

About our presenters:



Orin Herskowitz is the Senior Vice President of Intellectual Property and Tech Transfer for Columbia University, as well as Executive Director of Columbia Technology Ventures (CTV). He also is an Adjunct Professor at Columbia's Business and Engineering Schools. He has served on boards or served as the Principle Investigator for a number of innovation and entrepreneurship-focused initiatives, including the NYC Media Lab, the PowerBridgeNY clean energy proof-of-concept center, the Columbia Coulter Translational Partnership, the Academic Venture Exchange, the

NYC ACRE technology incubator, and Harlem Biospace; has been a peer reviewer for innovation and entrepreneurship awards for the National Science Foundation, the US Small Business Association, the Association of Public and Land-grant Universities; a published author on the topic of translating university-stage technology; and is a frequent speaker at technology-focused events in NYC and across the country. Orin has also been appointed by U.S. Secretary of Commerce Penny Pritzker to the National Advisory Council on Innovation and Entrepreneurship, serving a two-year term beginning in 2016. Orin received his BA from Yale and his MBA from the Wharton School of Business. Prior to joining Columbia, Orin spent 7 years at the Boston Consulting Group's New York office as a strategy consultant, and was previously an entrepreneur and a consultant to start-ups.

Columbia Technology Ventures is the tech transfer office of Columbia University. Our core objective is to facilitate the transfer of inventions from academic research to outside organizations for the benefit of society on a local, national and global basis. Each year, CTV manages more than 350 invention disclosures from faculty, 100 license deals and over 20 new start-ups. CTV currently has over 1200 patent assets available for licensing, across research fields such as bio, IT, cleantech, devices, nanotechnology, and materials science.

Columbia Technology Ventures has a particular focus on start-up companies. Over the years, CTV has been involved with launching over 180 companies based on Columbia's technologies. Of these companies, over 40 have received VC funding, with over 25 successful acquisitions or IPOs to date.



Jack Miner is a leader for venture-stage technology start-up companies with a deep understanding and affinity for the Venture Capital industry. He successfully partners with Research & Development, strategic investors, and investment colleagues to create and communicate the vision and launch strategy optimizing the success of pipeline assets. Jack is adept at vetting companies and teams, evaluating investment strategies, and measuring results. He is focused on designing and implementing corporate venture processes using the most current techniques and trends to attract investors, improve company valuations, and bottom-line return to stakeholders.

Jack's most recent position was at **Cleveland Clinic Ventures** as **Managing Director** where he spearheaded the development of a new corporate venture team for investing in a CCF-startup and external early-stage companies and managing these companies with appropriate governance and

oversight. Jack had a \$40million annual allocation to deploy in a robust investment process and co-invest in companies that were both strategic and financial opportunities.

Before joining the Cleveland Clinic Ventures, Jack was with **University of Michigan** as **Director, Venture Center** where he managed the Mentor in Residence Program, the Business Formation Team, and the Venture Accelerator under the Office of Technology Transfer to help new startup ventures move quickly to the marketplace.



As Executive Director of OLV, Robin Razor oversees all functions of the tech transfer process at Duke University. Previously, she was Managing Director of Licensing at the University of Michigan where she oversaw the licensing process ranging from management and marketing of disclosures to developing and negotiating appropriate licensing terms for license agreements, and finally to maintaining and monitoring existing agreements.

Ms. Razor is also a former Director of Licensing at The Ohio State University and former employee of Battelle Columbus Laboratories, a leading US contract research firm.

Ms. Razor has a MS in Genetics from The Ohio State University and a BS in Bacteriology and Zoology from Ohio Wesleyan University. She has earned the CLP (Certified Licensing Professional) credential and is past President and Chair of the Board of Governors of Certified Licensing Professionals, Inc. Ms. Razor is a Past President of the Association of University Technology Managers (AUTM) Board of Trustees. She has also served on the Board of Directors, most recently as Treasurer, of the Ann Arbor Area Chamber of Commerce.

In 2005, she was awarded the President's Award for service to AUTM. In 2007, Ms. Razor was part of the team headed by Michigan's Dr. Arul Chinnaiyan honored by The American Association for Cancer Research in its first annual AACR Team Science Award.



Jon Soderstrom is currently the Managing Director of the Office of Cooperative Research at Yale University. The Office manages the intellectual assets created at Yale to achieve the maximum benefit for the public and provide a financial return to support the University's research efforts. He is responsible for managing the intellectual property portfolio of Yale faculty members, including (1) defining and executing commercialization strategies including negotiation of licenses and corporate-sponsored research agreements, (2) initiating strategic corporate partnerships, and (3) development and marketing of business concepts for new spin-off companies to the venture investment community.

Since joining the Office in 1996, he has helped form more than 25 new ventures including Molecular Staging (acquired by Qiagen), Agilix, Achillion Pharmaceuticals (NASQ: ACHN), PhytoCeutica (acquired by Kadmon), Protometrix (acquired by Invitrogen), Iconic

Therapeutics, Applied Spine Technologies, HistoRx (acquired by Genoptix), VaxInnate, Affomix, Kolltan Pharmaceuticals (acquired by Celldex), Arvinas and Artisan Bioscience. Collectively, these companies have raised over \$500 million in professional venture capital.

In 2007, the Office created the Yale Entrepreneurial Institute to help undergraduate, graduate and professional school students at Yale to start scalable new ventures. Over 100 new ventures have been formed that have raised over \$135 million in investment capital.

Prior to this position, Dr. Soderstrom was the Director of Program Development for Oak Ridge National Laboratory (ORNL) after serving for ten years as Director of Technology Licensing for Martin Marietta Energy Systems. In the Office of Technology Transfer, he directed a group of ten professionals responsible for negotiating licenses and Cooperative Research and Development Agreements (CRADAs).

Dr. Soderstrom was a founding board member and past president of the Association of Federal Technology Transfer Executives as well as a member of the Licensing Executive Society and Association of University Technology Managers where he was, in 2008, President and, from 2003 – 2005, Vice President for Public Policy as well as a member of the Executive Committee of the Board of Directors. He is frequently asked to lecture and teach seminars on various aspects of the technology commercialization process and economic development both within the United States and abroad. He has testified before Congress on technology transfer issues and served as an expert witness in patent infringement litigations.

In addition to his professional accomplishments, Dr. Soderstrom was honored as the 87th “Point of Light” by President George H. W. Bush in March, 1990 for volunteer work with low-income families in East Tennessee to build and rehabilitate housing and provide other essential services.

Dr. Soderstrom received his Ph.D. from Northwestern University in 1980 and his B.A. from Hope College in 1976.

University Startups: Improving the Economy or the Walking Dead?



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Robin Razor

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Jon Soderstrom

Managing Director, University Technology Commercialization and Faculty Innovation, Yale University

Nature Biotech, "Biotech Living & the Walking Dead"

- “. . .early stage university startups that never grow to more than 2 FTEs.”
- “. . .the behavior seems to have been replicated across the country by other schools. Creating formal companies with no employees or business expertise... the university gets the short-term benefit of transferring technology and the credit for economic development. *Over the long-term, however, these zombies contribute little to either technology or economic development*”
- How many of us had this article forwarded to us from management?

Are we contributing to the problem?

- How do we define startups?
- Do universities have different “pressures/objectives”
 - Economic development
 - ”what have you done for me lately?”
- What are successful metrics?
 - Investment (does only venture count?)
 - Location
 - Stability (% that remain after X years)
 - Employment numbers
 - IPOs/acquisition (even before any product makes it to market)
 - Do we even care if a product makes it to market?
- Are all startups the same?
 - Software vs. pharma
 - Tech vs. med

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AUTM Startup Definition (authors' italics)

START-UP COMPANIES: START-UP COMPANIES are new companies *that were dependent on licensing your institution's technology for their formation*. If a technology was licensed to an existing start-up company, that was formed to develop a different technology, this company should be counted as a SMALL COMPANY when responding to Question 6C., not a START-UP COMPANY. START-UP COMPANIES, as used in this Survey, *refer only to those companies that were formed specifically to develop the technology being licensed*. A START-UP COMPANY may be formed well in advance of when the actual license is signed, while the founders research and write the company's business plan and explore the feasibility of securing investors or grants. A company should be reported as a START-UP COMPANY irrespective of whether the company was formed by the licensing institution OR by an entrepreneur, investor, the professor, a graduate student or a post- doctoral fellow. The key question is: *"Was the company that licensed a technology formed specifically to license and develop the technology being licensed*.

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When is a startup a startup?

- At option or only at license?
- What if it existed before an option or license?
- What if it had other IP?
- What if it has no dollars and/or no management?
- What if “management” is a student/postdoc
- What counts as “dollars”/”investment?”
- What if it is a student startup?

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Discussion Questions

1. Does the AUTM definition of startups provide an accurate representation of how the profession defines startups?
2. Should we have higher standards for defining startups?
3. What metrics about our startups should we measure?
4. What do we use those metrics for, internally and externally?
5. Do the definitions/metrics need to be consistent/the same across our institutions? Do we need ONE standard definition?
6. Are we putting too much emphasis on startups (and other metrics) on defining the success of our offices?
7. Should there be a “9 Points to Consider for Responsible Metrics”

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