

**American Association of Physicists in Medicine**  
**Ohio River Valley Chapter**



**Symposium Program**  
**October 7-8, 2011**  
**The Brown Hotel**  
**Louisville, KY**



# Ohio River Valley Chapter of the AAPM

## Meet & Greet Program

Friday, October. 7<sup>th</sup> – The Brown Hotel “Crystal Ballroom” (Accuray Night Out)

5:30 pm to 6:00 pm	<b>Vendor exhibit setup &amp; poster session setup</b>
6:00 pm to 6:45 pm	<b>Reception and “Meet &amp; Greet” social, then dinner seating</b>
6:45 pm to 7:45 pm	<b>“Recent technology developments for the CyberKnife and TomoTherapy Systems”</b> <i>Calvin R. Maurer, Jr., Ph.D.</i> <i>Accuray Incorporated – Sunnyvale, CA</i>
7:45 pm to 10:00 pm	<b>“Meet &amp; Greet” social continued, cash bar, exhibits and poster sessions</b>

### Poster Presentations

- AAPM ORVC history**  
*Minsong Cao, Ph.D., DABR – Indiana University*
- NCRP is wrong for skyshine: new solid angle equation provided**  
*Michael S. Gossman, M.S., DABR – Tri-State Regional Cancer Center*
- Dosimetric implication of bolus placement in electron treatment**  
*Shiv P. Srivastava, M.S., DABR – Reid Hospital, IUSM & Purdue University*
- Guidelines of measurements required for extended SSD electron beam therapy**  
*David L. Wilson, M.S., DABR – James Graham Brown Cancer Center at UofL*
- Overview of Penelope Monte Carlo code for radiotherapy applications**  
*Vadim Moskvina, Ph.D. – IU Cyclotron Operations and Indiana University*
- Dosimetric verification of stereotactic body radiotherapy (SBRT) using cone-beam computed tomography images**  
*Ganesh Narayanasamy, Ph.D. – University of Kentucky*
- Monitoring the effects of anti-angiogenesis and re-oxygenation on radiotherapy in pancreatic cancer xenografts**  
*Ning Cao, M.S. – Purdue University*
- Feasibility of a quantitative, patient-specific image planning system for radiation therapy**  
*Bishnu B. Thapa, M.S. – University of Kentucky*
- 3D small field dosimetry for proton therapy using Presage**  
*Li Zhao, Ph.D. – Midwest Proton Radiotherapy Institute*
- Determination of transmission factors for the Varian Exact Couch and ORFIT SBRT Immobilization boards**  
*Bryon M. Murray, M.S., DABR – Ohio Medical Physics Consulting, LLC*
- Dose distribution comparison between Monte Carlo and treatment planning system for pediatric patients**  
*Yingcui Jia, Ph.D. – Indiana University*
- Evaluation of prostate edema and seed migration via seed position change from consequent post-implant CT scans in prostate brachytherapy**  
*Yong Peng, Ph.D. – Indiana University*
- Amorphous silicon imager profile corrections for Varian portal dosimetry**  
*James L. Durgin, M.S. – Ohio State University*



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- 14. Quantifying absolute metabolite values in MR spectroscopy of the prostate using LCModel with a dedicated basis set and real patient data analysis**  
*Mark A. DiMascio, B.S. – University of Cincinnati*
  - 15. Radiation therapy with gold nanoparticles: quantitative evaluation of the radiation dose enhancement at the gold-tumor interface**  
*Nava R. Paudel, M.S. – University of Toledo*
  - 16. Analysis, correlation, prediction of tumor respiratory motion and the development of innovative gated treatment approaches**  
*Huanmei Wu, Ph.D. – Indiana University Purdue University at Indianapolis*
  - 17. A modeling study of effects of the blood perfusion rate on thermal distribution in induction heating of thermobrachy ferromagnetic core seed for solid tumors**  
*Bhoj R. Gautam, M.S. – University of Toledo*
  - 18. The use of arterial spin labeling for estimating brain perfusion**  
*Peter A. Hardy, Ph.D. – University of Kentucky*
  - 19. An automated program for shielding calculation of a radiotherapy vault**  
*Charles R. Rhodes, III, B.A. – University of Toledo*
  - 20. Adjusting scanning magnet patterns to reduce neutron production in proton radiotherapy at the Indiana University Health Proton Therapy Center**  
*William R. Reed, B.S. – Indiana University Health Proton Therapy Center*
  - 21. Comparison of traditional linac vs helical tomotherapy for lung SBRT**  
*Luis C. Bohorquez, B.S. – University of Cincinnati*
  - 22. Effect of surface irregularities on dose distribution from Leipzig and Valencia HDR skin applicators**  
*Stephanie MT Horne, M.S. – University of Toledo*
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### Special Acknowledgements

We would like to offer special appreciation to [Michael D. Mills, Ph.D., DABR, FAAPM](#) of the James Graham Brown Cancer Center at the University of Louisville. It was his initial efforts which led to the contract with the Brown Hotel and arrangement of our social venue. Thank you Dr. Mills!

We would also like to thank current AAPM President [J. Anthony Seibert, Ph.D., DABR, FAAPM](#) of UC Davis Medical Center in Sacramento, CA, for rearranging his time to travel across the country and speak with us. Thank you Dr. Seibert!



# Ohio River Valley Chapter of the AAPM

## Educational Program

Saturday, October 8 <sup>th</sup> – The Brown Hotel “Crystal Ballroom” (Symposium)	
7:00 am to 7:30 am	<b>Vendor Exhibit Setup &amp; Check-in/Registration</b>
7:30 am to 8:00 am	<b>Continental Breakfast (Provided) / Vendor Exhibits</b>
8:00 am to 8:02 am	<b>Symposium Launch</b> <i>Michael S. Gossman, M.S., DABR (AAPM ORVC President)</i> <i>Tri-State Regional Cancer Center – Ashland, KY</i>
8:02 am to 8:05 am	<b>Opening Remarks</b> <i>Minsong Cao, Ph.D., DABR (AAPM ORVC President-Elect)</i> <i>Indiana University – Indianapolis, IN</i>
8:05 am to 8:50 am	<b>“Medical physics workforce issues in the USA”</b> <i>Michael D. Mills, Ph.D., DABR, FAAPM</i> <i>James Graham Brown Cancer Center at UofL – Louisville, KY</i>
8:50 am to 9:45 am	<b>“Impact of ICRU-83 in IMRT”</b> <i>Indra J. Das, Ph.D., DABR, FAAPM, FIPEM, FACMP, FAAPM, FACR, FASTRO</i> <i>Indiana University – Indianapolis, IN</i>
9:45 am to 9:55 am	<b>Coffee Break (Provided) / Vendor Exhibits</b>
9:55 am to 10:25 am	<b>“BolusECT case study”</b> <i>Nathan C. Davis, M.S., DABR</i> <i>Global Physics Solutions &amp; Hendricks Regional Health – Avon, IN</i>
10:25 am to 11:10 am	<b>“Stereotactic body radiotherapy for prostate cancer “</b> <i>James R. Gray, MD</i> <i>Sarah Cannon Cancer Center at Centennial Hospital – Nashville, TN</i>
11:10 am to 12:00 pm	<b>“CT imaging for diagnosis and therapy treatment planning: How can we ensure that the studies are performed without excessive patient exposure?”</b> <i>David R. Pickens, Ph.D., DABR, FAAPM (James G. Kereiakes Keynote Lecturer)</i> <i>Vanderbilt University – Nashville, TN</i>
12:00 pm to 1:30 pm	<b>Lunch Break (Box Provided) / Vendor Exhibits (Exhibitor Breakdown Option)</b>
1:30 pm to 2:00 pm	<b>“Airport whole body scanners: fact and fiction”</b> <i>J. Anthony Seibert, Ph.D., DABR, FAAPM (AAPM President)</i> <i>UC Davis Medical Center – Sacramento, CA</i>
2:00 pm to 2:45 pm	<b>“Uveal melanoma: A brachytherapy perspective”</b> <i>Moataz N. El-Ghamry, MD, DABR</i> <i>James Graham Brown Cancer Center at UofL – Louisville, KY</i>
2:45 pm to 2:55 pm	<b>Coffee Break (Provided) and Vendor Exhibits (Exhibitor Breakdown Option)</b>








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2:55 pm to 3:40 pm	<p><b>“A quality management program (QMP) for craniospinal irradiation (CSI) with proton therapy (PT): a failure mode and effects analysis (FMEA) approach”</b></p> <p>Chee-Wai Cheng, Ph.D., DABR, FAAPM Indiana University &amp; IU Health Proton Therapy Center – Bloomington, IN</p>
3:40 pm to 4:25 pm	<p><b>“Medical physics as a profession – tips for young physicists”</b></p> <p>Ibrahim B. Syed, Ph.D., DABR, DABHP, FACR VA Medical Center – Louisville, KY</p>
4:25 pm to 4:35 pm	<b>Adjournment</b>
4:35 pm to 5:00 pm	<b>Business Meeting</b>











## Exhibitor Acknowledgements

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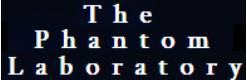


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# Ohio River Valley Chapter of the AAPM



## AAPM ORVC Officers



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*The Ohio River Valley Chapter Officers would like to thank you for your attendance. We look forward to seeing you again at our Spring Symposium.*