

## North Central Chapter

Michael W. Hinz, CHP

Mayo Clinic hosted the spring meeting of the North Central Chapter of the Health Physics Society (NCCHPS) on 20 May 2011 in Rochester, Minnesota. The meeting was attended by 33 members, three vendors, four speakers, and the chapter's 2011 Outstanding Science Teacher Award winner.

Dr. Michael O'Connor, Mayo Clinic, gave a very interesting talk on molecular breast imaging (MBI) for dense breast tissue. A small field of view gamma camera with a dual detector design is used. To increase sensitivity and resolution, O'Connor's team has redesigned the collimator, optimized the energy window, and reduced noise by combining images from opposite directions. He suggested that MBI could be used for preoperative surgical planning because it can see things you might miss with other imaging techniques.



Dr. Michael O'Connor

Mike Hinz, 3M Health Physics, talked about the challenges 3M faced in shipping three old radioactive sources from 3M Costa Rica to St. Paul for reuse/recycling. It was a six-year saga during which transportation regulations changed, the 3M license changed from Nuclear Regulatory Commission to Agreement State, people changed, and the shipping contractor's email system treated emails from 3M as spam.



Mike Hinz

Next, Jim Kelly, Minnesota Department of Health (MDH) Indoor Air Unit, gave an update on radon in Minnesota. MDH has had a State Indoor Radon Grant since the 1980s. Kelly reviewed 2010 radon-testing results and said 7,090 new homes were built with radon-resistant construction. He described the MDH Gold Standard for Minnesota builders who have demonstrated the knowledge and experience to build a healthy, radon-safe home at the maximum level using an active (fan) system.



Jim Kelly



Dan McGrane, 3M Health Physics, presented the NCCHPS Outstanding Science Teacher Award to Rick Cole, science instructor at Evansville High School in Evansville, Wisconsin. Cole talked about the programs he has set up to give students and teachers

experience with radiation sources and radiation safety. Cole was selected for the 2011 Geoffrey G. Eichholz Outstanding Science Teacher Award by the Health Physics Society.

Dr. Cynthia McCollough, Mayo Clinic, gave a talk on CT dose estimates and dose-reduction strategies. CTs are used from head to toe in many new diagnostic exams. Use is increasing 10 percent per year. McCollough said that you can't use BEIR VII and the linear nonthreshold theory to predict risk of radiation exposure. As an example, she said there has been a 30 percent decline in breast cancer cases due to mammography and treatment.



Dr. Cynthia McCollough



Chris Kessler

**Business Meeting Summary—**NCCHPS President Chris Kessler, Marshfield Clinic, called the meeting to order. David Paulu gave the secretary/treasurer report. Reports from the NCCHPS affiliates, Web site, science teacher workshop, and science teacher grant/award committees were re-viewed. There was a lot of discussion about the science teacher grants/awards. Kessler, Dan McGrane, and Mike Lewandowski will work together to develop a more formal process for these grants/awards. There was also considerable discussion about the NCCHPS involvement in local arrangements for the 2013 HPS Annual Meeting in Madison, Wisconsin. Ballots for the NCCHPS

election of officers will be distributed in early June to the membership. We were pleased to learn that Dr. Genevieve Roessler, an NCCHPS member, will receive the HPS Distinguished Public Service Award at the HPS meeting in West Palm Beach. The fall 2011 NCCHPS meeting will be held in the Minneapolis/St. Paul area, and 3M volunteered to host the meeting. Incoming HPS President-elect Armin Ansari has been invited to attend.



Rick Cole (left) receives the NCCHPS Outstanding Science Teacher Award from Dan McGrane.

