

### Volume 14 - Issue 4, 2014 - Cover Story

#### **European Society of Neuroradiology**



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#### As the newly installed President of the European Society of Neuroradiology (ESNR), what are your goals for your term of office?

The ESNR is a professional society with more than 3,000 members. A strategic plan and mission for the ESNR was initiated a few years ago. Under my presidency we will expand, improve and update this concept. The ESNR will continue to invest heavily in education, work on a comprehensive European Curriculum for Neuroradiology, and establish standards for neuroradiological knowledge and training in Europe.

#### What led you to specialise in neuroradiology?

I was interested in neurological sciences already as a medical student, and my first published article was on new therapies in multiple sclerosis. One year as a neurology resident at the University Hospital in Zurich was a great experience, and I had a chance to work with great scientists and clinicians. After completing residency in radiology at the University Hospital Vienna it was more than clear that neuroradiology is my "big love".

#### Do you see a role for PET/MR in brain imaging?

PET-MR will have a role in evaluation of brain disorders, especially in dementia, stroke, and neurodegenerative disorders.

# The ESNR produced a booklet for the 2014 International Day of Radiology (IDoR), looking at the role of radiology in brain tumour, stroke, Alzheimer's disease and dementia, Parkinson's disease, and multiple sclerosis. Do you think neuroradiology is sufficiently recognised?

In the past a radiologist was a person sitting in a dark room looking at plain films, not being involved in patient management. This picture rapidly changed with the introduction of CT and MRI a few decades ago. Nowadays, a radiologist is an important part of clinical boards (tumour board, vascular board), and is heavily involved in the patient's management. In the IDoR booklet for the general public we have tried to explain who a neuroradiologist is. It is still not broadly acknowledged that a neuroradiologist is not only a specialist trained in performing CT and MR imaging, but also in performing therapeutic procedures in the brain and spine.

## There are still many unknowns when it comes to the brain. What has been the greatest breakthrough for neuroradiology, and what research has the greatest promise for the future?

The brain is a fascinating, very well organised organ, but we still don't know enough to understand its functions and subsequently different brain diseases. The first important neuroradiological breakthrough was the discovery of MR; the second was the implementation of the high-field MR units (3.0 T) into the clinical routine. With new MR sequences, we see more anatomical details, we are able to look at the white matter tracts (diffusion tensor imaging [DTI]), at the vasculature (magnetic resonance angiography [MRA], susceptibility weighted imaging [SWI]), brain perfusion, and metabolic peaks in the brain parenchyma.

In the future, interdisciplinary research with all disciplines of neurosciences will be necessary to answer open questions. Ongoing research focusing on multiple sclerosis, healthy ageing and dementia (Alzheimer's disease), neurodegenerative disorders (Parkinson's disease and others) and brain tumours, will continue to improve our knowledge and understanding of brain diseases.

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