#### Memorandum

To: University Senate

From: Eric C. Bielefeld, Chair, Council on Academic Affairs

Subject: Proposal to Restructure the Center for Innovation and Entrepreneurship into the Center

Innovation Strategies and the Keenan Center for Entrepreneurship.

Date: April 17, 2019

A PROPOSAL FROM THE COUNCIL ON ACADEMIC AFFAIRS TO RESTRUSTURE THE CENTER FOR
FOR INNOVATION AND ENTREPRENEURSHIP INTO THE NEW CENTER FOR INNOVATION STRATEGIES AND
THE REVISED KEENAN CENTER FOR ENTREPRENEURSHIP.

Whereas the Center for Entrepreneurship was established in 2003 and renamed Center

for Innovation and Entrepreneurship in 2014 to better reflect a broader focus on

corporate innovation, as well as traditional entrepreneurship; and

Whereas interactions with corporate partners engaged with innovation have grown, the

entrepreneurship and innovation arms of the Center have diverged recently, and a naming gift opportunity for the entrepreneurship arm occurred; and

Whereas the Center for Innovation Strategies was reviewed fully as a new Center,

meeting all criteria expected – mission, administrative structure, program

overview, financial sustainability;

Whereas the Keenan Center for Entrepreneurship is seen as a center revision, and

documentation was provided to show how it will be organized, managed, and

budgeted without the innovation arm; and

Whereas the proposal was reviewed and approved by the Council on Academic Affairs at

its meeting on February 20, 2019, with a subsequent update on the status of the

Keenan Center for Entrepreneurship; and

Therefore be it resolved that the University Senate approve the proposal to restructure the Center for Innovation and Entrepreneurship into the new Center for Innovation Strategies and the revised Keenan Center For Entrepreneurship, and respectfully inform the Board of Trustees.

From: Smith, Randy

To: <u>Heckscher, Jennifer</u>; <u>Reeder, Paul A.</u>

Cc: Bielefeld, Eric; Smith, Randy; Reed, Katie; Makhija, Anil; Eveland, Jessica; McPheron, Bruce A.; Andridge,

Rebecca; McPheron, Bruce A.; Rubin, Sara E.

**Subject:** Center for Innovation Strategies

**Date:** Thursday, February 21, 2019 12:58:23 PM

Attachments: <u>image001.png</u>

#### Jennifer and Paul:

The proposal from the Fisher College of Business to establish the Center for Innovation Strategies was approved by the Council on Academic Affairs at its meeting on February 20, 2019. Thank you for attending the meeting to respond to questions/comments.

The proposal soon will be sent to the University Senate with a request for action at a forthcoming Senate meeting. Note that a meeting with the Senate's Faculty Council would proceed it. You would need to attend both meetings and I will contact you when I get details.

In the interim, the Chair of the Council, Professor Eric Bielefeld, who will be the one who will actually present the proposal to those groups on your behalf, will contact you with some additional suggestions/requests before the proposal goes forward.

In addition, he and I will be working on the next steps for the Center for Innovation and Entrepreneurship, given its role both historically and going forward.

If you have any questions, please contact Professor Bielefeld (.6) or me.

## Randy

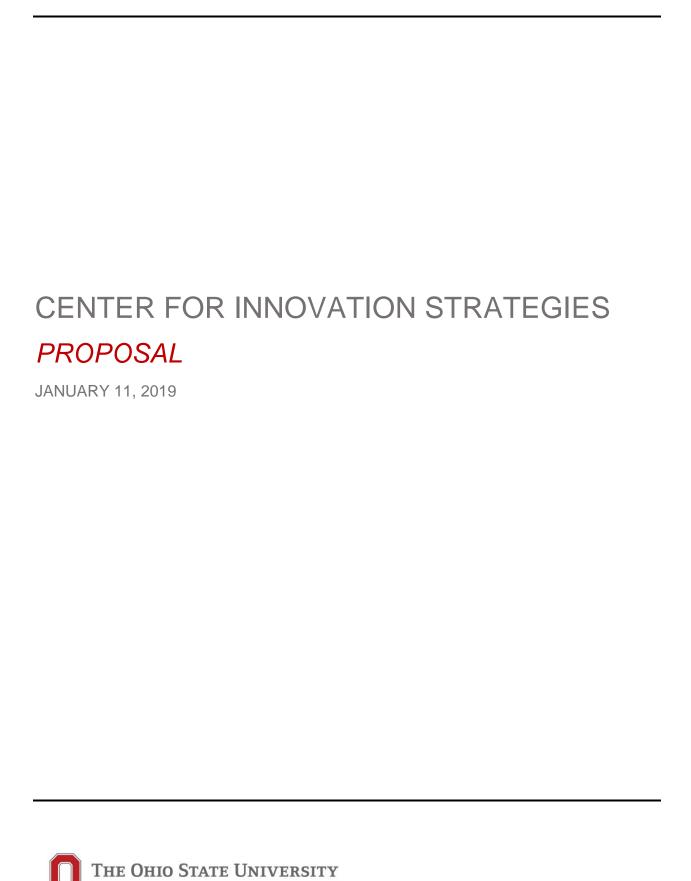


## W. Randy Smith, Ph.D.

Vice Provost for Academic Programs

Office of Academic Affairs

203 Bricker Hall, 190 North Oval Mall, Columbus, OH 43210
614-292-5881 Office
smith.70@osu.edu



# Contents

Background and Rationale	3
Mission	3
Defining Innovation	3
Faculty and Administration	4
Founding Member Board and Governance	5
Research and Academic Engagement	5
Cross Campus Collaboration	6
Diversity and Inclusion	6
Programs	6
Student Programs	6
Professional and Community Programs	7
Select Recent Programs and Engagement	8
Budget and Financial Sustainability	8
Evaluative Criteria	9
Supporting Materials and Appendices	9
Appendix A – Center for Innovation Strategies - Bios	10
Appendix B – Letter of Support from Dean Anil Makhija	13
Appendix C - Letters of Support from Founding Members	14
Appendix D - Letter of Support from Peer Institution Innovation Center	16

# Proposal – Center for Innovation Strategies

## Background and Rationale

The Center for Innovation and Entrepreneurship (CIE) was established in 2003 (initially named the Center for Entrepreneurship). In late 2014, "innovation" was added to the name of the center to better reflect a broader focus on corporate innovation as well as traditional entrepreneurship. At that point, there were 4 pillars of focus: traditional entrepreneurship, technology entrepreneurship, social enterprise and corporate innovation. CIE was based on a consortium model with founding members from industry, including JP Morgan Chase, Wendy's, Cardinal Health and The JM Smucker Company. In 2016, Paul Reeder took over as the executive director to unify the four pillars and create a focus on students, business and community. Over the course of two years, CIE has grown significantly, including securing additional corporate member support for the corporate innovation activities. Additionally, a naming donor was secured; however, the donor had an interest in supporting only the entrepreneurial activities of the center (the Keenan Center for Entrepreneurship), with no interest in pursuing corporate innovation activities. To maintain the relationship with the initial corporate founding members and to continue to grow corporate innovation activities, we propose that The Ohio State University Center for Innovation Strategies spin out as a separate university center. The Center for Innovation Strategies (CIS) has ongoing programs, industry partners and a sustainable funding model. This proposal will provide more detail on the rationale, organizational design and financial sustainability of CIS.

Private sector companies, nonprofits, universities and government entities must innovate in order to resolve increasingly complex challenges and create social and economic value. Interest in innovation continues to grow dramatically, with innovation centers at many major universities globally. According to a recent McKinsey study, only 6 percent of CEOs are satisfied with their company's innovation performance. Organizations of all sizes are in need of evidence-based innovation processes to maximize their impact. The Ohio State University Center for Innovation Strategies aims to meet this need.

## Mission

The Center for Innovation Strategies inspires a growth mindset in organizations and students by

- Acting as a catalyst and facilitator within the innovation ecosystem;
- Providing quality instruction and enabling the co-creation and sharing of innovation knowledge, frameworks and tools, and;
- Advancing innovation research and applied practice.

## **Defining Innovation**

Innovation spans multiple disciplines and departments within organizations and industries.

It is the practice of top-line growth and value creation through the development of new products and services, including new branded concepts, patents, and other intellectual property.

Begins with target consumer's articulated and unarticulated wants and needs

- Employs multi-disciplinary collaboration
- Incorporates networked, "open innovation" based partnerships
- Combines strategic rigor and creative intuition in decision-making

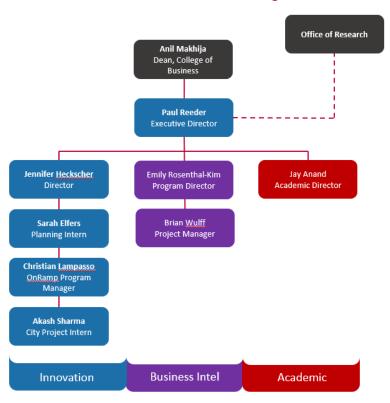
CIS currently has five engaged founding members who are integral to the economic vitality of the region and have significant involvement with the university: Cardinal Health, JPMorgan Chase, Safelite Group, The J.M. Smucker Company, and The Wendy's Company. CIS is finalizing details to add two additional founding members and has interest from over a dozen companies in affiliate-level membership. Robust interest in our programs, faculty research and students underscores the importance of developing the Center for Innovation Strategies as a separate entity.

## Faculty and Administration

The Center for Innovation Strategies serves as a catalyst and facilitator for multiple activities including faculty research, outreach to the community of innovation professionals and teaching of innovation students and professionals alike in the art and science of innovation. CIS will continue its work with faculty, staff and students across campus and plans to deepen its interdisciplinary collaboration.

CIS is currently well-staffed by professionals with decades of experience in higher education, private sector and non-profit leadership. An organizational chart is provided below, and staff and faculty bios are provided as Appendix A.

## **Center for Innovation Strategies**



## Founding Member Board and Governance

A founding member board consisting of senior innovation leadership from the five founding members provides guidance on center programs, input on pertinent research questions and information on innovation trends and challenges. The executive director Paul Reeder reports directly to the Dean of the Fisher College of Business, Anil Makhija. CIS is pursuing a reporting relationship to the Office of Research as well. In 2016 and again in 2017, a memorandum of understanding was presented and reviewed by the Office of Research for multi-disciplinary college support of innovation practices leading to sponsored research. This was a program that Paul Reeder created while working in the Office of Research and continued with CIE and now CIS. However, with the change in leadership in the Office of Research, the MOU has not been executed to date. However, CIS has continued to work with the Colleges of Engineering, Nursing, Optometry, Medicine, Arts and Sciences and the Moritz College of Law on innovation programs without university financial support.

## Research and Academic Engagement

Faculty with research and/or teaching interest in innovation and associated areas are invited to affiliate with the center, in collaboration with the center's academic director. CIS has engaged extensively with faculty across campus on industry collaborations, such as an ideation workshop for Honda R&D Americas which engaged students and faculty from the departments of History and Design, the College of Engineering and the Fisher College of Business. CIS has also showcased faculty research and expertise through its regularly scheduled events, including a speaker series and annual Innovation Summit. The center will continue to be an agent for leveraging and showcasing faculty research capabilities and expertise and facilitating interdisciplinary collaboration on complex innovation challenges.

The need for rigorous research to improve efforts to foster innovation is great. In its research, executive education and programs, CIS will focus on understanding how organizations create, capture and deliver value. Interesting areas for further inquiry and education include:

- Creating Value (actions that increase the benefits and/or reduce costs to society)
   How to identify which project to bet on? How to help employees overcome self-censorship?
   How to encourage employees to take more risks? Whether (when) and how to foster divergent thinking in your organization? How to help employees overcome bureaucratic constraints of mid- and large-sized organizations?
- Capturing Value (actions that affect the portion of value created that is seized by a given party) How to capture value from knowledge based assets? How to capture value in a world of imperfect property rights? How to capture value in a world of "platform" innovation where network effects are prominent?
- Delivering Value (designing organizations to coordinate activities that support new value) How to balance pursuit of big, unpredictable, projects and more profitable platform or derivative projects? How to balance the needs of the core organization while developing future value? How important is "innovation" as compared to the core business? How to trade off the needs of explorative and exploitive activities? How to manage incentive conflicts and information barriers associated with organization silos? How to communicate and lead the human side of innovation efforts?

-

<sup>&</sup>lt;sup>1</sup> Framework by Leiblein, Michael J. and Ziedonis, Arvids A.

Our academic director is Jaideep (Jay) Anand, the William H. Davis Chair and Dean's Distinguished Professor of Strategy at the Fisher College of Business. Dr. Anand has extensive academic experience in strategic management and executive education programs globally. We look forward to adding affiliated faculty from across the university who are interested in innovation research and teaching.

## **Cross Campus Collaboration**

CIS routinely seeks out and is called upon to assist with innovation related opportunities across campus. CIS collaborates with the Institute for Materials Research and the College of Engineering on innovation challenges. Our program director, Dr. Emily Rosenthal-Kim, PhD, leads TECh Lab, an interdisciplinary professional development program in technology commercialization and innovation, helping STEMM graduate students and postdocs to develop skills to enhance their career potential in the academic or private sectors.

Dr. Rosenthal-Kim also leads market intelligence and strategic support for internal and external clients. She currently collaborates with our project manager, Dr. Brian Wulff on business intelligence and strategic support projects on a contract basis for the Drug Development. CIS will continue this work which supports the salaries of both Dr. Rosenthal-Kim and Dr. Wulff, as well as graduate students as needed.

CIS leadership is also involved in Office of Research and cross-college programming through the Innovation to Research and Development model (I2R&D). Through this initiative, CIS executive director Paul Reeder leads ideation sessions for faculty, helping them identify areas of their research and expertise with commercialization potential and connect with and collaborate with industry partners. Dr. Rosenthal-Kim also offers a Research in Translation workshop for academic researchers who are interested in pursuing market-driven research. The accelerated workshop introduces the principles of market opportunity identification, customer discovery and value proposition design.

CIS will deepen partnerships with interested departments and units on the above programs and develop other initiatives to elevate faculty research and expertise as it pertains to innovation challenges.

## **Diversity and Inclusion**

CIS is dedicated to promoting diversity, multiculturalism and inclusion. CIS invites broad participation from diverse staff, students, faculty and professionals in our events and programs. We make concerted efforts to engage and recruit historically excluded groups not only as employees and interns of the center, but also in our programs and events as speakers, facilitators and participants.

## **Programs**

CIS has developed and maintained innovation related programs involving students, faculty, staff and industry and community partners. Details are provided on both CIS programs currently in place and upcoming initiatives.

## Student Programs

CIS offers curricular and co-curricular programs to advance students' knowledge and skills in innovation.

• The center will collaborate with faculty and practitioners on innovation courses at the graduate and undergraduate level, including BUSADM 3532, the Corporate Innovation course offered in

the undergraduate interdisciplinary minor in entrepreneurship and innovation. CIS will also be involved with the co-directors of the MBA program, Roger Bailey and Keely Croxton, as they develop innovation-focused curriculum and experiential learning opportunities as part of the MBA program re-design.

- CIS connects its robust network of industry partners with faculty who are seeking live innovation cases or projects against which undergraduate and graduate students may apply theory and evidence-based innovation practices.
- In terms of co-curricular programs, CIS collaborates with industry partners, such as Procter and Gamble and Stanley Black and Decker, along with the Institute for Materials Research, to lead 1-2 innovation challenge competitions each semester. The challenges engage undergraduates from the Colleges of Engineering, Arts and Sciences and Business over a weekend to ideate and develop solutions related to new business, product or service ideas.
- In collaboration with Honda R&D Americas, CIS also piloted an innovation accelerator program this summer, titled "OnRamp." Students received coaching from faculty and practitioners on innovation practices and project management and worked in teams on innovation challenges related to Honda R&D's 2030 innovation program.
- CIS has also begun discussions related to developing an innovation certification program for undergraduate students to meet an increasing need for innovation knowledge and skills among employers both regionally and nationally.

#### Professional and Community Programs

Our founding members have indicated an ongoing need for educational programs, from speaker series, summits and workshops to more formal executive education.

- The center has offered an Innovation Practice program through executive education and plans to collaborate with Fisher's Executive Education department on similar programs
- CIS hosts 2-3 speaker series and workshops on innovation each semester, bringing together faculty, staff and industry partners to discuss current topics in innovation, such as design thinking and fostering an innovation culture.
- The center has hosted a successful Innovation Summit the past two years (2017 and 2018), bringing together over 150 innovation practitioners and academics to share innovation processes and challenges.

The center provides market intelligence support to commercialization and translation-focused academic organizations across campus, local businesses and government-sponsored entities on a contract basis. Current clients include the Drug Development Institute in the James Comprehensive Cancer Research Center, the Center for Design and Manufacturing Excellence and the Ohio Federal Research Network. Additionally, Honda R&D Americas has approved a multi-phase market intelligence project that is in the final stages of approval with Ohio State's Office of Business and Finance and Office of Sponsored Programs in accordance with Honda's existing Strategic Partnership Agreement with the university.

Through a contract approved by Ohio State's Office of Business and Finance, the center is collaborating with the City of Columbus on a project related to helping small, disadvantaged businesses innovate and grow. City council has provided \$100,000 in funding for the center to conduct research and develop a strategic plan for a small business accelerator. The center will continue to look for mutually beneficial

partnerships with nonprofits and government entities in alignment with our mission to foster growth and innovation.

Select Recent Programs and Engagement

## • May 2018:

- TECh Lab professional development program for STEMM graduate students and postdocs in technology commercialization and innovation; conclusion of spring cohort
- o Innovation Summit sponsored by the Cullman Family
- o Smart Cities Town Hall facilitation for the College of Engineering

#### June 2018:

- Workshop combining Design Thinking and Jobs-To-Be-Done to Enhance Innovation
- Multi-center workshop: The Digital Economy and Customer Experience
- Honda OnRamp Innovation incubator (6 teams of undergraduate students)

#### August 2018:

Multi-center workshop: The Digital Economy and The Workforce

#### • Fall 2018

- Fall Innovation Speaker Series (90 minute sessions in September, October, November)
- Market intelligence/strategic support of Drug Development Institute
- Market intelligence project for Honda
- Honda OnRamp Innovation incubator (6 teams of undergraduate students)

### Upcoming for 2019

- Winter innovation speaker series
- o Continued market intelligence/strategic support of Drug Development Institute
- o 2019 Innovation Summit sponsored by the Cullman Family
- Honda OnRamp Innovation incubator (6 teams of undergraduate students)
- Market intelligence project for Honda

## **Budget and Financial Sustainability**

CIS is well-funded to sustain operations and programs and will seek additional founding member and affiliate member companies as well as contracted project work to maintain financial sustainability. Funding from prior donors and Fisher is also in place to cover startup costs. CIS will also seek funding from Office of Research and other departments on campus who wish to participate in the I2R&D program, TECh Lab and other programs.

CIS has secured an additional founding member for a gift of \$300,000 paid over four years. Discussions are taking place with two to three additional founding members in industry verticals that are not in direct competition with existing founding members. CIS plans to bring on affiliate members for a gift of \$25,000 annually for a period of three years. The goal is to add four affiliate members in 2018-2019 and 2019-2020 for a total of \$100,000 in revenue the first year and \$200,000 in subsequent years, with plans to continue to grow affiliate-level members.

As noted previously, CIS will engage in contract work with private companies. Any fee-for service research and development activities will be undertaken as formal sponsored research agreements between the company and The Ohio State University Research Foundation. CIS is also working with the Office of Business & Finance to ensure that other, non-research, fee-based services offered by the center to outside organizations are in accordance with university policy.

The projected five-year budget is summarized below.

Center for Innovation Strategies 5-YEAR BUDGET SUMMARY					
Current Equity	\$750,000	\$828,748	\$811,498	\$851,561	\$ 1,030,989
REVENUE:	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Corporate Gifts	260,000	180,000	180,000	280,000	260,000
Annual Memberships	100,000	150,000	250,000	300,000	350,000
Contract research and project work	267,000	325,000	400,000	450,000	500,000
Total Revenue	627,000	655,000	830,000	1,030,000	1,110,000
Current Equity	750,000	828,748	811,498	851,561	1,030,989
EXPENDITURES:	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Staff and Faculty Salaries and Benefits	503,902	591,500	665,437	682,073	767,332
Total Compensation	503,902	591,500	665,437	682,073	767,332
Supplies, Services, Comm., Equipment, Reproduction	5,000	8,000	10,000	12,000	15,000
Travel	3,000	5,000	8,000	10,000	12,000
Program and meeting expenses	5,000	10,000	15,000	20,000	20,000
Research grants		25,000	50,000	75,000	100,000
Fisher College Overhead (5%)	31,350	32,750	41,500	51,500	55,500
Total Non-Personnel Expenditures	44,350	80,750	124,500	168,500	202,500
Total Expenditures	548,252	672,250	789,937	850,573	969,832
Total Revenue & Equity Less Total Expenditures	828,748	811,498	851,561	1,030,989	1,171,157

## **Evaluative Criteria**

CIS has developed strategic goals and action plans and monitors progress toward goals on a weekly basis. CIS prepares an annual report summarizing activities and evaluating accomplishments relative to stated goals and objectives. A budget is submitted each year to Fisher senior leadership, and CIS performs quarterly reviews with Fisher's fiscal officer to review financial sustainability.

The performance measures that will be used to inform decision-making include the following:

- Amount of founding member and affiliate member revenue;
- Amount of research dollars made available to faculty;
- Quantity and quality of student internships and student opportunities derived from Center programs and contacts;
- Volume of attendance and attendee satisfaction with center programs and events;
- Representation of historically excluded groups as employees and event/program attendees, participants, speakers and facilitators; and
- The overall benefit/cost assessment of the center in generating positive net margin on its operations, both quantitatively and qualitatively.

## Supporting Materials and Appendices

- A. CIS Bios
- B. Letter of support from Dean Anil Makhija

- C. Letters of support from founding members
- D. Letter of support from peer institution innovation center

## Appendix A – Center for Innovation Strategies - Bios

#### **Paul Reeder, Executive Director**

As the Executive Director of the Center for Innovation and Entrepreneurship, Paul's mission is to partner with key university stakeholders to establish a unified, overarching entrepreneurial and Innovation collaboration strategy that maximizes value creation for Ohio State. His commercialization experience and industry relationships have uniquely prepared him to lead the Center for Innovation Strategies. The center facilitates innovation-based research, learning and experiences that will impact the global economy.

In his previous position as Director of Operations and Collaboration Strategy in the Office of Research, Industry Liaison Office, Paul will work closely with his ILO colleagues, Office of Research leaders, college deans, and internal partners involved in business collaboration to assemble, expand, and improve accessibility of core university capability in support of external engagement.

Previously, Paul was the Director of Ideation and Product Development at the Technology Commercialization Office, Paul worked closely with researchers and Medical Center staff on the creation and development of commercial inventions. The Ideation process was established within the TCO to support university inventors across the colleges to mature early stage ideas, accelerate the marketability and patentability of their inventions and to increase the value of the licensing opportunity for the university.

Before joining Ohio State in 2012, Paul founded Design Axis, a consulting firm specializing in product development and strategic innovation. Previously, he was the Vice President of Business Development at the Ellies Design Group and a hardware designer with Hewlett Packard. In 1994, Paul formed Zura Sports, a manufacturer of consumer products. Paul's experience across diversified areas of innovation and product development has provided him with a unique perspective of the business world, which drive his goal to extend the reach of innovation from user centric design to the creation of compelling business models.

## Jaideep (Jay) Anand, Academic Director

Jaideep (Jay) Anand is the William H. Davis Chair and Dean's Distinguished Professor of Strategy at the Fisher College of Business, Ohio State University. Prior to joining Fisher, he was faculty at the University of Michigan (Ross). He earned a B.Tech. in Mechanical Engineering from the Indian Institute of Technology, New Delhi, India, and master's and Ph.D. degrees from the Wharton School, University of Pennsylvania. His interests include corporate growth, mergers & acquisitions, joint ventures & strategic alliances, global strategy and strategy implementation.

He regularly consults and conducts executive education programs with companies all over the world. He has worked in more than a dozen countries in Africa, the Americas, Asia and Europe. He has appeared on ABC, NBC and CBS TV News, National Public Radio and Summit Business TV and has been referenced in The Economist, Wall Street Journal, USA Today, CEO magazine, Knowledge@Wharton and other popular media in several countries. He has received several awards for his teaching and contribution to management knowledge, including Outstanding Editorial Board Member from the Strategic

Management Journal (2010), the Best Reviewer Award from JIBS (2009), the Pacesetter Research Award (top research award at Fisher College) (2008), Executive education teaching awards (2014 & 2009), MBA Teaching awards (2012, 2011, 2009, 2007, 2003 and 1997), Best PhD Teacher award nomination (2004 and 2001), Booz, Allen and Hamilton Fellowship (2002), Best Research Paper Award in International Management (2001), the Outstanding Reviewer award from the Academy of Management (2000), F.W.P. Jones Award for Outstanding Faculty (1996-98), and several other international awards for research and professional excellence, and has been selected for inclusion in Who's Who in America since 2006.

He is the elected chair of the Academy of Management (the largest academic association in the field of management), IM division, Associate Editor of the *Global Strategy Journal* and is or has been a member of the editorial boards of *Strategic Management Journal*, *Organization Science*, *Journal of International Business Studies*, and *Journal of Management Studies*. His research has been published in business press (including the *Financial Times*, *California Management Review* and the *Columbia Journal of World Business*), academic journals (including the *Academy of Management Journal*, *Strategic Management Journal* and *Organization Science*), and has been widely presented at research conferences around the world.

### Jennifer Heckscher, Director of Operations and Outreach

Jenny Heckscher implements the Center's strategy, communications and programming and builds relationships with students, clients and companies to support academic research, education and community engagement in innovation.

Jenny has extensive experience executing innovative programs and services in the private sector and higher education. As a learning and development consultant, she developed evidence-based learning initiatives for staff and faculty with a focus on leadership, diversity and inclusion. As program director for Ohio State's gender equity initiative, she co-led regional efforts to develop a recruiting consortium, led the advisory board and managed an entrepreneurship leadership program for women faculty. Jenny has also served as director of career management at the Fisher College of Business, where she provided career coaching and programming for graduate students, led corporate development efforts, and assisted employers with recruiting strategies. In this role, she led a team to develop and implement an award-winning on-line career management course.

Prior to joining Ohio State, Jenny worked for Nationwide's retirement plan division as an associate vice president for product development and risk management. She assisted with the launch of a transformational trust company platform for new product innovations and implemented a fiduciary management system that is still in use by the national sales force.

She is also an adjunct faculty member for the UNC-Chapel Hill School of Government, teaching organization theory in the online MPA program. She graduated summa cum laude from The Ohio State University with a dual degree in English and Education and earned an M.A. in Public Policy and Management from the John Glenn College of Public Affairs.

#### Emily Rosenthal-Kim, PhD, Program Director

Dr. Emily Rosenthal-Kim joined The Ohio State Center for Innovation and Entrepreneurship in June of 2017 from the Technology Entrepreneurship and Commercialization Institute in the Fisher College of Business. Striving to maximize the social and economic impact of innovative university technologies, Emily manages the Center's technology-focused market research services and provides clients with

market intelligence and commercialization strategy insight. She also runs two educational programs directed towards STEMM graduate students, post-doctoral researchers and principle investigators interested in non-academic career paths.

Even before pivoting to the business side of technology translation, Emily approached scientific research from a commercialization perspective. Her academic research focused on the invention and development of translatable, industry-relevant polymers, biomaterials and chemical processes. She is named on three patents, and one of her polymers has undergone further development by a major biomedical device manufacturer.

After earning a Ph.D. in Polymer Science from the University of Akron in 2013, Emily held simultaneous research appointments with the Department of Mechanical and Aerospace Engineering at The Ohio State University (OSU) and the Department of Chemical and Biomolecular Engineering at The University of Akron.

Emily holds B.S. in Chemistry from California Polytechnic State University, San Luis Obispo (2008) and an A.A.S in Rubber Technology from Ferris State University in Michigan. She has been actively involved in the Rubber Division of the American Chemical Society since 2003.

#### Brian Wulff, PhD, Entrepreneurial Fellow; Project Manager

Dr. Brian Wulff joined the Center for Innovation and Entrepreneurship in June 2017 as the inaugural fellow of the Technology Entrepreneurship and Commercialization Fellows program. With a passion for research, Brian evaluates the commercial potential of new technologies and identifies those innovations with the greatest likelihood for success.

In his role as a project manager Brian provides actionable market intelligence and strategic decision support to groups partnering with CIE to accelerate the commercialization of new technologies.

Brian received his B.S. in Microbiology from the University of Iowa. He went on to earn a Ph.D. in Integrated Biomedical Science from The Ohio State University. Prior to joining the CIE, Brian was a postdoctoral researcher at The Ohio State University Wexner Medical Center specializing in regenerative wound healing and skin cancer formation.



#### Office of the Dean

201 Fisher Hall 2100 Nell Avenue Columbus, OH 43210-1144 614-292-2666 Phone 614-292-7999 Fax fisher.osu.edu

November 20, 2018

Vice Provost W. Randy Smith Office of Academic Affairs 203 Bricker Hall 190 North Oval Mall Columbus, OH 43210

Re: Center for Innovation Strategies

Dear Dr. Smith:

As a follow up to your meeting on July 13, 2018 with Paul Reeder and Jennifer Heckscher, I am writing to request permission for the use of the term "Center" with respect to the work of the Center for Innovation Strategies. As you know, the Center for Innovation and Entrepreneurship, established in 2015, has evolved and grown to necessitate two centers in order to maximize impact. Paul Reeder will serve as Executive Director of the Center for Innovation Strategies.

The Center for Innovation Strategies (CIS) has ongoing programs, industry partners and a sustainable funding model. CIS will seek university center status in the coming months through the process you outlined in your meeting with Paul and Jenny.

We appreciate your support of the CIS as it continues to connect our faculty, students, staff and industry partners in support of Ohio State's land grant mission.

Sincerely,

Anil Makhija

Dean and John W. Berry Chair in Business

anil K. Makhija

The Ohio State University Fisher College of Business

CC: Paul Reeder

## Appendix C - Letters of Support from Founding Members



October 9, 2018

Vice Provost W. Randy Smith Office of Academic Affairs 203 Bricker Hall 190 North Oval Mall Columbus, OH 43210

Re: Center for Innovation Strategies - Letter of Support

Dear Dr. Smith:

It is with great enthusiasm that I submit a letter of support for the new Center for Innovation Strategies, which has recently evolved from the Center for Innovation and Entrepreneurship. The Wendy's Company was an initial investor in the center and plans to continue its partnership with the new Center for Innovation Strategies. With the strong need for information sharing, networking and management practices that foster innovation, I endorse the decision to evolve the Center for Innovation Strategies to focus on innovation strategies for companies, nonprofits and government entities.

By continuing to support and grow the Center for Innovation Strategies, Ohio State can be a leader in developing and disseminating evidence-based innovation practices and providing the talent pipeline to help organizations maintain a sustainable competitive advantage.

Should you need additional information, please do not hesitate to contact me.

Sincerely,

David Trimm

Chief Information Officer, The Wendy's Company

1 Dave Thomas Boulevard Dublin, Ohio 43017 Office: (614)-764-3500

Email: david.trimm@wendys.com

The Wendy's Company | 614-764-3100 One Dave Thomas Blvd., Dublin, OH 43017 | www.wendys.com



October 12, 2018

Vice Provost W. Randy Smith Office of Academic Affairs 203 Bricker Hall 190 North Oval Mall Columbus, OH 43210

Re: Center for Innovation Strategies - Letter of Support

Dear Dr. Smith:

I am writing to express my support for the new Center for Innovation Strategies which has evolved from the Center for Innovation and Entrepreneurship. Cardinal Health was an initial investor in the center and will continue its engagement with the new Center for Innovation Strategies. Evolving the Center for Innovation Strategies to focus solely on corporate innovation and growth will enable the center to maximize its long-term impact.

The need for cutting edge information, practices and tools to foster innovation is great. By continuing to support and grow the Center for Innovation Strategies, Ohio State can be a leader in developing and disseminating evidence-based innovation practices and providing the talent pipeline to help organizations maintain a sustainable competitive advantage.

Should you need additional information, please do not hesitate to contact me.

Sincerely,

Jeff Curran

Director, Innovation Solutions

4305 W. Dublin Granville Rd, Dublin, OH 43017

614.757.6001

Jeff.curran@cardinalhealth.com

## Appendix D - Letter of Support from Peer Institution Innovation Center



Innovation Center 340 West State Street, Unit 7 Athens OH 45701-2979

T: 740.593.1818 F: 740.593.0186 www.innovationcenter.ohiou.edu

October 18, 2018

Vice Provost W. Randy Smith Office of Academic Affairs 203 Bricker Hall 190 North Oval Mall Columbus, OH 43210

Re: Center for Innovation Strategies – Letter of Support

Dear Dr. Smith:

I am pleased to submit a letter of support for the new Center for Innovation Strategies, which has recently evolved from the Center for Innovation and Entrepreneurship. As the Executive Director of the LIGHTS Regional Innovation Network and former director of the Innovation Center at Ohio University, I can attest to the need for a strong focus on innovation throughout the state of Ohio and beyond.

There is much to be done to connect academia and industry throughout Ohio. University innovation centers are uniquely positioned to make these connections and catalyze innovation to foster economic growth and social impact. I would look forward to working with the Ohio State's Center for Innovation Strategies to continue this important work.

Please contact me if I can be of assistance to you at 740/590-0969 or simonj@ohio.edu.

Sincerely,

Jennifer Simon, Executive Director LIGHTS Regional Innovation Network