

UW Center for Commercialization (C4C) Strategic Plan 12/2010

Overall Goal

*At UW C4C, we believe we have opportunity to significantly contribute to the University of Washington being increasingly and more consistently recognized as the nation's premier research university, and one of the greatest research universities in the world. We operate with a sense of greater responsibility and self importance than usually found in university technology transfer offices because we believe that our office in a position to affect the stature and relevance of our university to a much greater degree than counterpart units at other leading research universities. The importance and ongoing success of Stanford, MIT, CalTech, and Wisconsin are reinforced by brands and stature established for decades or hundreds of years. *The University of Washington is in a critical period of ascendancy.* UW's research enterprise has grown and increased in capability and prestige as the region and state around us has grown to be a center of technology, commerce, and political leadership. In this still formative stage, C4C can be an outcome determinative differentiating attribute, one that helps vault UW into the highest echelon of academic research institutes. *That level of contribution to achievement of excellence is our overall goal.**

Mission

The mission of the UW Center for Commercialization is to make the University of Washington the best place in the world to do research by providing unparalleled commercialization support to our entrepreneurial researchers.

The C4C mission statement focuses on *researchers*. While our function is rooted in the protection of the University's intellectual property, the success of our commercialization programs relies on successful positive engagements with researchers. Positive interactions with C4C will inspire faculty, staff, and graduate student researchers to increasingly consider translational research and to voluntarily engage with our office. A positive feedback loop will increase the volume and quality of the commercialization opportunities at UW.

To meet our overall goal by executing our mission, we've define four high-level goals:

- 1. Help recruit and retain the best faculty, staff, and graduate student researchers.** We will focus on those in high-demand areas of research, where research outcomes are most likely to be of importance to society.
- 2. Spin-out of more high-value, success-bound start-ups that leverage UW technology.**

3. **Generate revenue that significantly exceeds the cost of C4C operations to contribute to a sustainable business model for the University.** Start by architecting an interim plan for sustaining UW C4C while building a practice and pipeline of IP that will meet our longer-term revenue objective. Establish an understanding of “total contribution” (e.g. gifts from founders as well as licensing revenue).
4. **Raise the visible impact of UW discoveries regionally, at the state level, and globally.**

A detailed discussion for each of these goals, and the tactics we are using to achieve them is provided below. **This is a 4-year vision**, to reflect the funding horizon under which C4C is presently working.

Note: Ordinarily, we might not place emphasize revenue, but in the current fiscal environment, the university must focus on generating sufficient revenue to support its operations and initiatives. Without adequate funding, UW will not be the best anything. Commercialization is one of the few identified potential new sources of badly-needed funding.

1. **Help recruit and retain the best faculty, staff, and graduate student researchers.** We will focus on those in high-demand areas of research, where research outcomes are most likely to be of importance to society.

*The quality of UW researchers drives the quality of the education UW provides and its impact on society. Leading researchers in high demand areas, especially young researchers in these fields, increasingly and more consciously seek not only scientific distinction but also commercial success. UW competes with industry and private universities to attract and retain the best faculty, staff, and graduate students. UW can increase its success in this competition if it can leverage a branded, world-renowned first-rate commercialization entity (e.g. MIT’s Deshpande Center). C4C is committed to providing the University’s faculty, staff, and student researchers with unprecedented and **unparalleled** commercialization support, and to **promoting** its results.*

- a) Earn the *deserved reputation* for the best programs, services, attitude, turn-around times, entrepreneurship-supportive policies, problem resolution, and good outcomes.
 - i. Focus on UW researchers, letting their needs shape our programs and processes. Coordinate commercialization strategy with other parts of the researcher-centric Research Roadmap initiative and units such as Office of Research.
 - ii. Deliver prominent consistent messaging about our commitment to service and impact. The messaging will be consistent across our website, presentations, collateral, editorials, newsletters, letters, and

- personal interactions. Communicate and collaborate with deans, department chairs, and university leadership.
- iii. Routinely solicit feedback from researchers on our performance. Learn from problematic situations to make continuous improvements.
 - b) Provide resources and expertise across *a wide range of distribution models* and areas of research to support the breadth and diversity of UW research. Beyond the traditional model of licensing into existing companies, we will provide comprehensive support for UW spin-outs, investing the unprecedented resources it will take to ensure their success (see Goal #2 below). Continue our leadership in creative, modern commercialization models including distribution through online subscription or purchase, broad nonexclusive licensing programs, app stores, and open source/consortium agreements.
 - c) *Proactive engagement*. Get involved at the onset of broad research programs. Be visible, present, and accessible to the research community, academy leadership, and staff organizations.
 - d) Facilitate inter-institutional partnering, to leverage commercialization resources and to support the commercialization of collaborative research projects. For global health, this partnering is an essential component of the 2Y2D Global Support project. Partner with WBBA, ITHS, WTIA, and WA Department of Commerce to coordinate the region's resources to achieve maximum results. UW will not be accused of "going it alone."
 - e) Leverage the scale of C4C's office to employ *talented specialists* to provide our services to researchers. The culture, energy, and mission of C4C enable us to attract top talent, winning "more experience than we should be able to get." Our technology managers now devote their full energies to researcher relationships, support, and outreach. Their work is complemented by new Intellectual Property Management and New Ventures teams that includes senior life science intellectual property expertise, patent agents, veteran venture capitalists, industry relations officers, an SBIR grant writer, and a copyright and trademark manager. The capabilities of our permanent staff are augmented through well-managed, large-scale programs that recruit outside talent to help implement our programs. Our Entrepreneurs-in-Residence brings enormous talent and expertise to assist in identifying and realizing opportunities. MBA students and Law School students make major contributions through their for-credit participation in C4C's Commercialization Grant Fund program and well-designed internships.

2. Spin-out significantly more high-value start-ups

Technology transfers offices traditionally focus on less resource-intensive, less economically risky licensing of technology to (often large, and out-of-state) existing companies. C4C focuses resources on attempting to increase the number of companies spinning-out of UW around UW innovations/IP. We see start-ups as having a greater potential for creating revenue, good will, and reputational gain UW and WA. They can generate licensing revenue – if acquired, nearer term than do royalties (UW

*receives equity as a condition of license), create jobs, enhance UW's reputation (think of the benefit to Stanford of being known to have launched Google), and generate **many other benefits to UW – which is why we encourage C4C results to be analyzed** from a “total contribution” perspective. C4C's contribution includes gifts to UW by successful faculty founders or investors, and increased sponsorship of research – by industry or UW start-ups, and increased political support resulting from UW generating jobs that stay in WA. We see these benefits coming from “lifestyle” businesses as well as venture capital backed start-ups with the potential to change the world. C4C's focus on increasing the number and quality of UW start-ups through a variety of initiatives:*

- a) Increase the amount of “deal flow” by proactively working with departments and researchers to identify technology with commercial potential *earlier* in the development cycle.
- b) Bring in senior business professionals, both as staff members (New Ventures Directors, Technology Managers, Industry Relations Officers) and as advisors (Entrepreneurs-in-Residence, mentors) to provide business development expertise for emerging companies.
- c) New Ventures operations executed according to a professional, , programmatic approach: with defined methods for carrying out the systematized steps toward spin-out:
 - i. Opportunity vetting
 - ii. Market evaluation
 - iii. Intellectual property protection
 - iv. Regulatory and clinical strategy, where appropriate
 - v. Initial start-up leadership team identification/recruiting
 - vi. Company formation and incorporation (venture-backable entrepreneurs whose stature and ability is commensurate with that of our inventive researchers.
 - vii. Capital structure and ability to finance, identifying investors
 - viii. Assistance with business plans and pitches for investors
- d) Provide access to early-stage investment capital, both within C4C and via outside partnerships and relationships, including:
 - i. C4C Commercialization Gap Fund
 - ii. SBIR grant-writing assistance
 - iii. External visibility via the WBBA, WTIA, and Technology Alliance Innovation Showcase (some of which we've founded)
 - iv. Partnerships with local Angel funding groups (some of which we've founded, e.g. WINGS – an angel group dedicated to investing in medical device spin-outs)
 - v. Access to both local and national Venture Capital firms
 - vi. **UW Husky Fund – a major C4C initiative**

3. Establish a sustainable model for UW C4C, covering C4C operations and providing revenues to the University.

Unfortunately, the financial model that underpins almost all tech transfer offices around the country is based on the “big hit”. The relatively few offices that are truly self-sustaining typically have a patent on a valuable biotech or drug-related patent and the tech transfer fee/tax on the royalties it generates constitute 90%+ of the offices budget support. UW C4C is in the final four years of its big hit: the Ben Hall patents under management by the WRF.

Until 2014, when the Hall patents expire, UW C4C will continue to be a “self-sustaining unit.” Most of UW’s royalties from the Hall patents have gone to University units where they support research and programs. For example, in FY09 \$20.9M went to the Provost office, \$6.4M went to various departments, \$2.1M went to colleges/schools, and an additional \$1.3M went to sustain specific projects by PI’s under the copyright policy. After the Hall patents expire, unless another “big hit” is realized, gross revenue from royalties is predicted to decrease from ~\$32M in FY2011 to ~6M. Two years ago the then-Provost and then Vice Provost – Research agreed to place the Provost office portion of the Hall royalties in a reserve account to be used in largest part for future funding of UW C4C, and last year agreed that C4C could begin drawing on that account now in an effort to increase activities to a level that will accomplish C4C goals including generating revenue so that outside support is not needed.

We are investing now in initiatives which will drive revenue and diversify its sources. In pursuit of a sustainable business model, C4C is also working hard to drive down expenses and accomplish more with every budget dollar.

- a) Increased, earlier proceeds from equity liquidations. The emphasis on higher volume and higher quality start-up companies should lead to more and more profitable equity liquidations. The timing and magnitude of these cannot be predicted.
- b) Increase the number of license agreements, and craft licensing *terms more favorable to UW*. Terms should reflect the contribution of the UW “Platform,” which includes federal-funding, recruitment of grad students, and infrastructure not recognized as contributing to commercialization success. The staff specialization described above enables our technology managers to focus on business development. This will increase commercialization activity, leading to more licensing revenue. We continue to benchmark our licensing terms with those of other universities.
- c) Effectively manage and invest legal IP expenses. IP protection expenses (preparation of patent applications by outside counsel, maintenance fees to PTO) are C4C’s largest expense –\$5M+/year.

- i. Over the past year we dramatically reduced the number of law firms we use. We now require our law firms to conform to agreed-upon patent prosecution billing guidelines that set fee caps for legal IP expenses. We've worked with this manageable number of firms to build more effective relationships and improve quality of legal work (e.g. claim construction).
 - ii. In-house patent agents conduct patent filings, patent prosecution, and patent landscape reviews/mapping of large patent portfolios to determine scope and value. The patent agents actively manage external legal counsel, including the careful review of billing.
 - iii. Major IP decisions are made by an Intellectual Property Forum. Decisions about filing and conversion are made collectively by experienced technology managers and patent agents. There are established criteria for proceeding, especially with costly work to respond to PTO Office Actions.
- d) Proposing that a portion of industry-sponsored grant overhead go to C4C. This is the case elsewhere, and it helps align the incentives of C4C with those of OSP on industry engagement. Look for new model of C4C funding.
- e) Raise an endowment for C4C.
- f) Develop program support from the state.
- i. C4C has been successful in getting state money for our Entrepreneur-in-Residence (EIR) program, which is paying for this activity.
 - ii. C4C successfully led the application for \$500K from the state for a medical device IPZ in Bothell, which could help UW life science start-ups in the future.
- g) Pursue state, federal, and foundation grants.
- i. C4C has recently been successful in receiving grant awards from the state for commercialization related programs and is actively working to get federal grants for similar programs.
 - ii. Applications have also been submitted to the Life Sciences Discovery Fund, and we will look to the Kaufmann Foundation and other foundations for support for some of our initiatives.

4. Increase the impact of UW discoveries regionally, at the state level, and globally. Raise visibility of the same.

- a) **Break-through innovations that change people's lives or save them.**
Universities that attract great researchers and give them support generate break-through innovations. Doing so, and being known for it, contributes to being recognized as a top research university. All of our work is intended to drive the probability of such breakthroughs reaching the public. Our *proactive* efforts to introduce researchers to their industry counterparts are intended to lead researchers to design research programs around industry and society needs.

We work to create not only a pipeline of innovation, but a pipeline of relevant innovation. Further along the commercialization process, we are dedicated to increasing the access to early-stage capital that is critical to getting relevant innovations across the “valley of death” so they can go from “bench to bedside.”

- b) **Visibility.** *The University is continually challenged to **demonstrate** its impact – impact regionally, within the state, nationally, and globally. These requests often come from bodies that influence funding or policy decisions. The externally facing offices of the University need to provide integrated responses to these requests; people outside the University view the UW as a whole. Messaging is critical to expanding broad support for the University. Our researchers communicate extremely well within the academic communities; we need to carry their message and achievements to other audiences. C4C is working with OSP, Advancement, UW Marketing, External Affairs, and the Colleges to improve our collective marketing to diverse audiences. We will partner on stories about UW:*
- i. Economic impact: company starts, job creation, industry engagements.
 - ii. Major scientific breakthroughs
 - iii. Researchers, projects, and outcomes in **strategic sectors**: e.g. Clean Tech, Global Health.