2020 Young Investigators Symposium
Thursday, May 28th 2020, 5:00 – 9:00 PM

First ever GLC AAPM virtual meeting

We invite all GLC members and friends to join us for the annual Young Investigators Symposium to encourage and promote promising student research.

Registration for all attendees will be FREE

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2020 Young Investigators Symposium
Thursday, May 28th 2020, 5:00 – 9:00 PM

5:00 pm  Welcoming remarks  
Ning (Winston) Wen, Ph.D.  
GLC-AAPM President-Elect

5:10 pm  Recent developments and trends in diagnostic x-ray imaging and AAPM’s role in advancing medicine of the future  
James T. Dobbins III, Ph.D., FAAPM  
AAPM President-Elect

6:00 pm  Q & A with Dr. Dobbins  
Moderator: Ning (Winston) Wen, Ph.D.

6:15 pm  Coffee break

6:20 pm  Young Investigators Symposium talks (I)  
Moderator: Ning (Winston) Wen, Ph.D.

6:20 pm  Ionized Radiation Acoustic Imaging (iRAI) for in-vivo FLASH dosimetry  
Noora Ba Sunbul

6:28 pm  A deep learning cardiac substructure pipeline for MR-guided cardiac applications  
Eric Morris

6:36 pm  A multi-phase cross-modality deformable bio-tissue phantom for deformable image registration validation  
An Qin

6:44 pm  Predicting contrast enhancement in transcatheter aortic valve replacement CT using machine learning  
Erin Macdonald

6:52 pm  The development of an accurate model of spot-scanning treatment delivery time for a compact superconducting synchrocyclotron proton system  
Lewei Zhao

7:00 pm  Questions for YIS presenters (I)  
Moderator: Ning (Winston) Wen, Ph.D.

7:10 pm  Gold Sponsor Presentations  
Jim Ernsberger - Sun Nuclear  
Christine Smith - IBA

7:20 pm  Young Investigators Symposium talks (II)  
Moderator: Leo Ding, Ph.D.

7:20 pm  Creation of an automated hand-crafted radiomics methodology and assessment of its potential to contribute to a prospective trial  
Eric Carver
7:28 pm  Multi-temporal resolution model-based volumetric prediction of breathing and slow drifting motion in the abdomen using radial MRI

Lianli Liu

7:36 pm  Evaluation of an IMRT optimization method that directly incorporates patient-specific toxicity tradeoffs in NSCLC

Dan Polan

7:44 pm  A multimodality approach using deep attention convolutional neural networks for intrahepatic recurrence localization of liver cancer post-SBRT

Lise Wei

7:52 pm  The effect of image reconstruction on the quantification of transient ischemic dilation in rest-stress Tc-99m myocardial SPECT studies

Joseph Steiner

8:00 pm  Questions for YIS presenters (II)

Moderator: Leo Ding, Ph.D.

8:10 pm  Closing remarks

Leo Ding, Ph.D.
GLC-AAPM President

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![Sun Nuclear Corporation](image2)

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Our virtual booth is now open.

Quick Videos
Timely Webinars
Helpful Resources

Since we’re unable to meet at the usual conferences & chapter meetings, we invite you to learn what’s new from Sun Nuclear — at your convenience.

From faster QA workflows and remote accessibility to flexible support, we have some important advances we’re eager to share. In the meantime, we just want to say: thank you.
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(Thank You

To all of the healthcare professionals who are on the front lines during these challenging times.

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Working towards a world without fear of cancer.

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- Dermaplaned registration

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- Electrons
- Stereotactic planning
- ImmunoTherapy
- VMAT
- IMRT
- 3D-CRT

PHOTON AND ELECTRON PLANNING
- Adaptive optimization
- Rapidly-dosimetric optimization
- Optimization of multiple beam sets
- Robust optimization
- Multi-criteria optimization

ADVANCED OPTIMIZATION TOOLS
- Cloud-based dose calculation
- Web-based dose calculation
- GPU-powered computation
- Speed and accuracy

PROTON PLANNING
- Initial treatment plans creation
- Support for defining ENL specific RE models

Boron Neutron Capture Therapy
- Automatic creation of boron proton plans
- Simulated organ motion
- Fully integrated adaptive planning
- Helical plunge optimization extending gross tumor volume
- PBS optimization with apertures/TL
- Robust optimization and evaluation
- More dose computation/optimization
- RPS. OUS. LS. Modifying

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- Automated Breast Planning
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- Templates and protocols

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