June 2011. Medical editor: Are Brean.