AbstractID: 10094 Title: Models and Resources for Intergrated Teaching and Learning of Medical Imaging Physics and Technology

Purpose: Develop a model of an educational system that supports the effective and safe utilization of contemporary medical imaging technology on a global basis and to produce open resources, based on the model, that will enrich the local learning environments in radiology residency programs and related activities professional development activities.

Method and Materials: The results of extensive research on the educational process, relating to both learning and teaching, identify the characteristics that determine the effectiveness and efficiency of learning activities. This is used to guide the development of models that use digital technology, including the internet, to enhance human performance of both learners (residents, students, etc) and medical physicists as learning facilitators (teachers).

Results: A resource containing high-quality visuals and images to increase the effectiveness of class/conference presentations and discussions, modules for "point and time of need learning" and review, online textbook materials, and interactive simulations is available on the web at: http://www.sprawls.org/resources/

Conclusion: The resource is being used in virtually all radiology residency programs, either/both as a support for classroom/conference discussions or for individual resident study and review. Residents report that the visuals, images, and easy to understand discussions in the modules are very helpful to their learning. On a global basis, several thousand medical imaging learners and professionals in over 80 countries are using the resource each week.

Conflict of Interest (only if applicable):