

# Cancer Dynamics: Modeling and Experiment Workshop Schedule

## Monday, May 9<sup>th</sup>    **THEME: Avascular Tumor Growth**

9:00 – 9:15	Welcome Opening Remarks	Conference Organizers L. Sander & T. Jackson
9:15 – 10:00	<i>Stability/Instability of dormant tumors</i>	Avner Friedman Ohio State University
10:00 – 10:45	<i>Mathematical modeling for dormant pre-angiogenic tumors</i>	Khalid Boushaba Iowa State University
10:45 – 11:15	Coffee Break	
11:15 – 12:00	<i>Ductal Carcinoma in Situ: Modelling in the Dark</i>	Helen Byrne U. of Nottingham
12:00 – 1:30	Lunch	
1:30 – 2:15	<i>Solid Tumor Growth: A Multiscale Cellular Model</i>	Yi Jiang Los Alamos Nat'l Lab
2:15 – 3:00	<i>A Glioma Cell's Strategy for Malignant Invasion</i>	Tim Demuth TGEN
3:00 – 3:30	Wrap Up/ Question and Answer Period	

**Tuesday, May 10<sup>th</sup>      THEME: Treatment and Suppression**

8:15 – 11:15	Trip to Detroit Institute of Arts	
11:15 – 1:00	Lunch	
1:00 – 1:45	<b><i>Modeling Cancer Treatment: Mixed Immuno-Chemo-Vaccine Therapy Strategies.</i></b>	Lisette de Pillis Harvey Mudd College
1:45 – 2:30	<b><i>Differentiation as a Tumor Suppressor Mechanism</i></b>	Carlo Maley The Wistar Institute
2:30 – 3:15	<b><i>Multiscale Cancer Modeling: Introducing CViT</i></b>	Thomas Diesboeck Harvard University
3:15 – 4:00	Wrap Up/ Question and Answer Period	

Wednesday, May 11<sup>th</sup>

**THEME: Brain Tumors-Growth  
Patterns and Cellular Dynamics**

9:00 - 9:15am	Announcements Opening Remarks	Conference Organizers L. Sander & T. Jackson
9:15 – 10:00am	TBA	David Vader Harvard University
10:00 – 10:45am	TBA	Cliff Brangwynne Harvard University
10:45 – 11:15am	Coffee Break	
11:15 – 12:00pm	<b><i>The Glioma Spheroid Invasion Model: New Tools and New Therapeutic Insights</i></b>	Sean Lawler Ohio State University
12:00 – 1:30pm	Lunch	
1:30 – 2:15pm	<b><i>Dynamics and Pattern Formation of Invasive Tumor Growth</i></b>	Evgeniy Khain University of Michigan
2:15: - 3:00pm	<b><i>Clinical Applications of Quantitative Modeling for Invasive Gliomas</i></b>	Kristin Swanson Univ. of Washington
3:00 – 3:30pm	Wrap Up/ Question and Answer Period	

**Thursday, May 12<sup>th</sup>      THEME: Vasculogenesis and Angiogenesis**

9:00 – 9:15	Announcements Opening Remarks	Conference Organizers L. Sander & T.Jackson
9:15 – 10:00	<b><i>Role of Bcl-2 in Tumor Angiogenesis: Biological Studies</i></b>	Jacques Nor University of Michigan
10:00 – 10:30	<b><i>Role of BCL2 in Tumor Angiogenesis: Mathematical Studies</i></b>	Harsh Jain University of Michigan
10:30 – 11:00	Coffee Break	
11:00 – 11:45	<b><i>Mathematical Modelling of Cell Motion in Application to Angiogenesis</i></b>	Brian Sleeman University of Leeds
12:00 – 1:30	Lunch	
1:30 – 2:15	<b><i>Modelling Vasculogenesis</i></b>	Luigi Preziosi Politecnico di Torino
2:15 – 3:00	<b><i>Chemotaxis and Strain in Vasculogenesis: A Unified View</i></b>	Davide Ambrosi Politecnico di Torino
3:00 – 3:30	Coffee Break	
3:30 – 4:15	<b><i>Nonlinear Simulation of Angiogenesis and Solid Tumor Growth</i></b>	John Lowengrub UC Irvine
4 :15 – 5:00	Wrap Up/ Question and Answer Period	

Friday, May 13<sup>th</sup>

**THEME: Vascular Tumor Growth and  
Metastasis**

9:00 - 9:15

Announcements  
Opening Remarks

Conference Organizers  
L. Sander & T. Jackson

9:15 – 10:00

*Multi-scale Modelling in Vascular  
Tumors*

Philip Maini  
Oxford University

**10:00 – 10:45**

Wrap Up / Closing Remarks