

Progress Report on UPEI Strategic Research Plan (SRP) Marva Sweeney-Nixon, Associate VP Research and Dean of Graduate Studies November 6, 2024

Overview

In November 2022, UPEI via the Office of the Vice-President, Academic and Research, launched a "Strategic Research Plan (2023- 2028): Roadmap to Research Excellence". The plan identifies the vision, priorities and action plan to build upon UPEI's reputation of research excellence.

"Among the key objectives, UPEI will leverage its existing strengths and support new emerging areas of research. It will promote EDI within these research programs, while advancing the principles of reconciliation as outlined in the TRC Calls to Action. The research plan fosters multidisciplinary, interdisciplinary and transdisciplinary work that crosses the traditional boundaries of disciplines. Furthermore, it aims to recognize and celebrate the successes of researchers through awards and communications of success stories".

In the SRP, the vision and mission of the University's research mandate were described as follows.

Vision

The University of Prince Edward Island will be one of the most distinguished research universities nationally, when compared with other universities of comparable size, while fulfilling its special obligation to PEI as the only university in the province. In pursuing this objective, UPEI will foster the principles of equity, diversity, inclusion, and Indigenous reconciliation (EDIIR).

Mission

UPEI is dedicated to the highest quality of intellectual, scholarly and creative endeavors that focus on the discovery, integration, interpretation and application of new knowledge. This research aims to make a positive impact on society, locally, nationally and internationally.

UPEI aims to cultivate a climate of research excellence that enables leading-edge research to flourish. The SRP identified five signature areas of existing research excellence at the University: 1) Humanity, Justice and Organizations; 2) Environmental Stewardship; 3) Healthy Communities; 4) Healthy Animals; and 5) Sustainable Development. In addition, it identified several other emerging priority areas of research at the University.

Beyond these specific areas, UPEI supports the full range of research programs across the University, including those which may not fall directly within one of the identified signature areas. The research activities often involve collaborative team-building that benefits UPEI as a whole, not only in research programs, but also in the development of academic programs that span multiple disciplines.

UPEI researchers are also actively engaged in the scholarship of teaching and learning. Through the Teaching and Learning Centre, and the Scholarship of Teaching and Learning Grant (SoTL) program, faculty members in various disciplines are bringing research into the classroom through innovative teaching pedagogy.

This report provides an update on progress in the SRP by reporting on each of the goals, action items, and overall objectives. It also provides an opportunity to receive feedback and identify new opportunities, challenges to be addressed, and areas of improvement. Selected performance indicators will be presented. The progress report is made broadly available for feedback on progress in the plan.

Strategic Objectives

The Strategic Research Plan had 3 main pillars involving research excellence, talent development, and community outreach.

1. Fostering and Celebrating Research Excellence.

This is the biggest element of the SRP, and includes increasing research capacity (1.1), promoting an inclusive climate of research excellence that effectively supports, values and celebrates the achievements of researchers (1.2), and raising the profile and visibility of research excellence at UPEI. There has been good progress to date on some of the goals in this pillar. For example, to increase grant success rates, the Office of Research Services (ORS) is providing funding for grant writers and SSHRC grant preparation. Many new EDI resources have been developed. Progress towards increased communications, profile and visibility is limited as there have been constraints with available resources and time, but plans are underway for the next year. More details are presented in Tables 1A, B and C below.

2. <u>Developing Talent for Impactful Research</u>.

This pillar includes expanding the opportunities and participation of undergraduate students in research (2.1) and strengthening graduate programs to recruit and retain top graduate students (2.2). There has been good progress on the goals in this pillar at the graduate student level, made possible in part due to increased financial resources. For example, a Graduate Programs Officer position was created, and a new graduate fellowship program was announced. More details are in Table 2 below.

3. Strengthening Outreach and Partnerships.

The main goal of this pillar is to expand engagement among the internal University community and external partnerships that contribute to research and strengthen academic programs. There has been very good progress on the goals in this pillar, e.g. campus events such as Research Breakfasts and Research on Tap have resumed, and we hosted several events with 30+ UPEI researchers and over 100 companies. Details are shown in Table 3 below.

Progress Towards Goals

The goals and objectives in UPEI's 5-year Strategic Research Plan, and progress during the first 18 months, are summarized in the Tables below.

UPEI Strategic Research Plan (2023-2028): Update on progress, November 2024

<u>Table 1A</u>. Fostering and Celebrating Research Excellence

1.1 Increase research capacity with a focus on strategic areas of strength in Humans, Environment and Health.

Health.					
#	Goals/Objectives Progress		Comments		
1.1.1	Increase the University's participation and success rates in grant competitions and number of research chairs.	 In Progress Funded 1) grant writers/editors for Tri-Agency applications, 2) EDI training for grants, 3) internal grants for SSHRC applications. Enhanced funding for Human Health from Levesque funds Canada Research Chairs (CRCs): 2 searches were started, 2 new CRCs arrived, 1 renewal, 1 submitted for renewal several Industry Research Chairs were pitched and the Faculty of Sustainable Design Engineering recruited a Cavendish Farms Research Chair 	A University Research Excellence Chair program was developed - MOU to be done		
1.1.2	Hold regular theme-based forums to foster collaboration among interdisciplinary, multidisciplinary and transdisciplinary research teams.	In Progress We hosted an interdisciplinary climate change session for researchers applying for an NFRF grant (March 2023). See 3.2 for similar activities.	More events being planned annually		
1.1.3	Develop a pool of funds to hire sessional instructors for course releases to support research programs with thesisbased graduate students (to be allocated through a call for proposals).	Partially Completed A new course release program for faculty who obtain research grants is in the new UPEIFA Collective Agreement (Expiry 2026).	This program is not a call for proposals, and based on grants received rather than graduate students.		
1.1.4	Establish appropriate measures of research impact to track key performance indicators of research intensiveness at the University	Completed 1) The Office of Commercialization, Innovation and Industry (OCII) has metrics for partnerships and commercialization- these are used to report to funders such as Springboard Atlantic; 2) ORS has Research Impact Metrics used to report to MacLean's Magazine			

<u>Table 1A</u> . Fostering and Celebrating Research Excellence (cont'd)
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#	Goals/Objectives	Progress	Comments
1.1.5	Ensure there are sufficient library collections and research tools to support new research areas	In Progress *Funds from graduate tuition to the Robertson Library have been dedicated to improving library collections. The Robertson Library added resources to support the new medical program which will also support research in other health programs: Psychology Doctorate (PsyD), Paramedicine, Nursing, Master of Applied Health Services Research (MAHSR) and Doctor of Applied Health (Dr AH). *ACENET, an Atlantic Canadian notfor-profit that provides access to digital to researchers and industry in the region, funded a research consultant to be hired at UPEI and training resources in several research areas.	There is continuing need for additional resources to meet the annual increases in subscription costs. University-wide Software licenses e.g. for NVIVO would provide necessary support for researchers

UPEI Strategic Research Plan (2023-2028): Update on progress, November 2024 <u>Table 1B</u>. Fostering and Celebrating Research Excellence

1.2 Promote an inclusive climate of research excellence that effectively supports, values and celebrates the achievements of researchers.

#	Goals/Objectives	Progress	Comments	
1.2.1	Embrace principles of EDI and Indigenous reconciliation as core values of research excellence. ORS led a session to help write EDI statements for grants; The Centre for Health & Community Research (CHCR) hired a role focused on community-based inclusive research; The Department of EDI provided a GBA+ training session for the Research Services team; EDIIR is the focus of the 2 new CRG searches.		ORS and Faculty of Graduate Studies are working with the Department of EDI and Human Rights to develop additional training and resources for researchers.	
1.2.2	Celebrate research awards for faculty members, undergraduate and graduate students across UPEI.	In progress Campus Events and Campus Connector emails have celebrated some award winners	Need to work with UPEI Communications and Marketing to enhance research communications or ideally get a dedicated position (0.5, merge with 1.2.3) to enhance celebratory stories.	
1.2.3	Establish a committee that seeks and nominates candidates for national and international awards.	Not Started Yet	Research Advisory Committee (RAC) has discussed initiating this objective in Years 2-3.	
1.2.4	Restructure and expand Faculty of Graduate Studies to increase admissions, consistency of regulations, enhance graduate student support services, and reduce administrative workloads and duplication in units.	In Progress New funds created a position, Graduate Programs Officer (GPO), who is developing admissions processes, renewal of Graduate Academic Regulations, leading student focused PD and enrichment programming		
1.2.5	Provide training resources to researchers engaged in partnerships with Indigenous communities.	Not Started Yet	This should start in Years 2-3 in cooperation with the Indigenous Advisor to VPAR	

UPEI Strategic Research Plan (2023-2028): Update on progress, November 2024 <u>Table 1C</u>. Fostering and Celebrating Research Excellence

1.3 Raise the profile and visibility of research excellence at the University, nationally and internationally.

#	Goals/Objectives	Progress	Comments
1.3.1	Expand methods for gathering and conveying information on research activities so that achievements are disseminated broadly by the University.	Not Started Yet	Need to work with UPEI Communications and Marketing or get a dedicated position
1.3.2	Enhance UPEI research accomplishments which are featured in local, national and international media venues.	In Progress Monthly features in 2024 included: January. Pat Murphy, New CCS emerging Scholar February. Marya Ahmed's new company March. Yulin Hu's CFI award April. CRC announcements May. Xander Wang's CREATE June. NSERC funding August. A. Farooque's SARI grant October. Margie Burns' SSHRC Partnership Engage grant	
1.3.3	Hold public lecture series including broader participation from the general public.	Good Progress Research on Tap sessions were brought back with 2 held in 2023/24. Research Breakfast presentation series started, 2 held in 2023/24. UPEI researchers participated in the Seniors College "Sharing Our Research"	and others planned
1.3.4	Encourage timely submissions to Island Schola	Not Started	
1.3.5	Develop Resources to increase open access for peer- reviewed publications.	In Progress Robertson Library joined the Canadian Research Knowledge Network so UPEI authors can access reduced publishing fees and get published with an open/Creative Commons (CC) license - 797 records in Island Scholar have a CC license	Ideally UPEI would start an Open Access Grant program

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Table 2. Developing Talent for Impactful Research.

#	Goals/Objectives	Progress	Comments
2.1.1	Implement a "student as scholar" model that incorporates student research opportunities in the undergraduate curriculum.	Not Started Prior to the SRP, several programs had Honours Research degrees	Academic units will increase research opportunities in courses. We plan to create Levesque undergraduate research awards.
2.1.2	Develop resources to engage at least 10% of undergraduate students in research project activities in up to 80% of all research programs of faculty members by 2027.	Good Progress Student Program for Undergraduate Research (SPUR) ran in 2023 with 40 students, and was expanded to 60 students from 16 programs in 2024; rebranded Student Program for Research Engagement and Excellence (SPREE).	We plan to create Levesque undergraduate research awards for human health research.
2.2.1	Double the current graduate student enrolment from 500 to 1,000 by 2027.	In Progress Total graduate student enrolments increased by 13% between 2022 and 2023.	New graduate programs and fellowships will help to increase enrolment. But federal government changes to international student caps imply that the target of 1,000 likely needs to be revisited. UPEI does not have a dedicated recruiter for graduate students.
2.2.2	Expand the Faculty of Graduate Studies to increase graduate student admissions, harmonize regulations, and reduce administrative workloads and duplication among units.	Good Progress ■ New funds created a position (Graduate Programs Officer), who is working on these areas [see 1.2.4]. ■ Research Process Advisory Group formed to examine and improve research administrative processes and procedures.	
2.2.3	Increase fellowship support to graduate students	Partially Completed A new graduate fellowship program was announced in the summer 2024.	More fellowship support is needed and ideally not in an operations accounts so future planning is improved.
2.2.4	Create opportunities for graduate student supervision by all eligible faculty members.	In Progress Discussions about a new interdisciplinary MA started	

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Table 3. Strengthening Outreach and Partnerships.

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#	Goals / Objectives	Progress	Comments
3.1	Create or expand internal collaborative events	Good Progress Two Research Breakfasts were held, and Research on Tap was brought back. [Reported in 1.3.3]. OCII hosted two Industry Network Days [see 3.2]	More events planned for 2024-25.
3.2	Enhance outreach and public engagement through industry/ community days	Good Progress Examples: OCII hosted 2 Industry Network Days (Biotech & Manufacturing, May '23 and Human Health, Oct '24) and collaborated with Holland College and Cleantech Academy for 2 Cleantech collaborations day (April '24 and Oct '24.	Funding support for these events was through applying to Springboard Atlantic's Innovation Mobilization and 360 Cleantech funding streams.
3.3	Increase collaborations with the public and private sector including through research projects, entrepreneurship, commercialization and knowledge transfer.	* OCII hired one more Business Development Officer. * OCII events and activities included: ➤ 17 industry events; ➤ 151 engagements with companies; ➤ 62 engagements with faculty/staff/students; ➤ 1 spinoff company; ➤ 1 new patent issued ➤ support to 4 startup companies	

Acknowledgements

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References

- 1. UPEI Strategic Research Plan (2023-28) https://files.upei.ca/research/upei_strategic_research_plan.pdf
- 2. UPEI By the Numbers (2023) https://files.upei.ca/publications/upei by the numbers 2023.pdf

Appendix – Progress Indicators

1. Total Research Income Received *

20	18	2019	2020	2021	2022	2023	2024 (as of June 2024)
\$11	.4M	\$10.7M	\$11.0M	\$12.9M	\$10.6M	\$14.1M	\$11.4M

^{*} As reported by UPEI to CAUBO in 2023 for the Financial Information of Universities and Colleges (FIUC) publication

2. Tri-Agency Research Funding (as of January 2024)

UPEI's 3-year tri-agency funding average is approximately \$2.3M, up from \$2.0M in the previous year.

Agency	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
NSERC	\$1,130,402	\$1,046,673	\$1,081,830	\$1,359,864	\$1,231,145	\$1,972,411
CIHR	\$335,294	\$359,104	\$408,673	\$405,287	\$611,601	\$506,243
SSHRC	\$207,021	\$203,460	\$414,717	\$208,203	\$276,395	\$234,911
Total	\$1,672,717	\$1,609,237	\$1,905,219	\$1,973,353	\$2,119,142	\$2,713,565
3-Year			\$1,729,058	\$1,829,270	\$1,999,238	\$2,268,687
Average						

3. Research Chairs

- Canada Research Chair in Geospatial Humanities
- Canada Research Chair in Social Epidemiology for Healthy Animals
- Canada Research Chair in Remote Sensing and Water Security
- Canada Research Chair in Biomedical Genetics
- Canada Research Chair in Children, Youth and their Educational Geographies (search underway)
- · Chair of LM Montgomery Studies, and Applied Communication, Leadership and Culture
- UNESCO Chair in Island Studies and Sustainability
- Industry Chair in Precision Agriculture, Water Management, and Food Processing
- Margaret and Wallace McCain Chair in Human Development and Health

4. IslandScholar Statistics

As of April 30, 2023, there were 15,255 publication records in IslandScholar. Of those records, 2,294 are available with full text, and over 630 records have some type of Creative Commons License applied. Scholarly output in IslandScholar is broadly categorized in collections as follows.

- Faculty/Staff Works 14280 records
- Theses 674 records
- Graduate Projects

Master of Business Administration Signature Projects - 90

Master of Education Projects - 10

Master of Global Affairs Projects - 2

Master of Nursing Nurse Practitioner Projects - 11

- Other Graduate Works 36
- Undergraduate Works 196 records

Faculty/Staff Works by Type of Publication

• Journal Articles: 10,440

Conference Proceedings: 1,059

Book, Sections: 962Books, Whole: 614

Reports: 279

Conference Presentations: 132Dissertation/Thesis: 105

Sound Recordings: 98Conference Abstracts: 97

Abstracts: 27

Newspaper Articles: 24

Online Discussions Forum/Blogs: 20

Magazine Articles: 18Invited Talks: 17Patents: 16

Patents: 16
Speeches: 12
Book Reviews: 10
Poster Presentations: 9

Videos: 6

Radio Broadcasts: 4Art/Theatre: 2Books, Edited: 2

Poems: 2Webinars: 2Brochures: 1

IslandScholar currently contains 593 profiles. UPEI users can log into the service with their UPEI username and password to update their profile, add new records to the service, or upload full text.