

DRAFT CHARTER

The Center for Biotechnology Innovation and Training (CBIT)

I. General Purpose of CBIT

The Center for Biotechnology Innovation and Training (CBIT) will serve to increase the number of biotechnology-trained STEM graduates for the growing biotechnology industry in Bothell and the greater Puget Sound region. CBIT will also facilitate collaborative biotechnology research for faculty and students, with industry. CBIT will house a university-wide multidisciplinary core of UWB faculty with expertise in multiple areas of biotechnology, such as chemistry, biology, engineering, physics, computer science, health studies, business, and policy studies. Affiliate faculty from outside UWB, especially from the local biotech industry, will become an integral part of the teaching and training core. UWB students, including those traditionally underrepresented in STEM, will receive specialized hands-on training in biotechnology skill sets required by regional and national industry for both entry-level and advanced jobs. An eventual biotechnology certification program is envisioned.

II. Congruence with Role and Mission of UWB Campus

CBIT aligns with the University's Mission and Values in the following ways:

1. Transformational Education CBIT will provide students with non-traditional, cutting edge, and real-world relevant learning experiences through: (i) active, hands-on learning in collaboration with industry; (ii) participation in industry-derived projects that will foster critical thinking skills; (iii) participation of industry professionals in mentoring students; (iv) professional development into the biotechnology industry.

2. Cross-Disciplinary Scholarship CBIT will house a university-wide consortium of faculty from such areas as engineering, computer science and software engineering, biology, physical sciences, health studies, business, and policy studies. The biotechnology field is inherently broad and encompasses all areas represented by STEM, public health, and business. Many UWB faculty are already engaged in cross-disciplinary research. Housing faculty from different areas of STEM with CBIT as a catalyst will foster additional multi-disciplinary scholarship within UWB and with industry. The Center also facilitates the vision of the School of STEM to be the indispensable partner in the region.

3. Strengthen Diversity and Equity Inclusive culture is a core value at UWB. CBIT will recruit students from underrepresented groups (as outlined by NIH and NSF) into curriculum and research training, and ultimately into directed paid internships. Personal recruitment efforts by faculty will be employed to ensure the number of graduates in underrepresented groups is significantly increased through the CBIT program. Additionally, a diverse faculty from UWB and industry will teach the curriculum and provide training. Funding has been allocated for our campus Office of Diversity, Equity & Inclusion which will provide workshops, content and training for our students and faculty.

4. Enhance Community and Campus Engagement CBIT will increase general awareness of biotechnology on campus. As importantly, the engagement of the local industry with UWB will increase through collaborative teaching and research. Periodic seminars and public lectures will ensure the community can be engaged.

III. Institutional Capability for Implementing the Unit

The Center will possess the following special capabilities for supporting the general purpose (mission) of the Center. (i) a newly-developed biotechnology curriculum integrating DEI materials and perspectives and culminating in internships and eventual industry-driven certifications; (ii) dedicated funding for underrepresented students for faculty-led research training and industry internships; (iii) cutting-edge collaborative research projects led by UWB research faculty and students with area industry; (iv) exploratory seed funds to promote and increase biotechnology research at UWB; (v) center management by a professor of practice (CBIT director) that will secure external funds and manage operations; and (vi) a biotechnology resource center which will including teaching and research resources and instrumentation.

The Center will have the opportunity to leverage existing research and teaching resources in the School of STEM as curriculum is developed and the research capacity of the Center grows. Center-affiliated faculty will have access to instrumentation and facilities including an SEM, NMR, chromatography and spectrophotometry equipment, clean rooms, the Collaboratory, and laboratory spaces with current faculty. Some of these resources will be available on a fee-for-services basis (e.g., SEM, NMR).

The CBIT will work closely with the Office of Research for research grant submissions and contracts for services (e.g., industry-sponsored research). The standard F&A rates will apply to provide appropriate revenue in support of those services. The Office of Advancement will be consulted, in coordination with the Dean, for corporate sponsorships and major gifts. Gift funds will be accepted with the standard 5% advancement tax.

The CBIT will also work closely with Career Services to support internship and other opportunities for students. Funding will be provided for consultation (e.g., professional development workshops for students, career fair coordination, shared curriculum) in Year 1 and potential additional staff in Year 2 and beyond. Funding will also be provided to the Office of Diversity, Equity, and Inclusion to support DEI programming and equity training for students, faculty, and staff.

At this time there is no physical infrastructure planned for the CBIT beyond the existing spaces allocated to the School of STEM. Appropriate workstations will be provided for all CBIT employees in consultation with the Dean and the Director of Physical Planning and Space Management. Off-campus leased spaces are possible in the future depending on additional funding in collaboration with industry partners in Canyon Park and the Innovation Partnership Zone in the Bothell-Woodinville corridor.

IV. Administrative Structure and Operating Policies

A. Administrative Structure. The Center for Biotechnology Innovation and Training will be housed and administered in the School of STEM at the University of Washington Bothell. The Dean, in consultation with the CBIT steering committee, will hire a Professor of Practice as the Founding CBIT Director for the first three years, with review and reappointments thereafter. The CBIT Director will be funded (salary) 100% by the UWB Investment Funds and the School of STEM for FY23 and FY24. Thereafter, CBIT will provide 50% of the Directors salary. Up to an additional 50% of the Director's salary can be augmented with external grants that are contingent on successful grant submission and approvals. This timeframe may be extended pending additional Federal funding.

The Director will be supported in Year 1 by a Program Coordinator on a project appointment and Research Technician ¹(timing dependent on approval of the Center). The Program Coordinator will provide general administrative and fiscal support; the Research Technician will support industry outreach (in consultation with Career Services; funding provided) for student-faculty-industry research, internship/capstone opportunities, and micro-credentialing. Additional Career Services and technical support staff support are planned beginning in Years 2 and 3, respectively, with increasing support from research and Federal center grants over time.

B. Responsibilities of the CBIT Director. The Director is responsible for overall leadership for the Center, including:

- Procuring grant funding to support the CBIT mission
- Establishing partnerships with local industry
- Working in consult with the steering committee
- Managing the CBIT budget, consistent with university and campus policies and the provisions of this Charter
- Managing technical and administrative staff in the CBIT
- Reviewing the performance of and recommending all employees in the CBIT consistent with university employment policies.
- Managing CBIT operations consistent with University policies
- Developing plans and strategies to achieve the CBIT mission
- Assessing the overall work of CBIT
- Preparing an annual report to the Dean of the School of STEM at the end of each fiscal year.

C. Major CBIT Activities. The Center's authorized activities include, but are not limited to:

1. *Conducting externally-funded projects that are linked to the mission of CBIT.*
The Center will pursue grants and contracts associated with its mission and goals
2. *Fundraising.*

¹ Staff HR and working titles will be confirmed in consultation with OE-HR prior to ad placement.

Gifts to support the Center may be solicited following the policies of the University of Washington Foundation and in collaboration with the Dean and UW Bothell Office of Advancement.

3. *Offering fee-based courses.*
Such courses will conform with campus and University policies on fee-based programs and will be offered in conjunction with approved continuing education programs and meet the mission and goals of the Center.
4. *Offering courses for normal UWB credit in conjunction with any of the academic programs at UW or UWB.*
All courses will be approved and scheduled following program and faculty governance procedures.
5. *Developing certification programs associated with the mission and goals of the Center.*
6. *Professional development and mentoring for Center-affiliated tenure-track and research faculty around building a program of scholarship.*
7. *Facilitating mentoring, capstones, and other high-impact practices that improve access and outcomes of the educational pipeline.*

D. The CBIT Structure. The internal structure of the Center will depend on the extent of its funded activities. The Center structure will include:

- i. CBIT Director
- ii. CBIT Steering Committee. The steering committee will consist of five faculty members who are Affiliate members of the Center. They will be appointed by the Dean of the School of STEM with a 2-yr appointment pending that the appointee meets at least one of the following eligibility criteria:
 - i. *is associated with teaching module(s) for the biotechnology curriculum*
 - ii. *has taught in the biotechnology curriculum in the past 2 years*
 - iii. *has secured external funding for CBIT*
 - iv. *is leading student research associated with CBIT mission*

The duties of the CBIT Steering Committee include:

 - i. *approve funding for student internships and faculty-led research*
 - ii. *provide input and review contents of course curriculum*
 - iii. *review and approve certification process*
 - iv. *work in conjunction with CBIT director in setting goals and mission*
- iii. Center Affiliates. The CBIT director shall establish criteria for recommending individuals as CBIT Affiliates and will be responsible for approving these appointments along with the steering committee. The Center Affiliates may be employees of the University of Washington or collaborators with the Center whose primary affiliation is elsewhere. Any appointments will be in consultation with the Dean and relevant Division Chairs and follow the provisions of the UW Faculty Code.
- iv. Advisory Board – Once the CBIT is formally established and the Director hired, a CBIT Advisory Board will be established to provide continual industry feedback

and support, facilitate CBIT strategic planning, develop an Intellectual Property plan in consultation with UW CoMotion, and promote the long-term sustainability of the Center. The advisory board may intersect/overlap with both the CBIT Steering Committee and the School of STEM Industry Advisory Board. The CBIT Director and Dean of the School of STEM will sit on the CBIT Advisory Board as ex officio.

E. Charter Revisions. The Institute's Charter and policies that it may adopt to implement the Charter will be reviewed at least every five years in conjunction with UW Bothell's procedures for reauthorizing current research centers.

V. Fiscal Control

The CBIT will operate with fiscal controls consistent with general policies for University research units and any special requirements associated with external grants and contracts. The CBIT director will have primary oversight of all CBIT budgets, including external and gift funds for the Center (e.g., NIH and NSF Center grants). The Director will work in consultation with the Dean to draft policies and procedures for the distribution of RCR funds generated by CBIT grant activity, as well as other appropriate policies and procedures for the Center. The Program Coordinator, in consultation with the School of STEM Administrator, will provide support for the CBIT Director to ensure fiscal compliance in accordance with university policies, funding agency requirements, and agreements associated with gift funds. The CBIT Director will submit annual reports to the Dean of the School of STEM that report on the fiscal health, research and major activities of the Center, and actualization of yearly goals.

VI. Resource Implications and Support Commitments

The CBIT has received preliminary funding from the UWB Chancellor's Investment fund and matching funds from the School of STEM (\$900k). An additional \$750k is pending from a Federal appropriation. The first five years of CBIT revenue and expenses (Appendix I) includes additional planned revenue from grants, corporate sponsorships (see business plan), and planned revenue-generating auxiliary operations (e.g., equipment use fees, fee-based curriculum). The five-year plan does not include the pending Federal funding; if received this appropriation would fund the CBIT for an additional 12-18 months depending on other revenue. The Dean of the School of STEM will also work collaboratively with the Director, the Chancellor's Office, and our legislative liaison to pursue additional multi-year provisos from the State of Washington to support ongoing CBIT operations.

In the long-term the Director will be responsible for the self-sustaining fiscal support of the CBIT through a diverse portfolio of funding streams. This will include submission of 2-3 large Federal and/or foundation proposals per year (e.g., [IUCRC](#), [NIH P-series](#), Moore Foundation, Pew Charitable Trust). In the first year of establishing the Center the School of STEM has committed \$25k from the School's Research Cost recovery (RCR) allocation to support grant-related activities. In year two and beyond the Center will generate independent RCR funding from research and other grants, at a rate of 40% of the

RCR returned to UW Bothell. The indirect rates for research grants vary according to Federal and funder regulations and policies.

The Center will seek to fund a minimum of **three new undergraduate students and their projects each year** with the aim of **recruiting at least one historically underrepresented student each year**. This will include funding for internships, peer facilitators, capstone projects, and the Research Accelerator Scholarship (beginning in year 4).

The CBIT Director, in consultation with the Dean of the School of STEM and the Steering Committee, will submit an annual report to the Office of Research, the Vice Chancellor for Academic Affairs, and the Office of the Chancellor at the end of each fiscal year, beginning in FY22 with a report on progress in establishing the CBIT and expenditures under the Chancellor's Investment Fund award.

VII. Impact on Programs, Curricula, and Other Campus Services

The School of STEM will secure office space sufficient to support core operations of the Center, including office space for the CBIT Director and support staff. Location of the space is TBD and will be coordinated with the Dean and UWB Facilities. University administrative services that are normally available to other academic and research units to support faculty and research activities will also be required. (e.g., services of the Office of Research for grant submission and compliance, services to approve subcontracts and HR needs, and others. Space and other administrative needs will be assessed after each five-year certification period.

APPENDIX I

Five-Year Revenue and Expense Plan

	FY22	FY23	Years 1-2 Total	FY24	FY25	FY26	Years 3-5 total	Years 1-5 total
Funding								
Internal revenue								
UWB Investment Funds	125,000	150,000	275,000	200,000	0	0	200,000	\$475,000
School of STEM Matching Funds	80,000	150,000	230,000	65,000	135,000	20,000	220,000	\$450,000
Research Cost Recovery (Grant generated)	0	25,000	25,000	60,000	66,000	72,600	198,600	223,600
School of STEM net revenue allocation	50,000	50,000	100,000	50,000	50,000	50,000	150,000	250,000
External revenue								
Corporate Sponsorships (Tiers)	0	25,000	25,000	35,000	55,000	85,000	175,000	200,000
Generated from Industry Sponsored Projects	0	2,000	2,000	10,000	20,000	30,000	60,000	62,000
Industry-Sponsored Equity-Based Internships	0	20,000	20,000	30,000	30,000	50,000	110,000	130,000
Certifications (Module)	0	0	0	22,500	45,000	45,000	112,500	112,500
Certifications (Assessment Only)	0	0	0	5,000	5,000	5,000	15,000	15,000
Equipment revenue	0	0	0	0	5,000	10,000	15,000	15,000
Gifts	0	20,000	20,000	50,000	50,000	50,000	150,000	170,000
Infrastructure Grants / Gov't Provisos	0	0	0	50,000	150,000	250,000	450,000	450,000
TOTAL REVENUE	\$ 255,000	\$ 442,000	\$ 697,000	\$ 577,500	\$ 611,000	\$ 667,600	\$ 1,856,100	\$ 2,553,100
Expenditures								
Faculty								
Faculty course releases (number of)	6	10	16	10	10	10	30	46
Faculty course releases (cost)	57,000	125,000	182,000	125,000	125,000	125,000	375,000	557,000
Professor of Practice - Center Director	0	150,000	150,000	150,000	150,000	150,000	450,000	600,000
Industry Professional Instructors	0	0	0	15,000	15,000	15,000	45,000	45,000
SUB TOTAL	\$ 57,000	\$ 275,000	\$ 332,000	\$ 290,000	\$ 290,000	\$ 290,000	\$ 870,000	\$ 1,202,000
Staff								
Center administrative staff	60,000	60,000	120,000	60,000	60,000	60,000	180,000	300,000
Research Technician	40,000	80,000	120,000	80,000	80,000	80,000	240,000	360,000
Research Technician #2	0	0	0	40,000	40,000	40,000	120,000	120,000
UWB Career Center	10,000	15,000	25,000	15,000	15,000	15,000	45,000	70,000
Office of Diversity and Equity	25,000	12,500	37,500	12,500	12,500	12,500	37,500	75,000
SUB TOTAL	\$ 75,000	\$ 107,500	\$ 182,500	\$ 147,500	\$ 147,500	\$ 147,500	\$ 442,500	\$ 625,000
Students								
UG to support under represented students (interns)	0	20,000	20,000	20,000	20,000	20,000	60,000	80,000
UG to support under represented students (project leads)		10,000	10,000	20,000	20,000	20,000	60,000	70,000
Research Accelerator Student Scholarships	0	0	0	0	10,000	10,000	20,000	20,000
SUB TOTAL	\$ -	\$ 30,000	\$ 30,000	\$ 40,000	\$ 50,000	\$ 50,000	\$ 140,000	\$ 170,000
Operational Funds								
Class Consumables	10,000	10,000	20,000	15,000	15,000	15,000	45,000	65,000
Lab Instruments	10,000	10,000	20,000	10,000	10,000	10,000	30,000	50,000
Equipment maintenance & upkeep	0	0	0	0	5,000	10,000	15,000	15,000
Speaker Series	0	3,000	3,000	3,000	3,000	3,000	9,000	12,000
Marketing, Communications, Outreach, Events	5,000	5,000	10,000	10,000	15,000	15,000	40,000	50,000
SUB TOTAL	\$ 25,000	\$ 28,000	\$ 53,000	\$ 38,000	\$ 48,000	\$ 53,000	\$ 139,000	\$ 192,000
TOTAL REVENUE	\$ 255,000	\$ 442,000	\$ 697,000	\$ 577,500	\$ 611,000	\$ 667,600	\$ 1,856,100	\$ 2,553,100
TOTAL EXPENDITURES	\$ 157,000	\$ 440,500	\$ 597,500	\$ 515,500	\$ 535,500	\$ 540,500	\$ 1,591,500	\$ 2,189,000
NET	\$ 98,000	\$ 99,500	\$ 197,500	\$ 62,000	\$ 75,500	\$ 127,100	\$ 264,600	\$ 462,100