



## 9th Mayo Clinic Symposium on Immuno-Oncology and Tumor Microenvironment Crosstalk

**Friday, October 30, 2020**

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- 7:00 a.m. Continental Breakfast and Registration
- 8:00 a.m. **Section I: Mini-Symposium - Nanotechnology**  
*Chairs - Priyabrata Mukherjee, Ph.D. and Santanu Bhattacharya, Ph.D.*
- 8:05 a.m. Aiming to Push Forward Novel Micro/Nanoscaled Technologies for the Purpose of Minimally Invasive Therapeutics  
*Ali Khademhosseini, Ph.D., UCLA Samueli School of Engineering, California, Los Angeles*
- 8:25 a.m. Discussion
- 8:30 a.m. HURying for Cancer Therapy  
*Rajagopal Ramesh, Ph.D., University of Oklahoma*
- 8:50 a.m. Discussion
- 8:55 a.m. Probing Cellular Processes Using Engineered Nanoparticles  
*Priyabrata Mukherjee, Ph.D., Stephenson Cancer Center*
- 9:15 a.m. Discussion
- 9:20 a.m. Theranostic Nanoparticles Targeting Both Tumor and Stromal Cells for the Treatment of Drug Resistant Cancer  
*Lily Yang, M.D., Ph.D., Emory University, GA*
- 9:40 a.m. Discussion
- 9:45 a.m. Targeting The Microenvironment in Liver Metastasis of Colorectal Cancer  
*Leaf Huang, Ph.D. UNC Eshelman School of Pharmacy, Chapel Hill, NC*
- 10:05 a.m. Discussion
- 10:10 a.m. **Coffee Break**
- 10:30 am. Transdermal, Oral and Targeted Drug Delivery Systems  
*Samir Mitragotri, Ph.D. Harvard University, MA*
- 10:50 a.m. Discussion
- 10:55 a.m. Nanoparticles in Cancer Radiotherapy – Updates and Future Visions  
*Sunil Krishnan, M.D. Ph.D., Mayo Clinic Jacksonville, FL*
- 11:15 a.m. Discussion
- 11:20 a.m. Short Talk- Abstract Presentation

- 11:30 a.m. Short Talk- Abstract Presentation
- 11:40 a.m. Short Talk- Abstract Presentation
- 11: 50 p.m. **Adjourn and Lunch Break**
- 12:50 p.m. **Section II: Welcome and Introduction Angiogenesis and Tumor Microenvironment Symposium**  
*Asher Chanan-Khan, M.D., Mayo Clinic Jacksonville*
- 12:55 p.m. Pre-Plenary Assessment Utilizing Audience Response
- 1:10 p.m. **Joseph Austin McCartney and Ruth McCartney Hauck Named Visiting Professorship Lecture**  
*Chair: Mayo Clinic Cancer Center Director*
- 1:15 p.m. Available at a Later Date  
*Hauck Proffesorship Lecture*
- 1:40 p.m. Discussion
- 1:55 p.m. **Section III: Vascular Biology and Cell Signaling**  
*Chair: Ying Wang, M.D., Ph.D., Mayo Clinic Jacksonville*
- 2:00 p.m. Targeting Pancreatic Cancer Cells and Stellate Cells Using Designer Nanotherapeutics in Vitro  
*Resham Bhattacharya, Ph.D., Oklahoma*
- 2:20 p.m. Discussion
- 2:25 p.m. Angiopoietin/Tie Signaling: Still an Attractive Therapeutic Target?  
*Augustin Hellmut, Ph.D., Heidelberg University*
- 2:45 p.m. Discussion
- 2:50 p.m. Vascular-neural interface in development and disease  
*Ramchandran Ramani, Ph.D., Medical College of Wisconsin Milwaukee, WI*
- 3:10 p.m. Discussion
- 3:15 p.m. **Coffee Break**
- 3:35 p.m. Mechanisms of Blood & Lymphatic Angiogenesis  
*Laura Benjamin, Ph.D., University of Pennsylvania*
- 3:55 p.m. Discussion
- 4:00 p.m. Harnessing the information in cancer exosomes for novel cardiac repair mechanisms.  
*Ke Cheng, Ph.D., North Carolina State University, Raleigh, North Carolina*
- 4:20 p.m. Discussion

- 4:25 p.m. Partners in Crime: Brain Tumor Stem Cells and the Microenvironment  
*Gangjian Qin, M.D., The University of Alabama at Birmingham*
- 4:45 p.m. Discussion
- 4:50 p.m. Short Talk- Abstract Presentation
- 5:00 p.m. Short Talk- Abstract Presentation
- 5:10 p.m. **Adjourn**
- 5:15–7:00 p.m. **Section IV: Poster Session and Reception**
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**Saturday, October 31, 2020**

- 7:00 a.m. Continental Breakfast and Registration
- 8:00 a.m. **Section V: Tumor Microenvironment Crosstalk and Cancer Stemness in GBM**  
*Chair: Subrata Sinha M.D., Ph.D.; FAMS FNA FASc FNASc.,  
Indian National Science Academy, India*
- 8:05 a.m. When Less is More: Dexamethasone Dosing for Brain Tumors  
*David Reardon, M.D., Dana Farber Cancer Institute*
- 8:25 a.m. Discussion
- 8:30 a.m. *Reconstructing Tumor Vessels for Cancer Therapy*  
*Gabriele Bergers, M.D., Ph.D., Vib-Ku Leuven Center for Cancer Biology*
- 8:50 a.m. Discussion
- 8:55 a.m. Epigenetic Regulation of Glioma Angiogenesis and Growth  
*Suyun Huang, M.D. Ph.D., Virginia Commonwealth University*
- 9:15 a.m. Discussion
- 9:20 a.m. A Deadly Conversation: Cancer Stem Cells and the Microenvironment  
*Jeremy Rich, Ph.D., Cleveland Clinic*
- 9:40 a.m. Discussion
- 9:45 a.m. “Go and Grow” in Glioblastoma  
*Steven Rosenfeld, M.D., Ph.D., Mayo Clinic Jacksonville*
- 10:05 a.m. Discussion
- 10:10 a.m. **Coffee Break**
- 10:35 a.m. **Section VI: Cross-Talk Between Tumor and Stroma for Targeting**  
*Chairs: Derek Radisky, Ph.D., Mayo Clinic Jacksonville*

- 10:40 a.m. Theranostic Nanoparticles Targeting Both Tumor and Stromal Cells for the Treatment of Drug Resistant Cancer  
*Ming-Hui Zou, Ph.D., Georgia State University, Atlanta, GA*
- 11:00 a.m. Discussion
- 11:05 a.m. New Avenues for the Development of Novel and Effective Pharmacological Therapeutic Approaches for Human Diseases  
*Arduino Mangoni, M.D., Ph.D., Flinders University, Australia*
- 11:25 a.m. Discussion
- 11:30 a.m. Understanding the Behavior of Mitochondria is Controlled in Cells  
*Y. Eugene Chen, M.D., Ph.D., University of Michigan*
- 11:50 p.m. Discussion
- 11:55 p.m. **Lunch**

## **Section VII: Oncogenesis and novel therapeutics**

*Chair: Panagiotis Z. Anastasiadis, Ph.D., Mayo Clinic Jacksonville*

### **Keynote Talk**

- 11:55 p.m. Defining the Complex Functions of the MYC Oncogene, Identifying Key Domains Mediating Myc Transcription Activity  
*Chi Van Dang, M.D. Ph.D., The Wistar Institute, PA*
- 1:45 p.m. Discussion
- 1:50 p.m. Protein Kinase Ciota: Oncogene and Therapeutic Target  
*Alan Fields, Ph.D., Mayo Clinic, Florida*
- 2:10 p.m. Discussion
- 2:15 p.m. Ntanoparticles in Radiation Oncology – the Road Traveled, the Road Ahead  
*Eduardo Chini, M.D., Ph.D., Mayo Clinic Rochester*
- 2:35 p.m. Discussion
- 2:40 p.m. *Syncope: A Mindful and Systematic Approach*  
*Jordan (Chris) C. Ray, M.D., Mayo Clinic Jacksonville, FL*
- 3:00 p.m. Discussion
- 3:05 p.m. **Young Investigator Talk** – abstract presentation
- 3:20 p.m. **Young Investigator Talk** – abstract presentation
- 3:35 p.m. **Coffee Break**
- 4:00 p.m. **Section VIII: Microenvironment and Disease Progression**  
*Chairs: Baoan Ji, M.D., Ph.D. Mayo Clinic Jacksonville*

- 4:10 p.m. Unexpected Contribution of Lymphatic Vessels to Promotion of Distant Metastatic Tumor Spread  
*Michael Detmar, M.D., Swiss Federal Institute of Technology*
- 4:30 p.m. Discussion
- 4:35 p.m. Mechanisms of Lymphangiogenesis and Lymphatic Valve Formation  
*Tsutomu Kume, Ph.D., Northwestern University, IL*
- 4:55 p.m. Discussion
- 5:00 p.m. Ceramide Restoration with Ant Venom Derived Solenopsin Analogs as Anti-Inflammatory and Anti-Neoplastic Strategies  
*Rodionov Roman M.D., Ph.D., Technische Universität Dresden, Germany*
- 5:20 p.m. Discussion
- 5:30 p.m. **Section VIII: Poster Session and Reception**
- 6:30 p.m. **Section IX: Travel Scholarships/Oral Presentations and Dinner**  
*Chairs: Vijay Shah and Tushar Pal*  
Travel Award Winners  
Young Faculty Scholarship Winners

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### **Sunday, November 1, 2020**

- 7:00 a.m. Continental Breakfast and Registration
- 8:00 a.m. **Section XI: Precision Therapy Targeting Microenvironment and Clinical Outcomes**  
*Chair: John A. Copland, Ph.D. Mayo Clinic Jacksonville*
- 8:10 a.m. Disruption of the Immunosuppressive Microenvironment in Mantle Cell Lymphoma with Bromodomain Inhibitors  
*Eduardo Sotomayor M.D., George Washington Cancer Center*
- 8:30 a.m. Discussion
- 8:35 a.m. Angiocrine Signaling in Liver  
*Vijay Shah, M.D., Mayo Clinic Rochester*
- 8:55 a.m. Discussion
- 9:00 a.m. Understanding the Immune System Using Genetic Knockout Models and in Vitro Human Cell Systems with an Emphasis on T cell and NK Cell Biology  
*Dan Billadeau, Ph.D., Mayo Clinic, Rochester*
- 9:20 a.m. Discussion
- 9:25 a.m. Ceramide Restoration with Ant Venom Derived Solenopsin Analogs as

Anti-Inflammatory and Anti-Neoplastic Strategies  
*Jack Arbiser, M.D Ph.D., Emory University School of Medicine*

9:45 a.m. Discussion

9:50 a.m. **Coffee Break**

10:05 a.m. Vaccines for the Treatment and Prevention of Cancer  
*Keith L. Knutson, Ph.D., Mayo Clinic Jacksonville*

10:25 a.m. Discussion

10:30 a.m. Modeling Tumor Vascular Integrity and the Tumor Microenvironment  
*Michelle Bradbury M.D., Ph.D., Memorial Sloan Kettering Cancer Center*

10:50 p.m. Discussion

10:55 a.m. **Section XII:**  
***Folkman Lectureship Forum***  
***New Horizon of Cancer Research: from Biomarker Discovery to Therapy***

Moderators: *Jack Arbiser, M.D., Ph.D., Emory University School of Medicine*  
*Kabir Mody, M.D., Mayo Clinic Jacksonville*

*Panel members: Kenechi Takeshita, M.D. Ph.D., Saranto/ Kite Pharma Biotechnology  
Santa Monica, California ·  
Asher Chanan-Khan, M.D., Mayo Clinic Jacksonville  
Keith L. Knutson, Ph.D., Mayo Clinic Jacksonville  
Subrata Sinha M.D., Ph.D.; FAMS FNA FASc FNASc., Indian National  
Science Academy, India*

**Section XIII:**  
12:25 p.m. Post-Plenary Assessment Utilizing Audience Response  
*Dev Mukhopadhyay, Ph.D., Mayo Clinic Jacksonville*

12:35 p.m. **Vote of Thanks**  
*Leslie Cooper M.D., Mayo Clinic Jacksonville*

12:40 p.m. **Adjourn**