



## Divisional Quantitative Research Strategic Plans - Guide

The U of T Division of the Vice-President, Research and Innovation is working closely with academic divisions to ensure that every U of T faculty researcher is resourced to be the best in their field in the nation, and among the top scholars in the world. One component in the U of T strategy to foster this culture of excellence in research is the setting of quantitative targets within the academic divisions.

U of T's share of Tri-Agency funding drives the allocation of additional resources to universities including:

- Canada Research Chairs (CRC)
- Research Support Fund (RSF)
- Incremental Project Grant
- Canada Foundation for Innovation (CFI) and
- John R. Evans Leadership Fund (JELF)

Research funding and success in research and innovation, as well as awards and honours, will soon factor into Ontario's performance-based funding formula for universities' operating grants via Strategic Mandate Agreements (SMAs). Furthermore, research funding is a critical revenue source for Divisions and growth enables such things as funding for graduate students and post-doctoral fellows and the creation of additional undergraduate research experiences. Even small changes that bring success in a Division have important institutional impacts.

The Logic Model below was developed to assist with the creation of Divisional Quantitative Research Strategic Plans (DQRSP). It provides a framework for planning Divisional priorities and setting achievable targets. The Appendices include a list of required core institutional research metrics and additional metrics that Divisions may wish to use in the setting of strategic goals.

DQRSPs will be summarized and shared with the community of practice for research officers with the launch of CORE (the Community for Research Excellence) to inform the broader strategic work of staff supporting research centrally and in the divisions. Divisions are encouraged to communicate their DQRSPs within their faculties.

## Logic Models and Goal Setting

Some goals may take time to realize, and it can be valuable to develop a logic model with metrics to demonstrate progress. VPRI's Senior Strategist, Research can connect divisions with resources to aid in development of these models and strategies to achieve the divisional goals.

Most metrics are available through the [VPRI Dashboards](#) and the Research Analytics team are available to provide further metrics, and guidance in metrics use and selection to support the planning process.

### Logic Model Examples:

Component	Description	Example	Metric
Goal	Long-term outcome you aim to achieve	Increase our share of highly visible national and international awards	# of awards we have today
Input	The resource invested to achieve goal	Staff dedicated to the program	# of hours spent, \$ spent on any external vendor etc.
Activity	Activity or Intervention	Identify & nominate candidates, support nominations etc.	# of candidates evaluated # of nominations submitted
Output	Products from the program	Get additional awards	# of awards received
Outcome	What changed because of the program	U of T's reputation enhanced.	News stories about the award

Plan Priority	Research Excellence
<b>Goal</b>	Increase our support for transformative, peer-reviewed research that inspires innovation.
<b>Targeted metric(s) and leadership leads</b>	Increase annual NSERC funding by 11.5% = \$36M per year (2020-21: \$30.6M per year), SSHRC to \$20M (2020-21: \$15M per year); CIHR to \$5M (2020-21: \$3.4M). <b>VDR</b>
	Increase CRC units by 15% to 47 (2017 data: 41 units), increase Endowed Chairs to 45 (2020-21 data: 37). <b>VDR</b>
<b>Actions to support the target</b>	<ul style="list-style-type: none"> <li>Expand the current internal grant review process to strengthen grants prior to submission, including support for budget development</li> <li>Expand grant and business development officer support to identify strategic opportunities and support proposal development</li> <li>Expand our mentorship programs for early career researchers and support grant writing and partnership development</li> </ul>

**Goal Setting in the DQSRP Template:**

<b>Goal</b>	Statement, normally 1 sentence
<b>Metrics</b>	Quantitative measures for the goal, example: Increase 10% from previous year, grow from \$X to \$Y this fiscal year
<b>5-year quantitative history</b>	Data to support goal and metrics (see metrics for options)
<b>Actions to support the target</b>	High-level actions to support achievement of the goal

## DQRSP Core Divisional Metrics for Plans

These core metrics are institutional priorities for which quantitative figures are available and Divisions should include these in their DQSRPs. Recognizing that each Division is unique, and departments and units have distinct scholarly strengths and priorities, we encourage additional research metrics if Divisions wish to set other quantitative goals. VPRI recommends selecting from the metrics listed in the [appendix](#).

- Participation Rates in Tri-Agency Grant Applications
- Total Number of Grant Applications
- Success Rates in Tri-agency Grant Competitions
- Total Funding (\$) of Projects with Partnerships and Number of Grants Awarded for:
  - Industry/Private Sector
  - Not-For-Profit Sector
  - International, and
  - Tri-Agency Partnership Programs
- Industry/Private Sector Research Funding (\$) and Number of Grants Awarded
- Total CRC-eligible Funding
- Total Overall Research Funding (\$) and Number of Grants Awarded
- Total Number of external research and innovation awards received
- Number of external awards nominations submitted

### Instructions

A [DQRSP template](#) is available online to complete your Divisional Quantitative Research Strategic Plans. This template, together with the information and examples in this document, provides a step-by-step process for setting targets. The template allows Divisions to select from a variety of areas of focus that align with institutional research metrics and define Divisional targets based on historical data. Additional metrics in other focus areas that Divisions wish to include in their priorities for growth can also be added.

### Supports:

A companion DQRSP Worksheet is also available for Divisions to see all available metrics and work through the goals and action plans offline.

The [Senior Strategist, Research](#) can be contacted for any questions or help with the template during completion and the final plans can also be the point of contact for submitting final DQRSPs to VPRI.

### Format:

Divisions should use the [template](#) provided to create their DQRSP. Please contact the [Senior Strategist, Research](#) with any questions.

The annual goal-setting period is the fiscal year (May 1 through April 30).

### Key Deadlines:

- Divisions should develop their DQSRPs with quantitative metrics and submit the online DQRSP template by **April 15th**

## DQSRP Template Examples:

### Example A: Goal: Increase Tri-Agency Funding

**Metric:** Increase overall Tri-Agency funding by 5.6% in fiscal year 2021/22, from \$45.9M. to \$47.5M.

### 5-year quantitative history:

Total Tri-Agency Funding (data source: Dashboards)

2016-17	2017-18	2018-19	2019-20	2020-21	GOAL	Growth
\$42.9M	\$42.9M	\$42.9M	\$44.8M	\$45.9M	\$47.5M	5.56%



### Actions to support the target:

1. Strategic Research Officers to develop tools and coordinate Chairs and Directors to workshop unfunded grants to support *Response to Reviewers* and Resubmissions
2. Create a database of previously funded / exemplar grant applications to be shared with first time applicants and early career researchers (ECRs)
3. Encourage new faculty / ECRs to volunteer on peer-review panels or participate in programs such as the CIHR Reviewer in Training (RiT) program

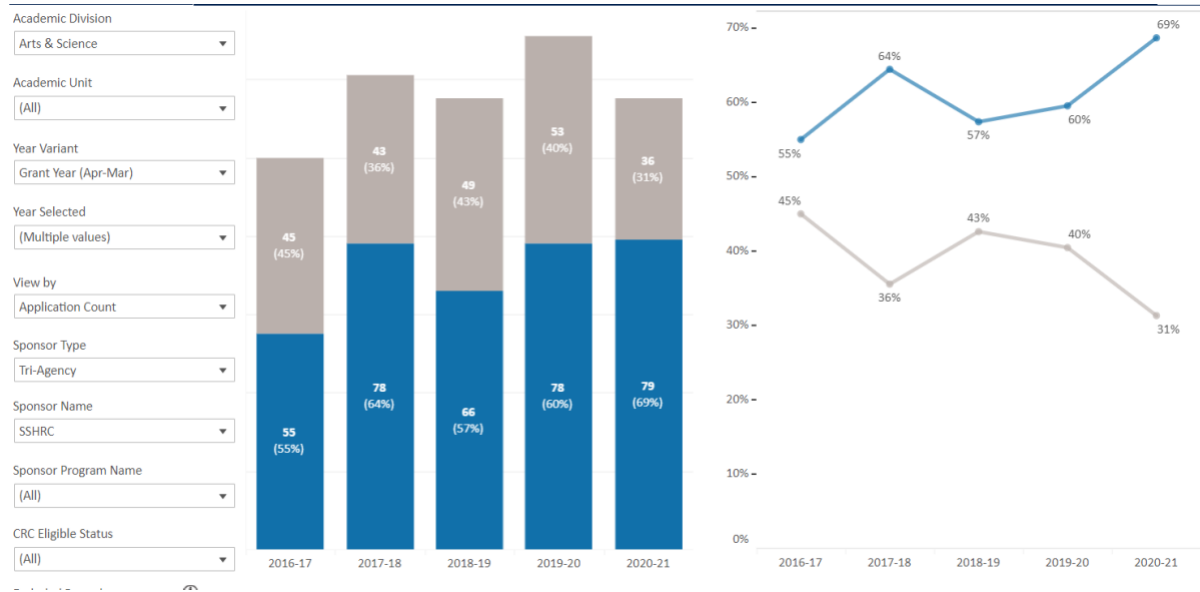
## Example B: Goal: Increase SSHRC participation

**Metric:** Increase SSHRC participation rate by 9% in 2021/22 from 69% to 75%

### 5-year quantitative history:

Total Tri-Agency Funding (data source: Dashboards)

2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	GOAL	Growth
47%	55%	64%	57%	60%	69%	75%	9%



### Actions to support the target

1. Strategic Partnership Officer in Humanities Divisions to work closely with faculty in Named Departments to support applications to appropriate SSHRC programs that include supports for graduate students
2. Provide financial support for editorial and writing support for grant applications for new and early-career faculty
3. Encourage faculty to attend Social Sciences and Humanities grant writing bootcamp and grant related workshops and information sessions offered by Jackman Humanities Institute (JHI) and the Centre for Research & Innovation Support (CRIS)

## Appendix - Research and Innovations Metrics

These are metrics that are currently tracked and reported institutionally, most at institutional and divisional levels. Those in bold are considered key metrics for the institution or reflect institutional strategic priorities. Core Divisional Metrics are underlined.

If you wish to include metrics that are not part of the list below, please contact [Aurora Mendelsohn](#) for advice on available data sources and/or strategies to locate the appropriate quantitative measures.

For information on how to obtain these metrics and on how to use them, contact [Research Analytics](#).

### 1. Funding:

*Available from [VPRI Dashboards](#):*

- Participation Rates in Tri-Agency Grant Applications
- Total Number of Grant Applications
- Success Rates in Tri-agency Grant Competitions
- US Government Funding
- NIH Funding
- Total Funding (\$) of Projects with Partnerships and Number of Grants Awarded for:
  - Industry/Private Sector
  - Not-For-Profit Sector
  - International, and/or
  - Tri-Agency Partnership Programs
- Industry/Private Sector Research Funding (\$) and Number of Grants Awarded
- Total Overall Research Funding (\$) and Number of Grants Awarded
- Total CRC-eligible Funding
- Success Rates in Grant Competitions (overall, private sector, for specific programs or sponsors)
- Number of Projects with Hospital partners

*Request from Research Analytics:*

- CRC Chairs/ CRC \$100K Units
- CRC Chairs- EDI targets
- Average Grant Size in NSERC Discovery, CIHR Project Grants or SSHRC Insight.
- Canada Council of the Arts Grants, Total funding and Number of Awards (advance notice required, coming soon to VPRI Dashboards)

### 2. Awards and Honours:

*Request from OVPRI or [Divisional Awards Coordinator](#):*

- Total Number of external research and innovation awards received
- Number of external awards nominations submitted

### 3. Innovations:

Available from [VPRI Dashboards](#):

- Number of invention disclosures
- Number of invention disclosures which include a student inventor
- Number of patents
- Number of priority patents
- Number of issued patents
- Number of licence and option agreements
- Number of start-ups
- [Number of Industry partnerships](#)
- Number of International Industry partnerships

### 4. Publications and Citations:

- Number of Researchers on [Highly Cited Researchers List](#)
- Number of journal publications, citations ([Web of Science](#), [InCites](#), [Scopus](#) -- [Guide on Use](#) )

### 5. Other Data:

- [T-Space: Theses and dissertations](#),
- [Public Policy](#)