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?