



The Cancer Initiating Cell and Stem Cell Biology: BSA, November, 3, 2009

- **Robert Wiltrout, Ph.D., Director and SD for Basic Research, CCR, NCI**
Introductions: *“The Cancer Initiating Cell and Stem Cell Biology”*
- **Irving Weissman, M.D., Professor of Pathology and Developmental Biology, and Director, Institute of Stem Cell Biology and Regenerative Medicine, Stanford University School of Medicine.** *“Normal and Neoplastic Stem Cells”*
- **Thea Tlsty, Ph.D., Professor of Pathology, University of California in San Francisco**
“Emergent Properties Common to both Stem Cells and Tumor Cells”
- **Kathy Kelly, Ph.D., Chief, Cell and Cancer Biology, CCR, NCI**
“Prostate Cancer Stem Cells and Metastasis – What is the Connection?”
- **Jonathan Vogel, M.D., Senior Investigator, Dermatology Branch, CCR, NCI**
“Tumor Initiating Cells in Human Squamous Cell Carcinoma”
- **Ronald McKay, Ph.D., Chief, Laboratory of Molecular Biology, NINDS**
“Controlling Stem Cells”



Current Status and Opportunities in Normal Stem Cell Biology and Tumor Initiating Cells

- **Where are we with the science; are there unmet opportunities?**
- **What is the relationship(s) of ES and tissue stem cells to cancer stem cells?**
- **What roles do stem cells play in resistance to therapy and in the metastatic process?**
- **How are stem cells maintained in their undifferentiated state?**
- **What is the role of bone marrow cells in populating the microenvironment and facilitating metastasis?**
- **What criteria should be applied to the development of cancer stem cell (CSC) lines and their use for therapeutic screening purposes?**
- **What is the best approach(s) to analyze the diagnostic and/or prognostic value of CSC markers in human cancer?**