



### **SEJ Special Issue Call for Papers**

## **Re-thinking Academic Entrepreneurship: Micro, Macro, and Meso Perspectives**

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### **Background and Special Issue Purpose:**

2020 was the 40th anniversary of the Bayh-Dole and Stevenson-Wydler Acts in the U.S., which induced universities and federal/national labs to become more engaged in the commercialization of science. These legislative acts also led to the establishment of technology transfer offices at universities and federal/national labs (Link, Siegel, and Van Fleet, 2011) and a concomitant rise in patenting, licensing, and startup creation by scientists worldwide. The 1980 Bayh-Dole Act has also influenced global policies regarding university technology transfer, as well as inspired legislative reforms in both developed countries (e.g., China, Japan, South Korea, U.K., Europe) and developing countries (e.g., Brazil, Colombia, Chile, India, Indonesia, Malaysia, Mexico, Philippines, Russia, and South Africa-see Siegel and Wright, 2007).

Scientists who engage in such activities are now referred to as “academic entrepreneurs” and entrepreneurial programs and initiatives have grown exponentially on campus and in surrounding regions of the university or federal/national lab. At the same time, more attention has recently been paid to students and alumni who set up their own ventures, referred to as student and alumni entrepreneurship, and which belong to the broader umbrella term of “academic entrepreneurship”.

To support legislation, there has been substantial public investment in programs to support academic entrepreneurship (e.g., the Small Business Technology Transfer Program (STTR) in the U.S., various state level technology innovation public investment programs, and diverse national and regional support programs in the E.U., Singapore, Korea, and Taiwan), student-entrepreneurship, and property-based institutions, such as incubators/accelerators and

science/technology parks on campus and surrounding regions, as well as state-level programs to attract “star scientists” who actively engage in academic entrepreneurship (e.g., the Georgia Research Alliance <https://gra.org/>).

A key policy issue relating to academic entrepreneurship is ownership of intellectual property arising from government-funded research at universities and federal/national labs, such as patents (the Bayh-Dole approach in the U.S.), and whether universities own such patents (the Bayh-Dole approach) or inventors own them (the “Professor’s Privilege” in Sweden -see Hvide and Jones, 2018 or in Germany - see Cunningham et al., 2019). Also, policymakers, intergovernmental actors, academics, and practitioners view academic entrepreneurs as key agents in addressing “grand societal challenges,” such as climate change and sustainability, improving physical and human infrastructure, reducing poverty and inequality, and health care (e.g., George et al., 2016; De Silva et al., 2021).

It is also important to note that innovation and entrepreneurship occur within an entrepreneurial ecosystem. Some key agents, institutions, and initiatives defining entrepreneurial ecosystems on campus (and in surrounding regions of the campus) include faculty, post-docs, students, alumni, technology transfer offices, science and technology parks, incubators/ accelerators, venture capitalists and angel investors, alumni commercialization funds, and numerous entrepreneurship programs and centers on campus. These systems have expanded greatly over the past forty years. Thus, the rise of academic entrepreneurship has both important managerial and public policy implications at multiple levels of analysis.

Below are four sets of research questions regarding the managerial and public policy implications of academic entrepreneurship that could be explored in the special issue. These questions are informed by Markman et al. (2008), who identified three key aspects of the commercialization of science: individual, organizational, and institutional/societal dimensions. The examples are not meant to be exhaustive but provide guidance on the scope and types of questions that might fit the special issue.

### **Micro Level Research Questions**

- (a) How do scientists, investors and student-entrepreneurs form and manage their initial teams? To which extent and when do these teams rely on external advice, for instance provided by advisory boards and boards of directors? How do academic teams evolve, and which factors drive such evolution? (Zellmer-Bruhn et al., 2021). How and when do they select early employees (also referred to as ‘joiners’ (Roach and Sauermann, 2015)?
- (b) How do various “micro”/organizational behavior/human resource management issues, such as championing and leadership, work-life balance, organizational justice, diversity and inclusion relate to academic entrepreneurship (Balven et al., 2018; Waldman et al., 2022)?
- (c) What are the positive/negative effects of emotions in technology transfer activities, such as innovation disclosures, patents, licenses, and startup formation (Huyghe et al., 2016)?
- (d) How do individual characteristics and diversity (e.g., education, prior experience, minority groups) affect academic entrepreneurship (Colombo et al., 2019; Luczaj, 2021)?
- (e) How is identity in academic entrepreneurs developed, and what is the role of the academic institution in identity formation? (Wang et al., 2021; Mmbaga et al., 2020; O’Neil et al., 2020)?

- (f) What are the implications of failure or unsuccessful experiences for academic entrepreneurs? What career paths do they pursue after such experience (Toole and Czarnitzki, 2007)?

### **Macro Level Research Questions**

- (a) What evidence exists on the effectiveness of policy frameworks for fostering academic entrepreneurship across continents? (Guerrero and Urbano, 2019b; Audretsch et al., 2020)
- (b) What is the role of academic entrepreneurship in less developed regions of the world and how does it affect regional and national economic performance (Kolympiris et al., 2015)?
- (c) What are the public policy implications of efforts to promote academic entrepreneurship (Audretsch and Link, 2012)? What is the role of global orientation in enhancing the ability of university startups to “scale up”?
- (d) How have societal challenges, such as the pandemic, affected entrepreneurial ecosystems and science-based co-creation (Siegel and Guerrero, 2021; De Silva et al., 2021)? How do ecosystem interactions emerge and evolve, as well as what is the role of key institutions, such as universities, federal/national labs in an ecosystem? (Good et al., 2019, 2020; Guerrero and Urbano, 2019a)?

### **Meso Level Research Questions**

- (a) What is the role of the new organizational structures of the scientific workplace (e.g., digital, hybrid, physical) on the effectiveness of the commercialization process (e.g., transitions, goals, and networking) (Fini et al., 2019)?
- (b) How do organizations (e.g., universities, firms, federal/national labs) formulate and implement strategies to promote equality, diversity, and inclusion as they relate to academic entrepreneurship?
- (c) How can end users be integrated earlier on in the development of academic entrepreneurship, next to industrial partners, trading partners, and intermediaries (Nicolaou and Birley, 2003; Brunnel et al., 2010), including co-creation processes for addressing societal challenges (De Silva et al., 2021)?
- (d) How has academic entrepreneurship changed in the aftermath of the pandemic (Siegel and Guerrero, 2021)?

### **Multi-Level Research Questions**

- (a) How do individual attributes of academics (e.g., identity, emotions, the ability to learn from failure) and managerial practices (e.g., championing and leadership, work-life balance, organizational justice, equity, diversity, and inclusion) influence organizational and regional success in academic ventures and the region entrepreneurship (e.g., invention disclosures, patents, licenses, and startup formation, and regional/economic performance).
- (b) How do immigration policies and other macro policies relating to mobility affect the propensity of academics to engage in entrepreneurship and the outcomes of such endeavors?
- (c) How do we measure the “success” or “impact” of academic entrepreneurship (Powers and McDougall, 2005; Mathisen and Rasmussen, 2019; Bolzani et al., 2020) at multiple levels of analysis (individual, organizational, regional, and societal), and how does one level influence the other?
- (d) What are the antecedents and consequences of student/alumni entrepreneurship (Wright et al.,

- 2019; Wu and Eesley, 2021)?
- (e) How do university incentive systems, including promotion and tenure criteria, encourage faculty members to initiate entrepreneurial activities?

### **Deadlines, Submission and Review Process:**

The deadline for submission is August 9, 2024. Please indicate that the manuscript is for consideration in the **Re-thinking Academic Entrepreneurship: Micro, Macro, and Meso Perspectives** Special Issue when submitting your manuscript online.

Contributors should follow the directions contained in the [SEJ manuscript submission guidelines](#). Submissions can be made via the SEJ ScholarOne website at <https://mc.manuscriptcentral.com/sej> from July 9, 2024 to August 9, 2024.

All papers will be reviewed according to the standard policies of the Strategic Entrepreneurship Journal. It is anticipated that the special issue will be published in June 2026.

### **Further Information:**

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