September 17th, 2023

# **RE:** Director, Lubar Entrepreneurship Center (LEC)

Dear Hiring Committee:

Please find attached my resume, in support of my application for the position of **Director, Lubar Entrepreneurship Center (LEC)** at the University of Wisconsin-Milwaukee (UWM). I am very interested in this position. It is an ideal fit for what I have been training for my entire career, and in an area I truly enjoy and believe I can contribute. Helping entrepreneurs grow, formulate their IP and business strategy, then form and grow their companies are activities I currently do, enjoy and am well-trained for; and, building partnerships in the community in southeast Wisconsin is something I am actively involved in, and would love to take to a higher level with UWM. I also have extensive experience fundraising, currently in partnership with our advancement team, for entrepreneurship programming as well as physical resources.

In terms of requirements of this job, I have specific experience and expertise in all the required areas, having: (a) partnered with our advancement team to raise capital for multiple projects (e.g. > \$10 M for a school of Business building), (b) led academic strategic planning initiatives, previously as Dean (for the school of business) then as AVP (setting a vision for research and innovation for the entire university), (c) built community partnerships across southeast Wisconsin (e.g. leading a 6-institution CTSI-AMPD<sup>NR</sup> grant/partnership on healthcare innovation), (d) raised significant donor and grant funding to support entrepreneurship initiatives of students, faculty, and partners (secured funding from industry, WEDC, NIH and corporate partners), (e) managed multiple large budgets and P&Ls (e.g. > \$1 M for CU Ventures), and (f) created and deployed academic and continuing education programming as well as community boot camps for entrepreneurs – including creating lawyer and investor in residence programs.

My current positions at Concordia University are as Associate Vice President for Research and Innovation (which includes serving also as Director of Technology Transfer), as well as Professor of Business and Professor of Pharmaceutical Sciences. The latter is because I have had NIH-funded research doing drug development, and I also am co-leading a regional NIH-CTSI program focused on commercializing healthcare innovation (drugs; devices; HealthTech IT) from 6 southeast Wisconsin Universities, called AMPD<sup>NR</sup> (Accelerating Medical Product Development through Networked Resources). Associated with this, I am actively helping 5+ startups connected to Concordia, and manage Concordia's patent portfolio, while also negotiating, drafting and executing all our agreements – licensing, as well as more routine documents (MTAs; CDAs; CRADAs). While my technology transfer efforts are in some ways focused on Concordia, they are really more broadly for all of southeast Wisconsin, via the NIH-CTSI grant (the PI is Dr. Reza Shaker at MCW). This grant has me leading and collaborating with a consortium of tech transfer offices from UW-Milwaukee, Medical College of Wisconsin (MCW), Blood Center of Wisconsin (Versiti), Milwaukee School of Engineering and Marquette.

I am at a point in my career where I want to now focus more on entrepreneurship and commercialization with broad impact in the region (it is why I did my MBA and JD degrees while at Marquette), and I'd love to do it with an institution like *UWM* (I am a proud *UWM* alum!). I cut my teeth in biotech in San Diego 25 years ago, building a company that was ranked in the top ten in the U.S. by *Drug Discovery Today*. I came back to Wisconsin (Milwaukee) to

pursue an academic career while raising our family close to relatives (all our kids are only recently off to college). I am now ready for the next challenge, focusing more on helping startups and entrepreneurs in the university setting and with partners in the community, through an iconic and prominent institution like *UWM* and the LEC.

In terms of relevant nonacademic skills for this job, I am an experienced entrepreneur. I have helped raise venture capital (> \$40 M) and started multiple companies, including one that was sold to Novartis. That company, Triad Therapeutics, was the one ranked as a top ten biotech startup; and, we had as one of our advisory board members a Nobel Laureate, Kurt Wüthrich, who I recruited (before his prize) and even published with. More recently, partnering with our advancement team, we raised the > \$10 million for Concordia's new school of business building (completed several years ago), designing the incubator space and working with external and internal stakeholders – including many donors – to move the project from concept to completion. I also led the effort to do a \$1 M buildout in what is now incubator space that Concordia subleases in UWM's Innovator-Accelerator building. And, I built our technology transfer department and forged its connections across the southeast Wisconsin startup community and ecosystem. Even more recently, I started CU Ventures (<u>www.cuventures.com</u>) with Curt Gielow, and an associated angel group for funding some of our university-affiliated startups; this angel group has donated over \$200,000 and invested over \$1 M. Some recent press describing that https://www.bizjournals.com/milwaukee/news/2021/07/29/daniel-semventure is here: executive-profile.html

I would love to join and help the world class team at *University of Wisconsin-Milwaukee*, where I know I would learn much, but also add value with my technical, legal and entrepreneurial skills. I am quite familiar with many of the faculty at *UWM*, as well as leaders like Brian Thompson, as well as Doug Stafford (previously) and Alexander Arnold at the Milwaukee Institute of Drug Discovery (MIDD). Indeed, I am already mentoring and helping or partnering with many *UWM* students and faculty through the CTSI-AMPD<sup>NR</sup> and i-Corps programs.

As a practical matter, I am aware of the salary range for this position, and am aware that it is a non-academic position, and feel that all of this can work for me (although an unpaid academic affiliation could facilitate transfer of grants, and facilitate funding). If a position were to open up in the Chemistry department, I would certainly want to apply for that as well, given the synergy with the LEC and MIDD and the new Chemistry facility – but I do not view that as a constraint or requirement for my interest in this position.

In summary, it would be a joy and an honor to work with and for this group of colleagues that I already know and respect. I truly enjoy helping and mentoring faculty & student innovators and community members, while working with startup support teams. I hope to do that at and for *UWM*.

Sincerely,

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Daniel Sem, Ph.D., MBA, JD Associate Vice President for Research & Innovation President of CU Ventures Professor, School of Business

Professor, Pharmaceutical Sciences

# Daniel S. Sem, PhD, JD, MBA Associate Vice President of Research and Innovation Professor of Pharmaceutical Sciences Professor of Business

<u>Conc</u>ordia University Wisconsin

I am an energetic serial tech entrepreneur with a background at the interface of business, law and technology that uniquely prepares me to lead entrepreneurial-educational initiatives. Currently, I serve a dual role at Concordia University as Associate Vice President of Research & Innovation and President of CU Ventures. I am also a Professor of Business Administration with a 20% joint appointment in Pharmaceutical Sciences (I am a medicinal chemist by training). With interests in entrepreneurship and technology innovation, I have published >70 papers, and have 10 issued and multiple pending patent applications, multiple federal research grants (including NIH and NSF (I-Corps) grants), and I co-founded fivebiotechnology companies (Triad, AviMed, Retham, Estrigenix, Vivid) and a nonprofit that helps healthcare technology entrepreneurs form companies and secure seed funds (Bridge to Cures). I also recently founded and now lead CU *Ventures*, a subsidiary of our foundation (now capitalized with \$1 M), around which I formed an angel investor group (they donated \$200,000 in the last year and invested > \$1 M). I am active in the business community, serving on multiple boards, including BBB and the Ozaukee County Economic Development. While my career began in the private sector, co-founding then raising venture capital (\$42 M) for my San Diego-based biotech company. I later pursued an academic career in Milwaukee in Chemistry, transitioning later to business with a focus on helping faculty and student entrepreneurs build, fund and grow companies.

As *Director of Technology Transfer* at Concordia University, I manage patent prosecution, licensing, negotiation of term sheets, drafting legal documents (licenses; MTAs; NDAs), and mentoring faculty and students in IP and business strategy. I am active in the southeast WI community, building our regional healthcare/tech ecosystem. Accomplishments include:

- Leading an NIH CTSI grant module (PI at MCW) entitled "Accelerating Medical Product Development," to commercialize medical innovation from 6 university TT offices
- Mentoring and help with the NSF I-Corp program with UW-Milwaukee (Co-I on grant)
- Secured equity in 6 biotech startups for Concordia, based on licensing and partnerships
- Formed *CU Ventures*, a Concordia-owned 501(c)(3) research foundation to manage and grow funds for supporting startups; it also holds equity in Concordia assets
- Formed the nonprofit Bridge to Cures (B2C), as a support for 6 southeast Wisconsin Universities looking to grow startups; B2C secures state funds (Wisconsin Economic Development Corp.) and provides to startups mentored by B2C via a pitch event to VCs
- Forged a partnership with a Wisconsin Venture Fund, the \$10 M *Winnow Fund*; Concordia is an investor and the fund manager is now Concordia's VC in residence

Previously, as Dean of Business at Concordia, I maintained and grew what was Wisconsin's largest MBA program, and the most profitable of our six schools. Major accomplishments:

- Created an entrepreneurship minor and continuing education offerings for startups, and an annual student pitch competition (CU Launch; >3 students startups/year)
- Developed and executed a fundraising strategy, with *Advancement*, to raise over \$12 M for a business school building; led the design of the building, including incubator space

- Worked tirelessly to build more visibility for our brand via high profile events, and partnerships with local companies (e.g. AmFam; Sargento; Ascension; Vertz Marketing)
- Created novel *Master of Product Development* (business/technology) graduate program
- Led a \$1 M buildout/partnership in UW-Milwaukee's *Accelerator Building-Campus*

## **EDUCATION**

Marquette University, Law School J.D., top 25% of class Areas of focus: Intellectual Property & Corporate Law Marquette Intellectual Property Law Review (Editorial Board, 2012 - 2014)		aukee, WI June 2015	
<b>Marquette University, Business School</b> MBA, GPA 3.90, Beta Gamma Sigma (honor society; top 20% of class) 2013	Milw	aukee, WI	June
<b>University of Wisconsin-Madison, Biochemistry Department</b> Milwaukee, WI			
Ph.D. in Biochemistry; Minor in Chemistry Thesis advisor: Dr. W.W. (Mo) Cleland (Member of the National Academy of		June 1990 ces)	
<b>University of Wisconsin-Milwaukee, Chemistry Department</b> B.S. in Chemistry (Biochemistry focus), <i>summa cum laude</i> Research advisor: Dr. David Petering		aukee, WI 1e 1986	
EXPERIENCE:			
<b>Concordia University Wisconsin</b> Mequon, WI			
Vice Provost/Associate Vice President of Research and Innovation 2022 -present		April	
President and Founder of CU Ventures 2021 - present		May	
Director of Technology Transfer present	July	2011-	
Dean and Professor of Business July 2015–April 2022			
Courses: Entrepreneurship; Macroeconomics; Intellectual Property; Regulatory law (food, drug)			
Associate then Professor of Pharmaceutical Sciences 2011 – present		July	

Courses: Pharmacology; Medicinal Chemistry

### **Marquette University Wisconsin**

Milwaukee, WI		
Associate Professor of Organic Chemistry (with tenure)	Aug 2009 – June 2011	
Courses: Organic Chemistry; Biochemistry; Spectroscopy		
Assistant Professor of Organic Chemistry	Aug 2002 – July 2009	
Awarded the Way-Klingler fellowship, based on academic scholarship		

### **Triad Therapeutics**

San Diego, CA Aug 1998 - June 2002

Co-founder and Vice President for Biophysics I cofounded Triad based on intellectual property I developed; I helped raise a Series A of \$12.5 million and Series B of \$30 million in venture capital; ranked a top 10 biotech startup in 2001 by Drug Disc. Today; acquired by Novartis (drug lead for inflammatory diseases) for \$66 million http://www.biospace.com/News/1-reports-sale-of-p38-kinase-inflammation-program/18363220

# La Jolla Pharmaceutical Company

San Diego, CA

Research Scientist August 1995 – June 1998 Awarded the President's Award for discovery (1996)

## **OTHER PROFESSIONAL ACTIVITIES**

Ad hoc Reviewer for the National Institutes of Health (Washington, DC; Bethesda, MD), 2010-present

CEO, Retham Technologies LLC, (diagnostic for heparin-induced thrombocytopenia), June 2017-present

President and CEO of Bridge to Cures, Inc., (a nonprofit), November 2013-present

Investment Committee Member (academic observer), Winnow Fund, Jan 2021-present

Editorial Board Member for PLoS One Life Sciences, 2011-2020

Board member for BioForward (Wisconsin's BIO affiliate), 2013-2016

## **Research & Teaching**

*Classes taught*: New Venture Formation; Entrepreneurship; Intellectual Property; Regulatory Law (esp. Food and Drug); Drug discovery and development; Organic Chemistry; Biochemistry.

*Grants & research*: Over the last 15 years, I have had 5 NIH grants or contracts (3 with me as PI), and secured over <u>\$3 million</u> for research. I regularly serve as an *ad hoc* member of NIH study sections. My h-index is 24 and i-10 index is 42 (Google Citation)

### Active:

- Granting agency: NIH(CTST). Role: collaborator. Project Title: Clinical and Translational Science Award. Overall goal: The major goals of this project are to assist in the commercialization of biomedical innovations in southeast WI. NIH 2UL1TR001436-06; 6/1/2020-5/31/2025.
- 2. Granting agency: NIH(R15). Role: PI. Project Title: Development of ER beta agonists to treat post-menopausal memory decline. Overall goal: To optimize and characterize mechanism of ER beta agonists. NIH R15; 9/1/2018-8/31/2021.

# **Recently Completed:**

- Granting agency: NIH(CTST). Role: collaborator. Project Title: Clinical and Translational Science Award. Overall goal: The major goals of this project are to assist in the commercialization of biomedical innovations in southeast WI. NIH 5UL1TR001436-05; 8/18/2015-3/31/2020
- 2. Granting agency: NSF (I-Corps). Role: PI. Project Title: I-Corps: Vivid Microscopy LLC: Imaging Thiols to Understand Oxidative Stress. Overall goal: Refine the business model for Vivid's product, using the customer discovery process. NSF 1906623; 1/1/2019-9/30/2019

### BAR ADMISSIONS:

Wisconsin (2015)

# **ISSUED PATENTS (NOTE: SAMPLE FROM 10 ISSUED PATENTS):**

- Sem, D.S., "NMR-SOLVE Method for Rapid Identification of Bi-ligand Drug Candidates", December 25<sup>th</sup>, 2001, US 6,333,149.\*
- Sem, D.S., "Method for Detecting Kinase Activity with Thiol Reactive Fluorescent Reagents", Sept. 8, 2009, US 7,585,643.\*\*

\* Based on this technology, I cofounded Triad Therapeutics and helped raise \$12,500,000 in venture capital money (series A). Triad sold its drug leads to Novartis (arthritis; psoriasis).

\*\* Based on this technology, Marquette received a license payment + legal expenses from a biochemical reagent company that licensed this patent.

# SAMPLE PUBLICATIONS (BOOK CHAPTERS AND REVIEWS; FROM OVER 70 PAPERS)

- Hanson, A.M., Perera, K.L.I.S., Kim, J., Pandey, R.K., Sweeney, N., Lu, X., Imhoff, A., Mackinnon, A.C., Wargolet, A.J., Van Hart, R.M., Frick, K.M., Donaldson, W.A., Sem, D.S. (2018) A-C Estrogens as Potent and Selective Estrogen Receptor-beta Agonists (SERBAs) to Enhance Memory Consolidation under Low-estrogen Conditions. *J. Med. Chem.* 61, 4720-4738.\*
- Sem, D.S. (2016) Co-Developing Drugs with Indigenous Communities: Lessons from Peruvian Law and the Ayahuasca Patent Dispute. *Richland Journal of Law & Tech*. 23, 1-56.
- 3. Sem, D.S. (2014) Repurposing finding new uses for old (and patented) drugs: Bridging the "valley of death," to translate academic discovery into new medicines. *Marquette Intellectual Property Law Review*, *18*, 139-166.
- 4. Sem, D.S., ed. (2007) Spectral Techniques in Proteomics, CRC Press.
- 5. Pellecchia, M., Sem, D.S. and Wuthrich\*\*, K. (2002) Nuclear Magnetic Resonance in Drug Discovery. *Nature Reviews Drug Discovery 11*, 211.

\* Based on these studies, we secured two NIH grant (>\$700,000), two patents and formed a company, Estrigenix (<u>www.estrigenix.com</u>), a spinout from Concordia.

http://nobelprize.org/nobel\_prizes/chemistry/laureates/2002/illpres/reading.h tml; Published with SAB member Wüthrich in the year he won the Nobel Prize in Chemistry.