



San Francisco Bay Area Chapter of the
American Association of Physicists in Medicine

**The SF Chapter of the AAPM
Presents**

The 2014 Young Investigators Symposium

**Friday May 2, 2014 at the
Ballroom of the Embassy Suites SFO Waterfront
11:30AM-6PM
Embassy Suites, 150 Anza Boulevard,
Burlingame, California**

- Lunch will be served at 11AM
- Presentations will be from Students, Post-Docs, and Residents at UC Davis, UC Berkeley, UCSF, and Stanford
- All Student, Resident, Post-Doc, and Young Investigator admission is FREE!!!
- SF AAPM Members admission is \$25, and includes CAMPEP Credit (6-hours)
- Free Parking at the Hotel for those attending the Symposium
- Please complete survey so that we may make this a better symposium in the future.

AGENDA for the 2014 Young Investigators Symposium

8AM-11AM: *Vendor Booth Set-Up (Industry Sponsors may set-up anytime after 8AM)*

10AM: REGISTRATION

- Full member registration with CAMPEP credit is \$25
- All students, post-docs, residents are FREE
- Please take this opportunity to join or renew your Chapter Membership

11AM: LUNCH IS SERVED

11:30AM: ANNOUNCEMENTS

Julian Perks: (President of the SF Chapter of the AAPM)

Dilini Pinnaduwege: (Treasurer of the SF Chapter of the AAPM)

Stan Benedict (Board Representative of the SF Chapter of the AAPM)

NOON: 1:30PM: YI Speakers: GROUP 1

1. Moiz Ahmad (Postdoctoral Fellow, Mentor: Lei Xing, Department of Radiation Oncology Stanford University School of Medicine)

Title: Order of Magnitude Sensitivity Increase in X-ray Fluorescence Computed Tomography (XFCT)

2. Kuan Lu, Graduate Student (UC Berkeley: Mentor: Steven Conolly, Professor, UC Berkeley Imaging Systems Laboratory)

Title: Experimental demonstration of multichannel magnetic particle imaging for improved resolution.

3. Katherine Walker, Graduate Student (Mentor: Simon Cherry, Professor, UC Davis Biomedical Engineering)

Title: Flexible Geometry, High-Sensitivity, Single-Photon Imaging System for Small Animals and Plants

4. Bo Zheng, MS, Graduate Student (UC Berkeley: Mentor: Steven Conolly, Professor, UC Berkeley Imaging Systems Laboratory)

Title: High-sensitivity Magnetic Particle Imaging for in vivo cell therapy tracking

1:30PM-3:00PM: YI Speakers: GROUP 2

5. Mohammadreza Negahdar (Postdoctoral Fellow, Mentor: Peter G. Maxim, Department of Radiation Oncology Stanford University School of Medicine)

Title: First in Human High-Resolution Imaging of Regional Lung Function by Single Energy Xenon CT Compared to Ventilation SPECT

6. Brian Neal, PhD, Clinical Physics Resident (Mentor: Tokihiro Yamamoto, PhD, Assistant Professor, UC Davis Radiation Oncology)

Title: Novel technique for dynamic lung ventilation imaging based on wide coverage 4D CT

7. Vickie Y. Zhang - PhD Candidate (Mentor: Jean Pouliot, Professor, UCSF, Department of Radiology and Biomedical Imaging)

Title: Hyperpolarized ¹³C Biomarkers of Response to Prostate Cancer Radiation Therapy

8. Patrick W. Goodwill, PhD, Postdoctoral Researcher, (UC Berkeley: Mentor: Steven Conolly, Professor, UC Berkeley Imaging Systems Laboratory)

Title: Kidney-safe, Radiation-free Interventional Imaging using Magnetic Particle Imaging

3:00-3:30 REFRESHMENTS SERVED

- **Please visit our sponsors at their booths**

3:30-5:00: YI Speakers: GROUP 3

9. Atchar Sudhyadhom, PhD - Medical Physics Resident (Mentor: Jean Pouliot, Professor, UCSF, Department of Radiation Oncology)

Title: Inaccurate Dosimetry of FFF Beams for SRS and SBRT: What's the worst that could happen?

10. Mareike Held, MS - PhD Candidate (Mentor: Jean Pouliot, Professor, UCSF, Department of Radiation Oncology)

Title: Urgent Treatments: Can we use MV CBCT for Expeditious Dose Planning and Delivery?

11. Serena Scott, PhD – (Research Specialist, Mentor: Jean Pouliot, Professor, UCSF, Department of Radiation Oncology)

Title: Interstitial ultrasound for image-guided thermal ablation in the vertebrae

12. Amy Yu, PhD (Resident, Mentor: Peter G. Maxim, PhD, Department of Radiation Oncology Stanford University School of Medicine)

Title: Anatomic Optimization of Lung Tumor Stereotactic Ablative Radiotherapy

5:00-6:00PM: YI Speakers: GROUP 4

13. **Peymon Gazi, Graduate Student (Mentor: John Boone, Professor, UC Davis, Department of Biomedical Engineering, Breast Tomography Research Lab, Department of Radiology)**

Title: High resolution dedicated breast CT for breast cancer screening: A replacement of digital mammography?

14. **Scott Hsieh, PhD (Postdoctoral Fellow, Mentor: Norbert J. Pelc, Department of Radiology, Stanford University School of Medicine)**

Title: Dynamic attenuators for CT systems

15. **Andrea Ferrero, Graduate student (Mentor, Ramsey Badawi, PhD, UCD Radiology/BME)**

Title: Initial clinical experience with the UC Davis dedicated breast and extremity PET/CT scanner

6:00-6:15PM ASSEMBLY OF JUDGES

>6:15pm: ANNOUNCEMENT OF WINNERS