

# NYBCe RESEARCHER PROFILE



## AVITAL MENDELSON, PhD

Head, Laboratory of Stem Cell Biology & Engineering

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### BACKGROUND

#### Degree Institutions

- Cornell University - BS, ME
- Columbia University - PhD Biomedical Engineering

#### Postdoctoral Institution

- Albert Einstein College of Medicine

### AREAS OF RESEARCH

- Platelet Production
- Platelet Activation
- Hematopoietic Stem and Progenitor Cells

### KEY PUBLICATIONS



### CONTACT

To contact the lab, email Dr. Mendelson at [amendelson@nybc.org](mailto:amendelson@nybc.org) or the Office of Sponsored Programs at [researchadmin@nybc.org](mailto:researchadmin@nybc.org).

To learn more about NYBCe patents and licensing, visit our webpage: <https://www.nybce.org/our-research/nybce-technology-discoveries/>.

### NYBCe LAB DESCRIPTION

Laboratory of Stem Cell Biology and Engineering: Investigating the mechanism by which mesenchymal stem cells (MSCs) and other niche cells in the bone marrow may improve platelet formation in megakaryocytes (MKs) and prevent activation of platelets. Using this knowledge, the lab is investigating methods for expanding platelets ex-vivo and developing cutting-edge tools to assist with this process.

The lab is also interested in understanding how the hematopoietic stem cell microenvironment is affected under steady state and conditions of hematological malignancy.

### INDUSTRY & ACADEMIC PARTNER COLLABORATIONS

- Weill Cornell Medicine: Assistant Professor (Adjunct)
- AABB: Foundation Scientific Research Grant Scholar and Annual Meeting Education Committee Member
- ASH: Scientific Committee on Transfusion Medicine Member
- Dr. Mendelson's lab has worked on or is actively working on collaborations with Columbia University, Cornell University, and City of Hope.

### COLLABORATIONS OF INTEREST

- Partners working on platelet production and activation including work to expand platelets in vitro. Dr. Mendelson's lab is working on solving for critical pain points related to platelets through basic research including improving the shelf life and supply.
- Collaborators working to understand the hematopoietic stem cell microenvironment.

