Message from the Co–Presidents

Welcome to the first issue of the newsletter for the Intra-operative Imaging Society. It has been a year since our very successful meeting in St. Louis, and given the rapid pace of change within the field, and the evolving plans for our next meeting in India in February of 2015, we felt that an update to our membership about the Society would be useful. In this newsletter you will find our plans for the next meeting, as well as new initiatives on the part of the Society.

In this age of shrinking budgets and ever increasing demands on our time, every society must address the needs for its existence, and the services it provides to members. Although each specialty is represented by at least one society, developments in technology have fostered relationships between specialties which are not supported by traditional entities. The use of imaging intra-operatively has created teams consisting of neuro-surgeons, radiologists, spine surgeons, engineers, neurologists, radiation oncologists, anesthesiologists, and commercial entities to create complex therapeutic suites, which represent large financial commitments. It is precisely this collaboration that the Intraoperative Imaging Society serves, allowing a forum for communication between groups to expedite development, demonstrate outcomes, and determine which patients are best served by an admittedly complex and costly medical effort. We will continue to strive to facilitate communication and collaboration between the groups to realize the greatest potential of this exciting technical field.

Upcoming Event

The 5th Meeting of the Intraoperative Imaging Society (IOIS) will be held in Delhi, India at the Oberoi Hotel Gurgaon from February 12-15, 2015. This is the first time that the meeting is being held in Asia and we are excited for this opportunity.

The IOIS meeting is a platform for clinicians and scientists working in the field of intraoperative imaging to exchange experience and knowledge. Internationally recognized experts will present and discuss technological advances, clinical applications and socioeconomic aspects of intraoperative imaging. While our core group has been comprised primarily of neurosurgeons, all other medical specialties are especially invited to participate as we evolve into a truly multidisciplinary society.

The symposia will be a scientific treat along with the cultural feast for all. India in general and Delhi in particular, can boast of World Class Facilities for tourists.

India has sensuous beaches, dense green forests, deserts, wildlife and landscapes for eco-tourism, snow, river and mountain peaks for adventure tourism, technological parks and science museums for
IOIS Membership Info:

We cordially invite you to become a member of the newly established Intraoperative Imaging Society. The goal of the Society is to serve as a forum for comparison of alternate imaging techniques in the operating room, and the determination of their clinical efficacy.

As a member you will be provided with:

- A listing of resources and scientific updates through the website
- A forum for presentations and discussions through online education
- Links to relevant organizations

To register please go to our website at: http://www.intraopimaging.org/membership/

We look forward to both having you become a member of the Society and your participation in the Society’s activities and efforts.

Newsletter Editor:
Daniel Orringer
University of Michigan
dorringe@med.umich.edu

IOIS Administrator:
Melody Dian
419 Oak Street West
Frederic, WI 54837
Ph: 715-327-8818
Cell Ph: 715-781-8307
E-fax: 866-362-1101

Hot Topics

Ten years have passed since the foundation of the intraoperative imaging society, IOIS. The society’s aim was to foster and promote the technology and use of intra-operative imaging in general and intraoperative MRI in particular. Even though numerous retrospective series and even prospective trials on this subject have been carried out, there still is doubt if intraoperative imaging in fact translates into a clinical benefit for neurosurgical patients.

In terms of improving extent of resection in neuroncology, there are other tools available as well, e.g. 5-ALA induced tissue fluorescence, which have been shown to be truly helpful, critics of intraoperative imaging argue. But is the choice of technology simply a question of faith or disbelief? Shouldn’t it be our aim to choose the most appropriate technology for our operating rooms in order to improve patient care and outcome? Is tumor fluorescence the "magic bullet", or does it have limitations? Can and should we combine intra-operative imaging with fluorescence guidance?

Two timely papers from Coburger et al. and Roder et al. deal with this issue, and they provide slightly diverging conclusions. Additional reports on this topic from other groups are being awaited.

The 2015 IOIS meeting in Delhi will provide the ideal platform to present and discuss views and ideas on intraoperative imaging in neuroncology and other areas of neurosurgery.

Christian Senft; Frankfurt, Germany
c.senft@med.uni-frankfurt.de

New Initiatives

Intraoperative Imaging Survey

Intraoperative imaging is increasingly being used in an effort to optimize surgical results for tumor resections, spinal operations, cerebro-vascular surgeries, and other procedures. Modalities available include a variety of intra-operative devices that utilize MRI, CT, fluoroscopy, ultra-sonography, catheter angiography, fluorescence imaging, and even nuclear medicine bone scans. The variety of these techniques is increasing and the tendency to adopt these various strategies seems to vary considerably from institution to institution.

We are developing a survey to assess the practice patterns of surgeons worldwide in regards to the types of intraoperative imaging that are being used and with what frequency for various types of procedures and pathologies.

Quantifying trends in utilization of intraoperative imaging will provide insight as to the current state of the art, the variations in practice patterns, and where these technologies may be headed in the future.

We encourage all to participate in this survey in order to improve our understanding of the growing field of intraoperative imaging.

Michael R. Chicoine, M.D.
August A. Busch Jr. Professor in Neurological Surgery
Associate Professor Department of Neurosurgery
Washington University School of Medicine
Featured Members

Dr. med. Marcin Czyż
Wroclaw Medical University
Department of Neurosurgery
Ul. Borowska 213, 50-556 Wroclaw;
mt.czyz@gmail.com

I began my coexistence with intraoperative imaging over seven years ago, being lucky enough to have the possibility to develop in this field from the very beginning of my neurosurgical residency. I find it is a great tool and an adjunct to other techniques, which may - together with thorough knowledge, appropriate preoperative imaging and assessment as well as intraoperative wisdom - highly improve the outcome and decrease the number of complications.

Being permanently fascinated by evidence based approach to neurosurgery, I find the combination of intraoperative magnetic resonance imaging with neuroendoscopy the most exciting topic. Being a budding board-certified neurosurgeon, I am going to start a six-month Clinical Fellowship in the UK on May 2014.

Constantin Cornelius Roder,
M.D.
University Hospital Tübingen,
Department of Neurosurgery
Hoppe-Seyler-Str. 3, 72076 Tübingen,
Germany
constantin.roder@med.uni-tuebingen.de

We have been using an iMRI suite in Tuebingen since 2011. As a young resident I was already involved in the planning and the initial cases operated with this new technology. The challenges, advantages and possibilities of this technology fascinated me since the beginning. Because of a very close cooperation with our neuroradiologists, my understanding of MRI, and especially functional imaging, expanded strongly and fascinated me even more. I think that the future of iMRI will not only be limited to standard sequences to detect residual tumor tissue any more.

Advanced functional imaging will likely give a much broader understanding of human brain functioning and especially enable safer resections for patients. Recent and future technological developments will make the use of iMRI easier, faster, more comprehensive and more affordable, enabling access to this technology for a growing number of patients within the next years.

“Intellectual growth should commence at birth and cease only at death”
...Albert Einstein