April 2, 2015

To Whom It May Concern:

I am writing to support Ohchan Kwon's application to attend the NBER Bootcamp. Ohchan is a second year doctoral student in the Technology and Operations Management (TOM) unit at Harvard Business School, and he has been working as my research assistant for the past year and a half.

Ohchan has a level of focus and clarity about his research interests that is rare for a second year student. He is specifically interested in the economics of innovation and the role of human capital in shaping technological adoption and diffusion.

As he enters the research phase of his Ph.D., I think Ohchan will benefit greatly from participating in the NBER entrepreneurship bootcamp: he will work hard, apply these lessons to his own research, and perhaps be useful to others who are seeking a collaborator who has an interest in the phenomenon of scientific research and commercialization, and a set of programming skills that are not commonly held by economists.

Ohchan is currently working as my RA for a project on understanding how high skill workers (in this case, scientists) adapt to changes in the demand for certain skills (in this case, in response to changing genome sequencing technologies). His primarily responsibilities are to use his knowledge of various programming languages to construct a database of scientists and their follow on research. He has an excellent grasp of some of the key databases used in the economics of science: Scopus, PubMed, Web of Science, and a programming toolkit that is a big step in making him productive in this research area.

Although Ohchan is my first RA (and thus I have no basis for comparison with others), I've found Ohchan to be both attentive to detail and creative in terms of suggesting new approaches. In addition to simply coding, Ohchan has shown an active interest in learning econometric tools, taking classes in MIT and Harvard economics departments. As we move forward with the project, I expect him to be more helpful with the analytic portion of our research.

In summary, I strong recommend that Ohchan be given the opportunity to attend the NBER entrepreneurship bootcamp. I think he will have a lot to learn, and to contribute. Please feel free to contact me (617) 721-3270 if you have any questions.

Best,



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To the organizing committee of the NBER Entrepreneurship Research Boot Camp,

I am writing to apply for the 8th NBER Entrepreneurship Research Boot Camp. I am a second-year doctoral student in the Technology and Operations Management (TOM) Unit at Harvard Business School, and interested in the economics of innovation, entrepreneurship, and firm-level innovation strategy. I strongly believe that the interaction among entrepreneurial and existing firms is a critical process for technology commercialization, and firm and regional level innovation strategy and performance cannot be understood without a good understanding on entrepreneurship research. I believe the NBER Entrepreneurship Research Boot camp is a unique opportunity to study both micro- and macro level mechanisms related to the origin and consequences of entrepreneurship, and this will provide strong theoretical and empirical ground on which I can pursue my long-term research agenda.

This application package includes my CV and application statement. My recommendation letter writer is Professor Danielle Li, also at Harvard Business School, and her letter should be already sent separately to Brett Maranjian.

Thank you for your time reviewing my application, and I look forward to hearing from you soon. Please feel free to contact me if there are any questions or concerns.

Sincerely,
Ohchan Kwon

Ohchan Kwon

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Fields of Interest

Economics of Innovation, Technology Strategy, International Business

Education

Doctoral Student, Harvard Business School, 2013 – current.

- Affiliation: Technology and Operations Management (TOM) Unit – Innovation Track

S.M. in Technology and Policy, Massachusetts Institute of Technology, 2013.

M.E. in Technology Policy, Seoul National University, 2008.

B.E. in Management Engineering, Korea Advanced Institute of Science and Technology, 2006.

Current Research Projects

Return Migration and the Diffusion of Scientific Knowledge: Evidence from Korean Life Scientists (with Prithwiraj Choudhury)

- Data analysis in progress

What Do High Skill Workers Do When Their Skills Become Obsolete? Evidence from Genomics (with Danielle Li and Pian Shu)

- Data collection in progress

Honors & Awards

Harvard Business School Doctoral Fellowship, 2013-2017.

Samsung Scholarship, 2013-2017.

Korean Government Scholarship for Overseas Studies, 2011 – 2013.

Korea Foundation for Advanced Studies Fellowship for Graduate Studies, 2006 – 2008.

Grand Prize, Global Social Entrepreneurship Competition, University of Washington, 2006.

PhD-Level Courses Taken

Economics

Microeconomic Theory I & II	Christopher Avery (Harvard)
Labor Economics	Lawrence Katz (Harvard)

Research Methods

Quantitative Research Methods I, II, & III	Jens Hainmuller & Teppei Yamamoto (MIT)
Advanced Quantitative Research Methods	Christopher Winship (Harvard)
Causal Inference in Management Research	Timothy Simcoe (Boston U.)
Applied Econometrics	Joshua Angrist (MIT)
Design of Field Research Methods	Robin Ely (HBS)

Specialization

Foundations of Strategy	Juan Alcacer (HBS)
Economics of IT	Erik Brynjolfsson (MIT)
Entrepreneurship	William Kerr & Josh Lerner (HBS)
Economics of Ideas	Pierre Azoulay & Scott Stern (MIT)
Innovation and Digitization	Karim Lakhani & Shane Greenstein (HBS)
Technology Strategy and Innovation	Kira Fabrizio (Boston U.)

Prior Experience

Manager, Institute of Network Technology, SK Telecom, South Korea, 2008-2011.

Additional Research Skills

Programming: R, Stata, SQL

Application Essay

I am a second year doctoral student in the Technology and Operations Management (TOM) unit at Harvard Business School. I am studying the economics of innovation and firm strategy in high-tech industries, and particularly interested in how science-based business firms innovate and commercialize novel discovery. I strongly believe that the interaction among entrepreneurial and existing firms is a critical process for technology commercialization, and firm and regional level innovation strategy and performance cannot be understood without a good understanding on entrepreneurship research. Thus, I apply for the 2015 NBER Entrepreneurship Research Boot Camp.

My research experience so far has focused on the economics of science and innovation area, in which I aim to understand what factors affect the generation and diffusion of knowledge. For instance, one of my current research projects is looking at how return migration of scientists to the home country affects the international diffusion of scientific knowledge and development of research capabilities of neighboring universities and firms. In another study, I look at how life scientists respond to radical technological changes that potentially make their existing skills obsolete, using the recent breakthrough in genomics as an empirical setting.

While understanding how ideas are created is an important piece of knowledge, I strongly believe that this is not sufficient to give us a complete understanding on why some regions and firms are better at creating economic value from novel scientific and technological discovery than others. For instance, I recently started to look at how existing firms in different regions and countries attempt to exploit new market opportunities in the pharmaceutical industry created by various deregulations on areas such as biosimilars. My current understanding is still far from complete and systematic, but what I have observed so far is that there is significant heterogeneity in the way firms in different countries try to seize the new market opportunity. While many U.S. pharmaceutical firms tend to participate in mergers and acquisitions with existing biotech firms, many foreign firms from countries without active entrepreneurial ecosystem resort

to develop capabilities internally by establishing joint ventures with market leaders or hiring experienced scientists. Ultimately, I am interested in how the adoption of these different management practices explains performance differences across firms, but without solid understanding on why different firms adopt different management practices, I would not be able to identify convincing empirical findings. In other words, even firm-level innovation strategy and performance cannot be understood without paying close attention to current entrepreneurship research.

I am certain that participating in the NBER Entrepreneurship Research Boot Camp will increase my understanding on the origin and consequences of entrepreneurship, and how this affects the patterns of dynamic competition among entrepreneurial and existing firms. Before joining the doctoral program, for instance, I participated in a research project that looked at the impact of grant and mentoring programs on academic scientists' entrepreneurship. Later, I realized that the role of financial constraints in hindering entrepreneurship is one of the key research questions in entrepreneurship, and I learned a lot of insights and research ideas that I could apply to understand academic entrepreneurship. Similarly, the theoretical framework on entrepreneurial strategy by Stern and Gans changed the way that I look at the interactions among entrepreneurial and existing firms entirely, and I want to deepen my understandings on this area by reading more related literature throughout the Boot Camp.

Understanding such complex interactions requires detailed dataset, clean research design, and theoretical framework to reconcile different empirical evidences together. I believe the NBER Entrepreneurship Research Boot camp provides a rare opportunity to study both micro- and macro level mechanisms related to the origin and consequences of entrepreneurship. As a second year student who is just about to finish required coursework and start thinking about long-term research agenda, I believe this summer is a perfect timing for me to attend and broaden my perspectives. I am sincerely excited about all the learning and interactions with professors and graduate students from different programs that I am going to enjoy if I can attend, and thus look forward to having an invaluable opportunity to attend the Boot Camp. Thank you for your consideration.