

2020 YALE MCDB VIRTUAL RETREAT

FRIDAY, SEPTEMBER 4, 2020 9:00 am – 6:00 pm EST

FEATURING THE JOHN SPANGLER NICHOLAS SYMPOSIUM

ZOOM LINK: <https://yale.zoom.us/j/97785350416>

Morning Session I

Moderator: Stavroula Hatzios

- 9:00 – 9:10 am **Welcome** (Stavroula Hatzios and Jing Yan)
- 9:10 – 9:22 **Damon Clark**: Engineering super-flies
- 9:22 – 9:34 **David Breslow**: Deconstructing the primary cilium: cilium disassembly and cell cycle progression
- 9:34 – 9:46 **Zhuobin (Ben) Liang (Isaacs Lab)**: An enhanced multiplex genome engineering technology and its application for precise editing of the SARS-CoV-2 genome
- 9:46 – 9:58 **Gaëlle Talross (Carlson Lab)**: Hungry for antennal ncRNAs
- 9:58 – 10:10 **Stavroula Hatzios**: An infection-activated redox switch promotes tumor growth
- 10:10 – 10:22 **Xiao-Feng Zhang (Forscher Lab)**: Regulation of axon growth by myosin II-dependent mechanocatalysis of cofilin activity
- 10:25 – 10:45 **Coffee Break**

Morning Session II

Moderator: Stavroula Hatzios

- 10:45 – 10:57 **Michael Mauro (Bahmanyar Lab)**: Gatekeepers for the nucleus: assembly of nuclear pores after open mitosis
- 10:57 – 11:09 **Ron Breaker**: Imaginary ribozymes
- 11:09 – 11:21 **Danyan Li (van Wolfswinkel Lab)**: Planarian PIWI guides tissue-specific chromatin changes during cell differentiation
- 11:21 – 11:33 **Nadya Dimitrova**: Long noncoding RNAs - hidden treasures in the cancer genome
- 11:33 – 11:45 **Weimin Zhong**: "Psychic" stem cells count time and number during mammalian neurogenesis
- 11:50 – 12:10 **Lightning Talks: Session I**
- 12:10 – 1:15 **Lunch Break and Social Hour**

❖ **Zoom links for the lunch time social hour are listed here:**

https://docs.google.com/document/d/1Zf42wayb2SsK_NxXyCQ2URyTqaAmA6LVQrIfuZ2Cmro/edit?usp=sharing

Afternoon Session I

Moderator: Jing Yan

- 1:15 – 1:27 pm **Henry Mattingly (Emonet Lab):** Are cells information-limited?
- 1:27 – 1:39 **Ted Leung (Gendron Lab):** The plant's calendar: photoperiodic genes in *Arabidopsis thaliana*
- 1:39 – 1:51 **Valerie Horsley:** How do we heal? Lessons from the skin
- 1:51 – 2:03 **Jing Yan:** Life in a tight spot: how biofilms grow under mechanical confinement
- 2:03 – 2:15 **Tom Pollard:** Insights about the mechanism of actin polymerization
- 2:15 – 2:27 **Lauren Dickenson (Jacob Lab):** Increased gene targeting efficiency through T-DNA amplification in plants
- 2:30 – 2:45 **Lightning Talks: Session II**
- 2:50 – 3:10 **Coffee Break**

Afternoon Session II

Moderators: Jing Yan

- 3:10 – 3:22 **Sigrid Nachtergaele:** Uncovering the cell biology of RNA modifications
- 3:22 – 3:34 **Haig Keshishian:** Synaptic tagging: a mechanism for branch-specific plasticity through retrograde trans-synaptic TGF-beta signaling
- 3:34 – 3:46 **Shanique Alabi (Crews Lab):** Mutant-selective degradation by BRAF-targeting PROTACs
- 3:46 – 3:58 **Michael O'Donnell:** Microbial metabolites regulate host behaviors
- 3:58 – 4:10 **Han Wan (Pyle Lab):** Identifying regulatory RNA structures in long, positive-strand virus genome
- 4:10 – 4:22 **Vivian Irish:** Patterning in plant development
- 4:30 – 4:35 **Abigail Ziemann (Diversity and Inclusion Committee)**
- 4:35 – 4:45 **Concluding Remarks** (Stavroula Hatzios and Jing Yan)
- 2020 Spangler Award Recipients
 - Lauren Penfield (Bahmanyar Lab)
 - Lucas Sanor (Crews Lab)
 - Omer Mano (Clark Lab)

Entertainment Session and Social Hour

- 5:00 – 6:00 **Entertainment:** Provided by 2nd-year students in MCDB, followed by time to socialize

❖ **Zoom links for the entertainment session are listed here:**

https://docs.google.com/document/d/1Zf42wayb2SsK_NxXyCQ2URyTqaAmA6LVQrifuZ2Cmro/edit?usp=sharing