



WSSFN



18TH
BIENNIAL MEETING OF THE
WORLD SOCIETY FOR
STEREOTACTIC AND
FUNCTIONAL NEUROSURGERY



HILTON MIDTOWN
NEW YORK CITY

JUNE 24-27
2019

WS06 Engineering and Functional Neurosurgery Workshop

Monday, June 24, 2019

The goal of this workshop is to provide interactive examples of engineers and neurosurgeons working hand-in-hand to address scientific questions and generate clinically useful technology. Each talk will be a coupled presentation given by an engineer/neurosurgeon collaborative team that highlights their innovative approach to technology development and application for functional neurosurgery. These examples will then spur participant discussion on strategies and best practices for generating their own engineering-based collaborative projects.

13:30 - 17:30

Grand Ballroom East

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- Coordinator: Cameron McIntyre (USA)
Chair: Cameron McIntyre (USA)
Chair: Peter Konrad (USA)
- 13:30 **Introduction**
Cameron McIntyre (USA)
- 13:30 **Introduction**
Peter Konrad (USA)
- 13:40 **Imaging Databases**
Invited Speaker: Pierre D'Haese (USA)
- 13:40 **Imaging Databases**
Invited Speaker: Peter Konrad (USA)
- 14:00 **Connectomic Targeting**
Invited Speaker: Robert Gross (USA)
- 14:00 **Connectomic Targeting**
Invited Speaker: Cameron McIntyre (USA)
- 14:20 **Virtual Reality**
Invited Speaker: Nadar Pouratian (USA)
- 14:20 **Virtual Reality**
Invited Speaker: Nanthia Suthana (USA)
- 14:40 **Robotics**
Invited Speaker: Eric Barth (USA)
- 14:40 **Robotics**
Invited Speaker: Joseph Neimat (USA)
- 15:00 **Group Discussion on Engineer/Neurosurgeon Collaboration**
- 15:30 **Break with Hands On Demos: HoloLens**
Jennifer Sweet (USA)
- 15:30 **Break with Hands on Demos: CranialCloud**
Pierre D'Haese (USA)
- 16:00 **Seizure prediction**
Invited Speaker: Tim Lucas (USA)
- 16:15 **Brain-Machine Interface**
Invited Speaker: Jaimie Henderson (USA)
- 16:30 **Biomaterials and Miniaturization**
Invited Speaker: Nandan Lad (USA)
- 16:45 **Nanotechnology**
Invited Speaker: Christophe Chautems (Switzerland)
- 17:00 **Group Discussion and Conclusion**