AbstractID: 14568 Title: Opportunities and Considerations for Multi-institutional Clinical Trials Research

The physicist role in clinical trials is sometimes confined to participation in filling out questionnaires, reviewing treatment plans, performing phantom studies, and verifying export of the correct information to the clinical trial group. However, participation in clinical trials research can be a rewarding and productive endeavor. The focus of this session is to highlight for investigators the potential and rewards of such research.

In this session, experts will present on different roles in supporting and conducting clinical trials research and secondary analyses. First, the role of the National Institute of Health in supporting clinical trials research will be described. Then, the richness of the data collected by the Radiological Physics Center (RPC) to support quality in clinical trials since its inception in 1968 will be described. The RPC has provided quality independent audits of delivered dose, design of phantoms, and other clinical trials support. More recently, the Advanced Technology Consortium (ATC) has been collecting digital 3D data to support clinical trials research for prospective and retrospective trials. Considerations with respect to the quality of data needed for retrospective analyses will then be discussed. Finally, individual investigators will share their experiences in 1) conducting research as a member of a clinical trials group and 2) furthering that research as an independent investigator supported by an NIH R-01 grant.

The panel discussion will provide an opportunity for investigators to ask questions about the nuts and bolts of becoming active in clinical trials support – and ultimately in clinical trials research.

Session: 1:30 – 3:20

1:30-1:35	Jean Moran, Ph.D.	Introduction to the Session
1:35-1:45	James Deye, Ph.D.	NIH: Funding Mechanisms for Clinical Trials Research
1:45-2:00	Geoffrey Ibbott, Ph.D.	Radiological Physics Center: 40 years of Data supporting the Quality of Clinical Trials
2:00-2:15	Jeff Michalski, M.D.	Advanced Technology Consortium: A Rich Database of Clinical Trials 3D image, dose, and outcome data
2:15-2:30	Susan Tucker, Ph.D.	Fulfilling the Promise of Clinical Trials: Quality Considerations for Successful Data Mining
2:30-2:45	Ying Xiao, Ph.D.	Research within a Clinical Trials Group on Multi-modality Imaging
2:45-3:00	Joseph Deasy, Ph.D.	Improving biological models with Multi-institutional Clinical Trials Data
3:00-3:20	Panel Discussion	All Participants

Learning Objectives for this Session:

Attendees will learn about:

1. NIH mechanisms for funding clinical trials research

AbstractID: 14568 Title: Opportunities and Considerations for Multi-institutional Clinical Trials Research

2. Examples of the RPC's database in support of clinical trials
3. Potential opportunities to conduct clinical trials research through the ATC
4. Ways to improve the quality of data acquired during clinical trials
5. Examples of research in the RTOG utilizing multi-modality imaging
6. Examples of improved biological models utilizing multi-institutional data