Curriculum Vita: Thomas H. Byers Department of Management Science and Engineering Huang Engineering Center, Suite 326 Stanford University, Stanford, CA 94305 Phone: 650-725-8271 Email: tbyers@stanford.edu

Stanford University (1994 – Present)

- 2002-present. Professor (Teaching) Department of Management Science and Engineering (MS&E).
 Full Professorship rank with Academic Council membership and privileges. Endowed Chair of
 Entrepreneurship in the School of Engineering. Bass University Fellow in Undergraduate Education.
 Courses: Technology Entrepreneurship; Leadership of Technology Ventures; Entrepreneurial
 Management and Finance; Entrepreneurial Thought Leader Seminar Series; Hacking for Defense:
 Solving National Security Issues with Lean Startup Methods; Principled Entrepreneurial Decisions.
- 1998-2002. <u>Associate Professor (Teaching)</u>. Department of Management Science and Engineering. Associate Professor rank with Academic Council membership and privileges.
- 1995-present. Founder and Faculty Director. Stanford Technology Ventures Program (STVP). STVP is the innovation and entrepreneurship education center at Stanford's School of Engineering, with a mission to empower aspiring entrepreneurs and innovators to become global citizens who create and scale responsible innovations. STVP is the home of the Mayfield Fellows Program (an annual work/study program since 1996 for 12 outstanding Stanford undergraduate students), its Roundtables for Entrepreneurship Education (50 international summits of faculty, industry, and policy makers), its eCorner collection (5,000 video clips and podcasts of thought leaders available at no charge), and the lean startup methodology curriculum now adopted widely by US government agencies (e.g., the Innovation Corps at NSF) and 100+ colleges/universities.

2019-present. <u>Founder and Director</u>. "Principled Entrepreneurship: Action and Knowledge" project regarding applied ethics and responsible technology innovation, Stanford School of Engineering.

2018-2021. Keohane Distinguished Visiting Professor. Duke University and UNC-Chapel Hill.

2017-present. <u>Principal Investigator</u>. Office of Naval Research's Hacking for Defense (H4D) sponsored project, Stanford Precourt Institute for Energy.

2011-2017. <u>Lead Principal Investigator and Director</u>. NSF's National Center for Engineering Pathways to Innovation (Epicenter) sponsored project, Stanford School of Engineering.

2005-2010. <u>Visiting Professor</u>. London Business School and University College London in England (2005); Higher Colleges of Technology (HCT) in the United Arab Emirates (2006-2010).

1995-present. <u>Academic Director</u>. Stanford global professional educational programs: Stanford Executive Institute; UAE National Entrepreneurship Curriculum; Malaysia Ministry; and Saudi Arabia's KAIST.

1994-1998. <u>Adjunct Professor (1995-1998); Lecturer (1994-1995)</u>. Department of Management Science and Engineering, Stanford School of Engineering.

Education

1980-1982. Ph.D., Business Administration (concentration in Management Science), Haas School of Business, University of California, Berkeley. Regents Scholar. Dissertation: "Optimal and Near-Optimal Policies for Discrete Deterministic Dynamic Programming Models". Dissertation Chair: Ernest Koenigsberg.

1978-1980. M.B.A., Haas School of Business, University of California, Berkeley.

1971-1975. B.S., Industrial Engineering and Operations Research, University of California, Berkeley. Graduation with Highest Honors, Phi Beta Kappa, and Tau Beta Pi.

Other Teaching Experience

1994-1995. <u>University of California, Berkeley.</u> Lecturer at Haas School of Business. Courses: Entrepreneurship and High-Technology Marketing Management.

1979-1982. <u>University of California, Berkeley.</u> Lecturer in Industrial Engineering and Operations Research (Course: Engineering Economics); Lecturer, Research Assistant, and Teaching Assistant in Haas School of Business (Courses: Information Systems, Computing, and Management Science).

Selected Major Programs and Funding Sources

2019-present. <u>Principled Entrepreneurship: Action and Knowledge project</u>. Co-founder and Faculty Lead. This project focuses on applied ethics, entrepreneurship education, and responsible technology and innovation. The team of faculty and industry experts imagine a future where every student in higher education learning innovation and entrepreneurship is equipped to brave ethical complexity.

2017-present. Office of Naval Research (ONR)'s Hacking for Defense project. Co-PI.

Supported by ONR, Hacking for Defense (H4D) is a university-sponsored course that allows students to develop a deep understanding of the problems and needs of government sponsors in the US Department of Defense and the Intelligence Community. In a short time, students rapidly iterate prototypes and produce solutions. For universities, it keeps their programs attached to real-world problems and provides students with an experiential opportunity to become more effective in their chosen field, with a body of work to back it up. For government agencies, it allows problem sponsors to increase the speed at which their organization solves specific, mission-critical problems. This project helped spread the curricula to over 60 colleges in the US and its national security allies.

2015-2018. <u>UAE/Stanford Innovation and Entrepreneurship Project</u>. Academic Director.

In partnership and \$10 million from the Prime Minister's Office and the Ministry of Education in the United Arab Emirates, our team at STVP developed and deployed through SCPD a one-semester syllabus combining design thinking and entrepreneurial leadership education. This course is now taught by local UAE faculty trained by Stanford and is required of undergraduate students at all UAE colleges and universities.

2011-2017. National Science Foundation's (NSF) <u>National Center for Engineering Pathways to Innovation</u> (Epicenter). Lead Principal Investigator and Director.

Epicenter's funding from NSF began in 2011 with a commitment of \$10 million. Managed by Stanford University and the STVP unit, this national center became a laboratory to explore ways to help engineering

and computer science undergraduate students develop the knowledge, skill sets and mindsets to help them be more innovative and entrepreneurial throughout their professional careers. The center created three initiatives: the Fostering Innovative Generations Studies (FIGS) research activity, the University Innovation Fellows (UIF) program for student leaders, and the Pathways to Innovation Program for faculty and administrators. We then led these three core initiatives until 2017 and engaged a large community of educators and students across the country. Through its core initiatives and partnership activities, the center reached 300 US institutions of higher education and hosted annual gatherings for our program participants and two large summits for HBCU leaders. The UIF program continues to be widely adopted at colleges and universities worldwide to support student change makers who encourage education innovation on their campuses.

1998-2012. <u>Roundtables on Entrepreneurship Education (REE)</u>. Founder and Co-Director. Organized and co-hosted 50 annual convenings of educators, busines leaders, and policy makers in North America, South America, Europe, Asia, Middle East, and Australia to encourage innovation and entrepreneurship education for all students in higher education.

Industry Experience

1995-2021. Board of Directors (several technology startups). Member.

1994-1998. <u>Interval Research Corporation</u>. Senior Business Advisor. Lab funded by the late Paul Allen (Microsoft co-founder).

1990-1993. <u>Slate</u>. President and Co-founder. Led startup stage of a supplier of software applications in emerging field of pen and mobile computing.

1985-1990. <u>Symantec.</u> Executive Vice President and General Manager. As a corporate officer, created the antivirus and security software division during its formative years through its IPO.

1982-1985. Digital Research. Group Product Manager.

1975-1977. Accenture (previously Andersen Consulting). Management Consultant.

Stanford University Service

- 2020- Online and Professional Education Committee Chair, MS&E Department.
- 2019- Advisory Board, Stanford President's Ethics, Society and Technology (EST) Hub.
- 2016- Faculty Advisor, Science, Technology, and Society (STS) Major.
- 2016-2019 University Committee on Undergraduate Majors (C-RUM).
- 2016-2019 University Committee on Professional/Executive Education (VPTL/SCPD).
- 2015-2021 University Faculty Athletic Fellows (Baseball).
- 2014-2021 University Committee on Bing Overseas Studies Program (BOSP).
- 2014-2022 Stanford's Distinguished Careers Institute (DCI).
- 2007-2012 University Committee on Undergraduate Standards and Policies (C-USP).
- 2006-2020 School of Engineering's Undergraduate Council.
- 2006-2008 Faculty Liaison, Stanford Board of Trustees (Committee on Development).
- 2006-2019 Pre-Major Faculty Advisor, Freshmen and Sophomores.
- 2004-2020 Teaching Committee, MS&E Department.
- 2002-2005 Chairman, University's Committee on Public Events (COPE).

2001-2010 Deputy Department Chair, Department of Management Science and Engineering.

2001-2002 Host of the Dean's Visiting Committee, Management Science and Engineering.

1998-2001 Committee to create the Department of Management Science and Engineering (MS&E).

Awards and Honors

Council on Foreign Relations (CFR), membership election, 2021.

The Nannerl Keohane Distinguished Visiting Professorship at the UNC Chapel Hill and Duke, 2018-2021.

Engineering Entrepreneurship Pioneer Award, ASEE Entrepreneurship Division (lifetime), 2015.

Undergraduate Teaching Award, MS&E Department, Stanford University, 2015.

Endowed Chair in Entrepreneurship Education, School of Engineering, Stanford University, 2012.

Gordon Prize, National Academy of Engineering (NAE), which is its highest award for teaching, 2009.

Hall of Fame, Haas Alumni Network, University of California Berkeley, 2010.

Olympus Innovation Award (for entrepreneurship education) VentureWell, 2008.

Gores Award at Stanford University (university's highest award for excellence in teaching), 2005.

Kauffman Award (for excellence in engineering and technology entrepreneurship education), American Society of Engineering Education (ASEE), 2005.

Outstanding Entrepreneurship Educator of the Year Award, United States Association for Small Business and Entrepreneurship (USASBE), 2005.

STVP was awarded the NASDAQ Center for Entrepreneurial Excellence Award by the National Consortium of Entrepreneurship Centers, 2004.

National Leavey Award for Excellence in Private Enterprise Education, Freedoms Foundation, 2003.

Tau Beta Pi Award for Excellence in Undergraduate Teaching, Stanford School of Engineering, 2002.

Bass University Fellow in Undergraduate Education, which is a university-wide endowed chair given by Stanford for major contributions to undergraduate education, 2002.

STVP was awarded the National Specialty Program Award by the United States Association for Small Business and Entrepreneurship (USASBE), 2002.

Edwin M. Appel Prize for "bringing entrepreneurial vitality to academia" at the Price-Babson Symposium for Entrepreneurship Education, 1999.

Northern California Entrepreneur of the Year Award in the "supporter/educator" category, Ernst & Young competition, 1998.

Selected Publications

Jensen, Byers, Dunham, and Fjeld, "Entrepreneurs and the Truth: They often bend it. But don't demonize them – the problem is systemic" in Harvard Business Review, Vol. 99 No. 4, July-August, 2021.

Byers and Seelig, "Empowering Future Engineers with Ethical Thinking" in The Bridge: 50th Anniversary Issue, National Academy of Engineering, Volume 50 No. 5, December 2020.

Byers, Dorf, and Nelson, Technology Ventures: From Idea to Enterprise, McGraw-Hill, 5th Edition, 2019. For business, engineering, and science students and professionals who demand a comprehensive guide to high-growth entrepreneurship, Technology Ventures is the leading resource for analyzing opportunities and building new enterprises. Drawing on the latest academic research and practitioner insights, Technology Ventures integrates clear theoretical frameworks with action-oriented examples and exercises. A broad perspective on technology including information technology, climate tech, and life sciences ensures broad appeal to everyone with an interest in high-potential ventures. The 1st edition in 2004 was the initial textbook to focus on technology-intensive entrepreneurship.

Byers and Weilerstein, "Entrepreneurship and Innovation in Engineering Education" in Advances in Engineering Education, Volume 5, Issue 1, ASEE, Washington DC, Winter, 2016.

Nelson and Byers, "Challenges in University Technology Transfer and the Promising Role of Entrepreneurship Education" in Handbook of University Technology Transfer (Link, Siegel, and Wright, eds.), University of Chicago Press, Chicago, pp. 138-166, ISBN 9780226178349, 2015.

Byers, Seelig, Sheppard, and Weilerstein, "Entrepreneurship: Its Role in Undergraduate Education" in The Bridge, National Academy of Engineering, Volume 43 Number 2, Summer 2013.

Byers and Nelson: "Organizational Modularity and Intra-University Relationships Between Entrepreneurship Education and Technology Transfer" in University Entrepreneurship and Technology Transfer: Process, Design, and Intellectual Property, Elsevier, pages 275-311, 2005.

Byers, Keeley, Leone, and Parker: "The Impact of a Research University in Silicon Valley: Entrepreneurship in Alumni and Faculty" in Journal of Private Equity, Winter 2000.

Byers, Sutton and Kist: "The Characteristics of Entrepreneurs" in The Handbook of Technology Management, CRC Press and IEEE Press, 1998.

Byers and Waterman: "A Dynamic Programming Algorithm to Find All Solutions in a Neighborhood of the Optimum" in Mathematical Biosciences, 1985.

Byers and Waterman: "Determining All Optimal and Near-Optimal Solutions when Solving Shortest Path Problems in Dynamic Programming" in Operations Research, 1984.

Selected Ph.D. Dissertation Committees

Reading

Melissa Graebner, MS&E (UT Austin) Keith Rollag, MS&E (Babson) Chris Bingham, MS&E (UNC Chapel Hill) Victor Seidel, MS&E (Boston College) Soong Moon Kang, MS&E (Univ. College London) Nathan Furr, MS&E (INSEAD) Ben Hallen, MS&E (University of Washington) Ann Miura-Ko, MS&E (industry, Floodgate Ventures) Emily Cox, MS&E (University of Washington) Sam Garg, MS&E (Hong Kong Univ. of Science and Tech.) Rory McDonald, MS&E (Harvard Business School) Sruthi Thatchenkery (University College of London) Henning Piezunka, MS&E (INSEAD) Tyler Whittle, MS&E (industry, Floodgate Ventures) Eric Volmer, MS&E (government, US Air Force) Carrington Motley (Carnegie Mellon University)

<u>Oral Defense</u> Ken Ko, MS&E (chair) Ted Acworth, ME (chair) Kenton Yee, Business (chair) Fermi Ashaboglu, MS&E John Feland, ME (chair) John Taylor, CEE (chair) Ning Jia, Business (chair)

Selected Advisory and Editorial Boards

- Current
 - Menlo College's Board of Trustees.
 - Conservation International's Leadership Council.
 - Harvard Business School's California Research Center.
 - Engineering Innovation Leadership Council (EILC).
- Previous
 - American Society of Engineering Education's Entrepreneurship Division.
 - World Economic Forum's Technical Advisory Board (Education) and Tech Pioneers Judge.