Preface

In 1972, the first ICP conference was organized in Germany at Hannover Medical School by Mario Brock. This first meeting of clinical research enthusiasts and basic scientists has initiated a most successful chain of 14 successive conferences, traveling between Europe, Asia, and North America. Intracranial pressure remains one of the most important parameters to cast light on the “black box” of a sick brain, acutely injured by trauma, hemorrhage, or stroke or less acutely affected by hydrocephalus or idiopathic intracranial hypertension. Monitoring of the intracranial pressure has become more sophisticated and is often today mostly computer-ized, which opens new avenues for online computation of derived parameters describing e.g. autoregulation. Other invasive and non-invasive brain monitoring modalities and several imaging techniques supplement ICP monitoring. The broader our knowledge about the ongoing brain pathophysiology, the more we are potentially able to counteract harm in time and to improve the outcome of our patients.

The 14th International Conference on Intracranial Pressure and Brain Monitoring (12–16 September 2010) returned 38 years after its foundation to Germany. About 280 clinicians and scientists from 40 different countries met and focused over 5 days on ICP and brain monitoring topics and experienced an intense time of knowledge exchange at the old University of Tübingen, located in the geographical heart of Europe. The conference was again what it has traditionally been: a platform where clinicians from neurosurgery, neurology and intensive care medicine met scientists from all possible areas of intercept with the brain, a span that ranged from electrical engineers to physicists, and from mathematicians to molecular biologists. We had the impression that we recreated the hallmark of the previous ICP conferences: a friendly, interested and focused atmosphere, where the “young and keen” met the “old and wise.”

This volume is an excerpt of the conference, where 231 abstracts were submitted. They were presented as 97 oral presentation and 134 posters according to the score and preference of the authors. The supplement volumes of Acta Neurochirurgica (papers published therein are listed in PubMed, of course, the book series itself does not carry an impact factor) are an ideal marketplace for publication of new ideas and approaches to the field. Thus many of the papers can be seen as an inspiration for future research. The editors and the International Advisory Board stress the fact, that those titles nevertheless are important milestones in ICP history, documenting the progress of the field in an unique fashion over almost 40 years. Therefore, we were happy to receive more than 80 contributions to continue this legacy and document the current topics and developments. Seventy-seven of the papers have passed review and revision and are now at your hands.

This collection of scientific papers does not only document the 14th International Conference on Intracranial Pressure and Brain Monitoring, but also stimulates readers to continue and expand their research. We are therefore confident that this publication will help to remember Tübingen 2010 and to prepare for the 2013 ICP conference in Singapore.

Tübingen, Germany
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Cambridge, UK
Marek Czosnyka
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