

3rd European Stroke Science Workshop November 19th to 21st 2015; Garmisch-Partenkirchen, Germany

More than 120 stroke scientists gathered at the Eibsee near Garmisch-Partenkirchen to discuss the latest results and hot topics in clinical, translational, and basic stroke research. Since its inception in 2011, the European Stroke Science Workshop (ESSW) has become a 'must go' and true highlight for researchers in the field. This year's program started with an evening lecture by Peter Rothwell (Oxford, UK) who asked "How much can we improve secondary prevention of stroke by better use of existing treatments?" The following days were packed with sessions on a wide range of topics. Nancy Rothwell (Manchester, UK) opened the topical focus on stroke immunology by reviewing current treatment approaches and trials. The session on acute stroke started with a lecture by Diederick Dippel (Rotterdam, The Netherlands) who summarized published and unpublished results from recent trials on endovascular therapy and together with the following speakers also addressed practical issues including criteria for patient selection, recanalization techniques, devices, and type of anesthesia.



As in previous years topics covered the entire range from basic science to clinical trials with everybody in one room and long time for discussions. Martin Lauritzen (Kopenhagen, Denmark) presented new data showing that pericytes regulate capillary blood flow, which got the audience into a stimulating discussion about the distinguishing properties of pericytes and vascular smooth muscle cells. Advances in imaging technologies were a recurrent theme that also emerged from a presentation on ultra-highfield MRI in humans. Jeroen Hendrikse (Utrecht, The Netherlands) demonstrated the latest advances in imaging perforating brain vessels and measuring blood flow in individual arterioles.



The workshop also tackled the issue of how to reduce the global burden of stroke. Rustam Al Shahi Salman (Edinburgh, UK) alerted the audience to major gaps in stroke prevention and the need to extend trials on ICH, ischemic stroke, and

stroke prevention to low income countries. Saturday morning started with a series of talks illustrating how genetics and other omics technologies have transformed our understanding of diseases, changed disease classifications, and improved options for diagnosing and counseling patients. Anne Joutel (Paris, France) presented novel data showing that the phenotype in CADASIL transgenic mice can in part be reverted by altering the levels of Timp3 and Vitronectin, two extracellular matrix proteins that accumulate in the vasculature of CADASIL patients. The meeting further included a session on stroke in the young and a lecture by Christopher Chen (Singapore) on "Cognitive testing in stroke: why, when, and how?" The conference closed with a hot topics session that presented 5 minutes talks against the clock.



While packed with scientific discussions there was still enough time for social exchange and recreation. Several people walked around the lake, went for a run, or took the cable car up to the Zugspitze. A young researcher commented “it was the best conference I have ever attended”.

Martin Dichgans and Heinrich Mattle
Chairmen of 3rd European Stroke Science Workshop



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