PSOC Sedona Workshop Schedule

Cellular Differentiation and Response to Stress: Modeling Cancer Initiation and Progression

> Hilton Resort and Spa, Sedona, AZ, August 29th - September 1st 2010

Sunday August 29th

Reception and Plenary Talk 6:00 - 8:00 pm **Paul Davies** Where is the epigenome? Top-down causation and the organization of living matter

Monday August 30th

<u>Heterogeneity in Pre-malignant and Malignant Tissue</u> Morning session 9:00 - 12:30

Hal Berman Tumor heterogeneity: a view from the front line **Beverly Emerson** It all starts with stress

Coffee break 10:30 - 11:00

Rod Smallwood Computational tissueomics: computer science meets medical physics
Salvatore Torquato Toward an Ising Model of cancer and beyond:

a view from the CPU

Lunch 12:30 - 2:00

Evolution in Pre-malignant and Malignant Tissue

Afternoon session: 2:00 - 6:15

Michael Barrett Genomic archaeology: how did things fall apart Yosef Yardin Genetic sociology: how the conversation breaks down

Coffee break 3:30 - 4:00

Sandy Anderson Cancer ecology: modeling scales of competition **Jeff Trent** Genetic evolution in pre-malignant and malignant tissue

Tuesday August 31st

Developmental Biology, Plasticity and Cancer

Morning session: 9:00 - 12:30

David Schaffer Walking the walk, and talking the talk of stem cells

Timothy Newman Cancer is complex - but is it simple?

Coffee break 10:30 - 11:00

Paul Kulesa Taming cancer cells at the neural crest

Luis Cisneros Collective behavior arising from motility and signaling

Lunch 12:30 - 2:00

<u>Influences of the Microenvironment on Development and Malignancy</u>

Afternoon session: 2:00 - 5:30

Charles Little The matrix - reloaded (and reconsidered)

Nastaran Kuhn Engineering the location

Coffee break 3:30 - 4:00

Thea Tlsty *One rotten apple, or a rotten barrel?*

Wednesday September 1st

Synthesizing discussions (topics to be decided during meeting) and hiking: 9:00 - 12:00

Lunch and farewells 12:00 - 2:00