

Creativity, Innovation, & Entrepreneurship

Theme Project Proposal

Prepared for the

Institute for the Social Sciences at Cornell University

February 2012

Team Leader:

M. Diane Burton, Human Resource Studies Department, ILR School

Team Members:

Melissa Ferguson, Department of Psychology

Jack Goncalo, Organizational Behavior Department, ILR School

Wesley D. Sine, Management and Organizations, Johnson Graduate School of Management

Richard Swedberg, Department of Sociology

Introduction

In his 2011 “State of the Union” address, President Barack Obama linked innovation and national prosperity:

The first step in winning the future is encouraging American innovation. None of us can predict with certainty what the next big industry will be or where the new jobs will come from. Thirty years ago, we couldn't know that something called the Internet would lead to an economic revolution. What we can do -- what America does better than anyone else -- is spark the creativity and imagination of our people. We're the nation that put cars in driveways and computers in offices; the nation of Edison and the Wright brothers; of Google and Facebook. In America, innovation doesn't just change our lives. It is how we make our living.

President Obama’s speech highlights the widely held belief that new products and new companies are engines of economic growth and vibrancy. Even more recently, the media coverage surrounding the passing of Steve Jobs, co-founder of Apple Computer, highlighted American obsession with creative genius and high-tech entrepreneurship. Unfortunately, the social scientific evidence linking individual creativity, technology-based entrepreneurship, and economic prosperity is limited at best. To what extent are innovation and entrepreneurship an engine of economic prosperity? Can imagination and creativity be sparked in ways that lead to innovation and entrepreneurship? Who are the beneficiaries of technological innovation and entrepreneurial activity? What accounts for the dramatic regional variation in rates and types of entrepreneurship and innovation? Are new firms and new industries the best providers of good jobs? These are important questions for policy makers, investors, educators and scholars to consider. These are also questions to which modern social science has the potential to answer.

We propose to bring together an interdisciplinary group of scholars at Cornell University around the topics of “Creativity, Innovation, and Entrepreneurship.” As founding members of the core team, we bring distinct disciplinary perspectives (organizational behavior, psychology

and sociology) and methodological breadth (lab experiments, field studies, survey methods, archival methods) to this endeavor. Our ties to the ILR School and the Johnson School ground us in the practical concerns of the workplace and the labor market ensuring that our research is and will be useful to entrepreneurs and managers. Our grounding in the core social science disciplines of Sociology and Psychology ensure that our work will be grounded in rigorous scholarship. We hope to attract scholars from other social science disciplines (especially Economics) to stimulate an engaging interdisciplinary conversation about these issues and advance the state of knowledge surrounding innovation and entrepreneurship to serve scholars, practitioners and policy-makers.

Intellectual Core

We seek a rigorous social scientific understanding of the processes by which creative people develop novel ideas that garner interest and support from stakeholders and lead to new organizations and new industries that fundamentally alter economic and social orders. In short, we want to lay the foundations for a social science of entrepreneurship.

We are conceptualizing entrepreneurship as a process by which individuals and groups generate novel ideas, sort through the choice set to identify those that are most promising, present the ideas to relevant stakeholders (who similarly undertake an evaluation process), mobilize resources and support, and embody their idea in an organizational form that engages in market-based competition (Knudsen and Swedberg 2009). Each step in this process encompasses a set of basic social scientific research areas including the psychology of creativity and innovation, the sociology of organizations, the economics of innovation that could be fruitfully extended, combined, and applied to the domain of entrepreneurship. Unfortunately, a significant barrier to a comprehensive understanding of entrepreneurship is the siloed nature of

the academic enterprise. Psychologists who study innovation and creativity rarely interact with economists who are interested in the same phenomena. Sociologists who study entrepreneurship eschew the individualistic explanations put forward by psychology and economics in favor of structural accounts. Economists assert psychological motivations to entrepreneurs and inventors without interacting with actual psychologists who study motivation. This lack of interaction is a barrier to a true understanding of entrepreneurship. Moreover, because there is little in the way of a comprehensive social science, much of the wisdom about entrepreneurship is derived from practitioners and based on anecdote rather than empirical evidence.

Some substantive questions of great import to our understanding of entrepreneurship include: where do creative ideas come from? Are they better produced by individuals alone or in groups working together? How are ideas evaluated both by their creators and by the stakeholders who must provide support and resources? What cognitive and social processes are activated in the evaluation process? What kinds of biases influence evaluations? How are innovative ideas instantiated in new and existing organizations? What characteristics of entrepreneurs and ideas are associated with organizational creation? What factors are associated with entrepreneurial success? What are the legal and institutional forces that enable and constrain entrepreneurship? As these questions exist at the intersection of individual cognition, group dynamics, organizational processes, social norms, labor market and industrial dynamics, and institutional conditions, they require an interdisciplinary team to properly address them.

To date, much of the scholarly work on entrepreneurship and innovation is being conducted by economists who emphasize technology-based for-profit firms and economic value creation. While this is an important lens on the phenomena, we believe that a broader definition that incorporates social and cultural innovations in the for-profit and not-for-profit sectors and

examines outcome metrics such as change, sustainability, and employment in addition to economic value will shed more light on the subject. Moreover, we are confident that there is much to be learned by unpacking and carefully examining the various steps on the path from idea to enterprise. We intend to bring together theorists and empiricists of all stripes and hope to combine interests and skills in basic and applied social science to advance knowledge. In doing so, we aspire to better understand the origins, evolution and impact of new ideas, new organizations, and new industries.

A unique and important aspect of our proposed theme project will be attention to the employment aspects of entrepreneurship. There is wide recognition that entrepreneurship plays an important role in the economy and an emerging view that a substantial number of new jobs are created by start-up firms (Haltiwanger, Jarmin & Miranda 2010). But it we also know that many promising entrepreneurial ventures ultimately fail and that smaller firms tend to provide lower wages, fewer benefits, and limited training to employees. This implies that entrepreneurial firms might be creating jobs, but these jobs may be fleeting in nature and of lower quality than those being provided by existing established firms. Relatedly, the social scientific evidence on entrepreneurship and broader economic and social welfare is mixed. Is there equal access to the necessary inputs for successful entrepreneurship? Are the returns to entrepreneurship similar for different categories of entrants? Are resource providers and stakeholders biased in their evaluations of entrepreneurs and entrepreneurial ideas in ways that lead to suboptimal outcomes? Finally, the policy implications associated with entrepreneurial investments are highly contested. For example, entrepreneurship gurus have been rallying for a re-focusing of government investment away from traditional small businesses such as franchise operations, mom-and-pop businesses, and local self-employment towards “gazelles” – venture-capital funded high-growth

technology-based ventures (Shane 2008; Lerner 2009). But these recommendations are being made amidst growing concern that such a shift would increase aggregate inequality, destroy jobs, and accelerate global offshoring. Obviously there is some urgency in sorting out the links between creativity, innovation, entrepreneurship and economic and social outcomes.

Our proposed theme project will capitalize on three trends in the social sciences to foster a deeper understanding of how creativity, innovation, and entrepreneurship operate: the emerging emphasis on how social and cultural factors shape individual and collective judgments; the growing interest in studying groups and teams in addition to individuals; and the revival of structural and institutional analyses of economic phenomena. These trends usefully structure the work we propose to undertake as they create natural research sub-streams and highlight areas of disciplinary overlap where collaborative research is possible.

Biases in Individual and Collective Judgment

Most research on creativity has focused on idea generation on the assumption that evaluators will be readily able to recognize a creative idea when they see it. Relatedly, entrepreneurship scholars assert that successful entrepreneurs (and professional investors) have superior abilities to recognize high potential opportunities. Recent experience, however, would suggest that this is not necessarily the case. During the dot.com boom and bust a decade ago, eager venture capitalists competed to invest millions in start-ups, spectacular marketing campaigns, and massive IPOs with sky-high stock prices. But for every one good dot-com idea, there were many truly terrible ideas. Take Flooz.com as case example. Whoopi Goldberg promoted Flooz as an online currency that would present a viable alternative to credit cards. After buying a certain amount of Flooz, you could then use it at a number of retail partners. The idea behind Flooz was actually similar to a merchant's gift card, but gift cards are tangible items

that are backed by the merchant and not a third party. It was never clear why any consumer would rather use an "online currency" like Flooz rather than an actual credit card. Yet Flooz raised a staggering \$35 million from investors and convinced retail giants such as Tower Records, Barnes & Noble, and Restoration Hardware to join. Flooz went bankrupt in August 2001.

Through this theme project we aspire to move beyond the study of idea and opportunity generation that is commonplace among contemporary scholars to a consideration of the errors and biases that may misdirect idea and opportunity evaluation. In other words, why do people ignore ideas that are truly creative and favor ideas that are, in retrospect, purely practical or worse completely misguided? There is currently no psychologically rooted theoretical framework to elucidate the process through which ideas are evaluated. To address this question, we focus on the cognitive biases that may arise in the minds of the evaluator that may prevent them from recognizing creative solutions (Mueller, Goncalo & Kamdar, 2011) or the implicit and unconscious processes that influence evaluations (Ferguson & Wojnowicz, 2011; Ferguson & Zayas, 2001; Mueller, Melwani & Goncalo, 2012). One theoretical proposition is that the bias against creative solutions is difficult to recognize and most likely to arise under conditions of uncertainty; the very conditions under which we need creative ideas the most (Mueller, Melwani & Goncalo, 2012). Another theoretical proposition draws on prototype theory to uncover the stereotypes that evaluators may hold about creative people and how those stereotypes may cause evaluators to favor the mundane ideas suggested by people who fit the prototype and ignore objectively creative ideas that do not fit (Goncalo, Flynn & Kim, 2010). Both perspectives represent very new streams of research that might be advanced in this project. The theoretical insights derived from our investigation may culminate in a set of communication skills required

to successfully persuade evaluators. Unpacking these alternatives will not only impact our understanding of individual judgment and evaluation processes, it will allow us to provide guidance to prospective entrepreneurs and investors that is grounded in social theory and empirical research evidence.

From Individuals to Groups and Teams

Social scientific studies of both creativity and entrepreneurship are in the midst of an important shift from emphasizing individuals – creative people and entrepreneurs – towards emphasizing groups and teams. An oft heralded fact about entrepreneurship is that most successful firms are founded by teams rather than individuals (Beckman and Burton 2008; Ruef 2010). Similarly there is growing evidence that groups of individuals working collaboratively to build upon, combine, and improve on each other’s ideas can generate more creative ideas than any one person could generate alone (Mannix, Neal & Goncalo, 2009). There is also evidence that more patented innovations are the product of collaborative team efforts than of lone genius (Audia & Goncalo, 2007; Singh and Fleming, 2010;). But we are at the most embryonic stage of understanding group formation processes and applying this understanding towards building a vibrant entrepreneurial and innovative economy.

An important implication of the shift from individuals to groups and teams is that we can no longer glibly equate self-employment with entrepreneurship (as is commonly done in both sociology and economics) nor can we solely focus on individual attributes associated with innovation and entrepreneurship. A second important implication of the shift from individuals to groups and teams is the need to more clearly understand entrepreneurial founding teams. Because there is no legal definition of “founder”, students of entrepreneurship sometimes include various combinations of owners, investors, early employees, and advisors as founders of

entrepreneurial venture (Burton, Anderson, Aldrich, 2009). This conceptual and practical confusion likely accounts for the myriad inconsistent findings around how characteristics of the founding team affect entrepreneurial success. A third implication of this shift is the need to achieve a fundamental understanding of group processes that result in creative performance at the team level (Mannix, Neale & Goncalo, 2009). There is emerging evidence that the most creative groups are those that encourage individualism as opposed to collectivism so that people feel free to stand out, to be different and to hold their ground so that the group thoughtfully considers a wider range of unique information (See Goncalo & Krause, 2010). However, there is ongoing research on the psychological mechanisms that might explain the benefits of creativity for individualism that would benefit from a more serious consideration of the processes that take place in “real world” teams engaged in entrepreneurial ventures that require creative problem solving. There is a great potential for insights to flow in two directions: (1) research on entrepreneurial founding teams might benefit from a theoretical foundation rooted in basic psychological science and (2) research on group processes would benefit from incorporating sociological research on teams to formulate more comprehensive and generalizable theoretical models.

One important contribution to both the academic community and to all audiences for scholarship is some conceptual and empirical clarifications around key definitions and empirical operationalizations of entrepreneurship and founders. Cornell’s ties to the federal statistical agencies and leadership in the analysis of government labor market and employment statistics provide an ideal environment within which to do some of this important work.

In addition, combining insights from across the social science disciplines – particularly communications, organizational behavior, management, social psychology, and sociology, --

about group formation and group dynamics can enrich the study of entrepreneurial founding teams as well as innovative groups and creative teams across a variety of settings.

Structural and Institutional Factors

While most traditional research on entrepreneurship was primarily concerned with individual entrepreneurs – their personalities, skills, and behaviors -- there is a long tradition of scholarship on regional variation in rates and types of entrepreneurial activity (Chinitz 1961; Glaeser, Kerr & Ponzetto 2010). Understanding how context shapes and supports entrepreneurial activity reached the popular press via the rise of Silicon Valley and Annelee Saxenian's (1994) much heralded book, *Regional Advantage*, that provided a comparative institutional perspective on Silicon Valley and the greater Boston area and suggested that an array of legal, cultural, and institutional factors accounted for the ascendance of one region and the decline of the other.

Early research on institutions and entrepreneurship emphasized conformity to existing institutional mandates, whether explicit or taken for granted, as a prerequisite to acquiring resources. This line of reasoning suggests that the greater the extent to which entrepreneurs, entrepreneurial processes, and entrepreneurial forms are congruent with underlying beliefs, norms, values, and definitions of a particular constituency, the more legitimate those organizations will be considered by said constituency (Suchman, 1995; Zimmerman and Zeitz, 2002) and the more likely they will be to acquire needed resources. From this perspective, institutional context is often a barrier to innovation and entrepreneurship as it is oriented toward preserving an existing status quo.

Examinations of the contextual factors associated with innovation and entrepreneurship occur in a variety of fields including economics, geography, planning, policy analysis, political

science and sociology. Unfortunately each of these fields emphasizes different elements of the context and tends to ignore insights from other fields. In addition to bringing together scholars from these various fields and facilitating interdisciplinary knowledge transfer, we are interested in accelerating the emerging interest in how ancillary institutions and organizations can be mobilized in support of entrepreneurial endeavors. It is also important to recognize the limits of contextual explanations. For example, research on Silicon Valley technology start-ups revealed surprising heterogeneity among firms residing in the same context (Burton, 2001). It is still an open question as to whether psychological factors or hitherto unknown contextual factors might explain such variability. Perhaps entrepreneurs are differentially able to access information and resources? This would be consistent with recent research demonstrating that some entrepreneurs can take advantage of existing organizational entities such as industry associations, social movement organizations, and certification organizations to further their cause (Hiatt, Sine, & Tolbert, 2010). Additionally, where traditional research on contextual factors has taken elements like laws, norms, resources and values as givens, more recent scholarship has recognized these factors as malleable – as elements to be modified and manipulated (Zott & Huy, 2007; David, Sine, & Haveman, 2012). Exploring which contextual factors can and should be modified and manipulated – and how --will be a high priority endeavor for this theme project and one that demands an interdisciplinary approach.

Project Activities

Beyond providing an umbrella under which to gather the diverse scholars who are doing research broadly relevant to our topic, we hope to build a strong interdisciplinary research community that can advance basic social science knowledge, successfully train graduate

students, develop empirically grounded instructional materials and inform both policy and practice.

We will spend our first year recruiting additional team members, collaboratively developing an agenda that includes joint research projects, and launching co-sponsored workshops and seminars. We will begin with an off-campus retreat to acquaint team members with each other, to identify the relevant resources and entities around campus with which we might partner, and to begin the planning process. We will meet on a bi-weekly basis throughout the first year to plan the activities for Year 2, to engage in joint research, and to attend seminars and workshops that we co-sponsor. The year will conclude with a major public lecture describing the theme project to the broader community.

During the second year, our “in residence” year, the team will be most actively engaged in research and course development. In the first half of the year, we will meet on a weekly basis during this period and meetings will alternately emphasize external speakers, internal research, or collaborative course development and/or instruction. In the second half of the year we will shift some of our attention to developing a major grant proposal and to planning an outreach event for the 3rd year that will showcase the findings from our theme project.

The third year of the project will be devoted to establishing a legacy. We intend to finalize and submit a major grant proposal and to host an outreach event that will allow us to engage a broad community of scholars and policy makers, to disseminate our research findings to date, and to develop a research agenda for the future. We expect to produce an edited volume of research that arises from our theme project and is showcased in our third year event. The third year will culminate with a capstone lecture for the greater Cornell community where we will highlight our accomplishments and future plans.

Build an interdisciplinary research community

Our theme project will provide mechanisms for scholarly collaboration among Cornell faculty affiliated with our theme project through regular meetings and public events. We do not anticipate creating new campus-wide research seminars specifically for the theme project, but instead intend to work with existing entities and centers (e.g. Entrepreneurship@Cornell, the Johnson School Entrepreneurship and Innovation Institute, the Cornell Center for the Study of Economy and Society, the Cornell Population Center) with which the core team members are currently affiliated. We intend to work in a collaborative way to co-sponsor speakers and add tracks to ongoing conferences workshops and conferences. We would aggregate these activities under our theme project umbrella and thus unify (as opposed to fragment) the relevant audiences.

We particularly see opportunities to coordinate activities with the Johnson School Entrepreneurship and Innovation Institute (EI) as Wes Sine, a core team member, serves as the academic director of this institute. EI was recently formed in the fall of 2011 and its central thrust is to support the creation and disseminate of cross-disciplinary knowledge on the topic of entrepreneurship and innovation. EI focuses on knowledge leadership in this area by supporting high quality academic research at Cornell. EI also brings together world experts in entrepreneurship and innovation to complement existing capabilities through seminar series and conferences. Such focus on cutting edge research will lead to the development of world-class curriculum and students who understand the processes that drive entrepreneurship and innovation. This ISS innovation proposal has a similar vision and we intend to work together with EI to make Cornell a hub for academic scholarship in entrepreneurship and innovation in two ways: A key vehicle for doing this will be the annual academic cross-disciplinary speaker series that will be hosted by EI. The ISS theme project team will be intimately involved in the

launch of this series and the talks will be open to researchers across campus and throughout the region.

There are also obvious opportunities to host speakers through the joint ILR/JGSM Organizational Behavior Seminar as Jack Goncalo will serve as one of the coordinators for this speaker series. We expect that other ongoing seminars where team members have ties (for example the Center for Economy and Society, the Labor Economics Workshop, and Human Resource Studies Workshop) would be willing to host relevant guests where our theme project could co-host, share expenses and add to the audience.

This strategy of co-sponsoring seminar speakers has the advantage of broadening connections across campus without additionally burdening already strained faculty calendars. But a risk associated with this approach is that we fail to achieve the desired cohesion expected from an ISS theme project. As a remedy for this potential problem we would seek to include some of the most relevant visiting speakers in more informal discussions/meetings with the ISS theme project team as part of their campus visit. We thus achieve both broad public engagement and close team interaction.

Advance Social Science Knowledge

We hope that the most immediate deliverable from our theme project will be collaborative scholarly research among team members, and with a cadre of graduate students, who will be able to generate new insights about the social science of entrepreneurship by virtue of the multi-disciplinary interactions. We expect graduate students affiliated with our theme to successfully compete in the Kauffman Foundation Dissertation Proposal Competition (<http://www.kauffman.org/research-and-policy/kauffman-dissertation-fellowship-program.aspx>). We hope that faculty affiliates and graduate students could present their research at the biannual

meeting of the NBER Entrepreneurship Working Group

(<http://www.nber.org/workinggroups/ent/ent.html>). We expect team members and affiliates to publish scholarly research in leading disciplinary journals as well as in specialist journals devoted to creativity, innovation, and entrepreneurship. We will collaborate with Johnson EI to disseminate working papers on their website, and encourage team members and affiliates to present their work at conferences and workshops.

Beyond advancing our ongoing research and developing new joint research we have the ambition to generate a new social science of entrepreneurship. In fulfillment of this ambition we intend to produce an edited volume that will outline the approach that we derive from our theme project interactions. It is worth noting that one of our team members, Richard Swedberg, edited a volume -- *Entrepreneurship: The Social Science View* – in 2000 that included both classical readings and contemporary theorizing about entrepreneurship. We can conceive of our intended book as an important update and extension of this work.

Develop Empirically-Grounded Instructional Materials

The ISS project team will also work, in collaboration with faculty in the Dyson School and with Johnson EI, to develop new courses that fill gaps in the training of students from across campus, but in particular might be part of the curriculum for the joint Dyson/Engineering business minors or the new professional masters program being offered at the Cornell NYC Tech Campus. These courses will be grounded in the scholarly literature, but will take advantage of vivid case materials and examples drawn from actual entrepreneurs. We have already been in discussion with Deborah Streeter (Dyson) who will be overseeing the minor and with Sheila Danko (Design and Environmental Analysis) who teaches creativity and design thinking and is interested in collaborating with Johnson and ILR to reach business-oriented students.

Inform Policy

Our work will provide important input to policy makers via the recently formed “Sustainable Entrepreneurship” theme within the Employment Policy Research Network (<http://www.employmentpolicy.org/>) of which Burton is a founding member.

Final Products

We envision a first product of our theme project being a literature review that sets an agenda for future empirical work. We also expect this literature review to yield insights that would be relevant for practice. Additionally, producing a comprehensive portrait of the current state of social scientific knowledge around creativity and innovation will usefully inform our current teaching and will be expanded into training and curricular materials.

The primary products of this theme project will be scholarly research articles. We hope that there will be a number of joint publications among team members that arise out of the theme project and thus have set aside funds to support this work in the second year. Beyond the mainstream disciplinary journals where team members publish, this theme project has the potential to generate important work for two of the key Cornell-published academic journals: The ILR Review and Administrative Science Quarterly. For example, the October 11, 2011 statement from the new ILR Review editorial team describes how the journal is being refocused to take on interdisciplinary topics with policy relevance related to work and employment. Our proposed work on entrepreneurship and employment outcomes is clearly in line with this vision. Similarly, among management and organizational behavior scholars, *Administrative Science Quarterly*, published at the Johnson School, is considered to be one of the leading scholarly journals and would be an obvious outlet for scholarly research emerging from this theme project.

Note that our proposed team and affiliates already have strong ties to these journals as authors and as members of the editorial board.

In addition, we are all committed to contributing work to our culminating edited volume that will arise out of what we learn in the first two years of the project. Our major public event will be a conference where we attempt to synthesize what we have learned, engage with external scholars, and speak to a broader audience. This event will be a vehicle to obtain feedback and commentary on the chapters that we will include in the edited volume.

We see the ISS theme project as a first step along a more ambitious agenda to develop Cornell's intellectual leadership around the topics of creativity, innovation, and entrepreneurship. Our theme project proposal is directly in line with several funding initiatives within the National Science Foundation Social, Behavioral, and Economic Sciences Directorate (<http://www.nsf.gov/dir/index.jsp?org=SBE>) including the recently created *Science of Science & Innovation Policy* area, and the *Innovation and Organizational Sciences* area and we expect to pursue a major grant as one of the final products of our theme proposal.

Finally, a lasting legacy of this theme project will be creating a vibrant research community for Entrepreneurship@Cornell that has the same level of engagement as the current teaching and practice-oriented community.

Initial Team Members

Diane Burton will serve as team leader for this project. She is an organizational sociologist who has spent her career studying entrepreneurship and entrepreneurial firms. She is best known for her multi-method longitudinal research on the imprints of founding teams and founding condition on organizational evolution. She is a tenured associate professor of Human Resource Studies in the ILR School and has ties to the Organizational Behavior department in

ILR and the Sociology Department. Prior to joining the Cornell faculty, she was a faculty member in entrepreneurship departments at Harvard and MIT and as a consequence is connected to a diverse community of scholars interested in the topic and accustomed to engaging in multidisciplinary conversations. She brings experience in leading research teams, organizing workshops, conferences and professional development activities to the project. She was part of an advisory group for a large NSF project to collect panel data on the entrepreneurial process, has held editorial roles for several of the leading journals where entrepreneurship research is published, and served as an Executive Committee member for both the Organization and Management Theory and Entrepreneurship Divisions of Academy of Management (each of which serves more than 3000 members).

Melissa Ferguson, Associate Professor of Psychology, is an expert in the area of implicit social cognition. Her work addresses the ways in which classic social psychological constructs, including attitudes, goals, judgments, and ideology, operate in a non-conscious, unintentional manner. In collaboration with her colleagues and graduate students, she has also recently investigated the non-conscious underpinnings of creativity. These findings demonstrate that creative solutions to difficult problems can be tracked non-consciously before the person consciously grasps the solution. Her work is on the cutting edge in terms of implicit measures, methodologies, and social-cognitive and neuroscientific theory. She has been funded by the National Science Foundation, the National Institutes of Health, and the National Science Foundation, and her work has appeared in numerous outlets including the *Journal of Personality and Social Psychology*, *Psychological Science*, *Proceedings of the National Academy of Sciences*, and *Journal of Experimental Social Psychology*. She has also amassed considerable

administrative and organizational skills from serving as President of the International Social Cognition Network.

Jack Goncalo is a leading scholar in the area of creativity. His research investigates two key topics; (1) How groups can collaborate to generate more creative ideas than any one individual could generate alone; (2) How individuals can move beyond existing knowledge to generate ideas that are appropriate departures from what is already known. In one stream of research he has developed a theoretical perspective in which group creativity is stimulated by individualistic norms and individual achievement; a stance that runs counter to the “team player” mentality that is pervasive among management scholars. In a more recent stream of research he is investigating the biases and errors that cause evaluators to ignore creative ideas in favor of ideas that are mundane. His scholarly articles have been published in journals that span management and social psychology including *Organizational Behavior and Human Decision Processes*, *Management Science*, *Psychological Science*, *Journal of Experimental Social Psychology* and *Personality and Social Psychology Bulletin*. His work has also been featured in numerous media outlets including CNN, Businessweek, The Wall Street Journal, US News & World Report, Fast Company and Fortune.

Wesley Sine is an organizational scholar trained in the ILR school and currently on the faculty of the Johnson School. Prior to joining the Johnson School, he was a faculty member at the Smith School of Business in College Park. Sine’s past work has focused on how the institutional environment shapes both entry and failure rates in emerging industries. He has investigated these topics in a diverse array of contexts ranging from the alternative energy and internet sectors in the United States to entrepreneurial ventures in Colombia, Chile, Mexico, and Egypt. He is on the editorial board of several top journals that publish research on

entrepreneurship. He is the cofounder of the Entrepreneurship and Innovation Institute at the Cornell Johnson School of Management and is currently serving as its academic director.

Richard Swedberg is a professor of sociology at Cornell's Department of Sociology and one of the leading theorists of sociological approaches to entrepreneurship. In his writings he has especially emphasized the work of Joseph Schumpeter. He wrote the first biography of Schumpeter; he has co-edited Schumpeter's letters as well as several editions of his work (most recently a collection with all of Schumpeter's writings on the entrepreneur from 2012). He is also the editor of a popular anthology on entrepreneurship, *Entrepreneurship: The Social Science View*. In working with Schumpeter, Swedberg has especially tried to recast his ideas in a novel fashion and make them more amenable to empirical research. The two core ideas that he picks up on in Schumpeter are the notions of entrepreneurship as a new combination and that a successful innovation has to overcome resistance in its surrounding in order to succeed. Swedberg then argues that what underlies Schumpeter's ideas – and what also leads to a number of interesting hypotheses to test - is the notion of entrepreneurship as a process. The entrepreneur, in order to be successful, has to first conceive of an idea (combination), then translate this idea into a product, produce the good, market it, and sell it at a price that yields a profit. First when all of this has been done, has the innovation been successfully carried out.

As the initiators of this proposal, we are especially interested in combining our research expertise and synthesizing the current state of knowledge about creativity, innovation and entrepreneurship. Our research interests clearly intersect around our proposed topic and four of us are relatively recently tenured members of the Cornell faculty who are eager to embark on new research projects that serve and support the university mission while connecting us to colleagues from different departments.

While the specific direction of our theme project will necessarily evolve as we recruit additional team members, we already see a number of topic areas where the five of us could meaningful and fruitfully collaborate including entrepreneurial team formation; process interventions that improve creative team performance; the intersection of creativity at the individual, team, organizational, and industry levels; the organizational systems, policies and practices that support creativity and innovation; the relationship between the physical environment and innovative output.

References

- Beckman, C. & Burton, M.D. (2008). "Founding the Future: The Evolution of Top Management Teams from Founding to IPO." *Organization Science*, 19(1):3-24.
- Burton, M.D., Anderson, P.C., & Aldrich, H.E.. (2009). "Owner Founders, Nonowner Founders and Helpers." Chapter 7 in Reynolds, P.D. and R.T. Curtin (Eds). *New Firm Creation in the United States: Preliminary Explorations with the PSED II Data Set*. New York, NY: Springer
- Burton, M.D (2001). "The Company They Keep: Founders' Models for Organizing New Firms." Pp. 13-39 in C.B. Schoonhoven and E. Romanelli (Eds.) *The Entrepreneurship Dynamic: Origins of Entrepreneurship and the Evolution of Industries*. Stanford, CA: Stanford University Press.
- Chinitz, B. (1961) "Contrasts in Agglomeration: New York and Pittsburgh." *American Economic Review* 51(2):279-289.
- David, R., Sine, W., & Haveman, H. (2012) "Institutional change, form entrepreneurship, and the legitimation of new organizational forms." *Organization Science* (forthcoming)

- Ferguson, M. J., & Wojnowicz, M. (2011). The when and how of evaluative readiness: A social cognitive neuroscience perspective. *Personality and Social Psychology Compass*, 5, 1018-1038.
- Ferguson, M. J. & Zayas, V. (2009). "Nonconscious evaluation." *Current Directions in Psychological Science*, 18, 362-366.
- Glaeser, E.L., W.R. Kerr and G. Ponzetto, (2010). "Clusters of Entrepreneurship" *Journal of Urban Economics* 67(1):150-168.
- Goncalo, J.A., Flynn, F.J. & Kim, S.H. (2010). Are two narcissists better than one?: The link between narcissism, perceived creativity and creative performance. *Personality and Social Psychology Bulletin*, 36, 1484-1495.
- Goncalo, J.A. & Krause, V. (2010). Being different or being better?: Disentangling the effects of independence and competition on group creativity. In: S. Thye & E.J. Lawler (Eds) *Advances in Group Processes* (Vol. 27), 129-157.
- Haltiwanger, J.C., Jarmin, R.S., & Miranda, J. (2010). "Who Creates Jobs? Small vs. Large vs. Young." NBER Working Paper #16300.
- Hiatt, S.R., Sine, W.D. & Tolbert, P. (2009). "From Pabst to Pepsi: The Deinstitutionalization of Social Practices and the Emergence of Entrepreneurial Opportunities." *Administrative Science Quarterly* 54(4):635-667.
- Knudson, T. & Swedberg, R. (2009). "Capitalist Entrepreneurship: Making Profit through the Unmaking of Economic Orders." *Capitalism and Society* 4(2):1-26.
- Lerner, J. (2009). *Boulevard of Broken Dreams: Why Public Efforts to Boost Entrepreneurship and Venture Capital Have Failed and What to Do About It*. Princeton University Press.

- Mannix, E.A., Neale, M.A. & Goncalo, J.A. (2009). *Research on Managing Groups and Teams: Creativity in Groups* (Vol. 12).
- Mueller, J.S., Goncalo, J.A. & Kamdar, D. (2011). Recognizing creative leadership: Can creative idea expression negatively relate to perceptions of leadership potential? *Journal of Experimental Social Psychology*, 47, 494-498.
- Mueller, J.S., Melwani, S. & Goncalo, J.A. (2012). The bias against creativity: Why people desire but reject creative ideas. *Psychological Science*, 23 (1), 13-17.
- Ruef, M. (2010). *The Entrepreneurial Group: Social Identities, Relations, and Collective Action*. Princeton: Princeton University Press.
- Saxenian, A. (1994). *Regional Advantage*. Cambridge, MA: Harvard University Press.
- Shane, S.A. (2008). *The Illusions of Entrepreneurship: The Costly Myths that Entrepreneurs, Investors, and Policy Makers Live By*. Yale University Press
- Singh, J. & Fleming, L. (2010). "Lone Inventors as Sources of Technological Breakthroughs: Myth or Reality?" *Management Science* 56(1).
- Suchman, M.C. (1995). "Localism and Globalism in Institutional Analysis: The Emergence of Contractual Norms in Venture Finance," pp. 39-63 in W.R. Scott and S. Christensen (eds.), *The Institutional Construction of Organizations*. Thousand Oaks, CA: Sage.
- Swedberg, R. (Ed). (2000). *Entrepreneurship: The Social Science View*. Oxford: Oxford University Press.
- Zimmerman, M.A. & Zeitz, G.J. (2002). "Beyond Survival: Achieving New Venture Growth by Building Legitimacy." *Academy of Management Review* 27(3):414-431.
- Zott, C. & Huy Q.N. (2007). "How Entrepreneurs Use Symbolic Management to Acquire Resources." *Administrative Science Quarterly* 52(1):70-105.