

IMPACT

Ideas.  
Insights.  
Impact.

ACTION

LAB



ALBERTA INNOVATES

# IMPLEMENTING FOR IMPACT PART B: RESOURCING FOR SOCIETAL IMPACT

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*AESIS Institutional Structures for Societal Impact of Science*

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# LEARNING OBJECTIVES



## Implementing for Impact Part B: Resourcing for Societal Impact

1. *What are institutions doing to incent, recognize and award societal impact?*
2. *Understand the types of tools available to embed societal impact?*
3. *What are the skills sets needed to advance societal impact?*



# 1. INCENTIVES FOR IMPACT

# INCORPORATING PERFORMANCE AND IMPACT MANAGEMENT SYSTEMS



THE HOUSE THAT IMPACT BUILT

*PIMS helps align organizational purpose and processes to achieve targeted outcomes and impact*



# ECOSYSTEM & INSTITUTIONAL CRITERIA FOR SUCCESS



## *How are institutions rewarding societal impact of research?*

Research Impact	Example of Indicators
<b>Excellence</b>	<ul style="list-style-type: none"> <li>• <i>Peer review Indicators</i></li> <li>• <i>Authorship Order</i></li> <li>• <i>Journal Impact</i></li> <li>• <i>Grant funding</i></li> <li>• <i>National or International Reputation</i></li> </ul>
<b>Societal Impact</b>	<ul style="list-style-type: none"> <li>• <i>Reach</i></li> <li>• <i>Significance</i></li> <li>• <i>Citizen engagement</i></li> </ul> <p><b>Impact Categories</b></p> <ul style="list-style-type: none"> <li>• <i>Cultural</i></li> <li>• <i>Economic</i></li> <li>• <i>Environmental</i></li> <li>• <i>Health</i></li> <li>• <i>Social</i></li> </ul>

Performance and Evaluation Audit	Focus
<b>Relevance</b>	<i>Is the institution or research doing the right things?</i>
<b>Coherence</b>	<i>Coherence how well does the institution or research fit?</i>
<b>Efficiency</b>	<i>How well is the institution or research using resources?</i>
<b>Effectiveness</b>	<i>Is the institution or research achieving its objectives?</i>
<b>Impact</b>	<i>What difference is the Institution or research making?</i>
<b>Sustainability</b>	<i>Will the benefits last?</i>

# INSTITUTION-LEVEL INCENTIVES



## Recruitment, promotion and tenures

- Recommendation letters from non-academic colleagues
- Review panels include impact criteria
- Integrating societal impact into academic staff handbooks
- Training resources for hiring staff

## Adaptive Management

- Adaptive and Creative Management

## Broadening Public Engagement and Citizen Networks

- Start up universities, research institutes, centers of excellence
- Collaborative governance structures
- Partnerships between Universities, Funders, Private and Public

*Recalibrating academic incentives to include impact*

# INCENTIVES (CONT'D)



## *Encourage potentially high-impact, interdisciplinary work*

### **Transdisciplinary and interdisciplinary**

- One health
- Open Science
- Academic Leadership and Culture
- Diversity and Talent Management

### **Annual progress reporting**

- Consider progress measures to impact
- Impact narratives

### **Incenting translation of research to impact**

- Impact rewards
- Innovation and high impact
- Grand Challenges

# CASE EXAMPLE - STRATEGY EVALUATION PROTOCOL



## Background:

- Recognition that research impact was not rewarded
- Position paper: *Room for everyone's talents. Towards a new balance in the recognition and reward of academics*

## They proposed 5 characteristics:

1. *Enable the diversification and vitalization of career paths, thereby promoting excellence in each of the key areas*
2. *Acknowledge the independence and individual qualities and ambitions of academics as well as recognizing team performances*
3. *Emphasize quality of work over quantitative results (such as number of publications)*
4. *Encourage all aspects of open science*
5. *Encourage high-quality academic leadership*

## Strategy Evaluation Protocol – 3 Criteria

### Box 2: Research assessment criteria from the Dutch Strategy Evaluation Protocol

**Research quality:** the quality of the unit's research over the past six-year period is assessed in its international, national or – where appropriate – regional context. The assessment committee does so by assessing a research unit in light of its own aims and strategy. Central in this assessment are the contributions to the body of scientific knowledge. The assessment committee reflects on the quality and scientific relevance of the research. Moreover, the academic reputation and leadership within the field is assessed. The committee's assessment is grounded in a narrative argument and supported by evidence of the scientific achievements of the unit in the context of the national or international research field, as appropriate to the specific claims made in the narrative. The protocol explicitly follows the guidelines of the San Francisco Declaration on Research Assessment (DORA) adopted by KNAW, VSNU and NWO.

**Societal relevance:** the societal relevance of the unit's research in terms of impact, public engagement and uptake of the unit's research is assessed in economic, social, cultural, educational or any other terms that may be relevant. Societal impact may often take longer to become apparent. Societal impact that became evident in the past six years may therefore well be due to research done by the unit long before. The assessment committee reflects on societal relevance by assessing a research unit's accomplishments in light of its own aims and strategy. The assessment committee also reflects, where applicable, on the teaching-research nexus. The assessment is grounded in a narrative argument that describes the key research findings and their implications, while it also includes evidence for the societal relevance in terms of impact and engagement of the research unit.

**Viability:** the extent to which the research unit's goals for the coming six-year period remain scientifically and societally relevant is assessed. It is also assessed whether its aims and strategy as well as the foresight of its leadership and its overall management are optimal to attain these goals. Finally, it is assessed whether the plans and resources are adequate to implement this strategy. The assessment committee also reflects on the viability of the research unit in relation to the expected developments in the field and societal developments as well as on the wider institutional context of the research unit.



# CASE EXAMPLE – UMC UTRECHT



UMC Utrecht has a guide for reviewers that states that “*scientific research in the UMC Utrecht should be evaluated on societal impact and not just on scientific excellence. It means that an evaluation should not just focus on output or ‘deliverables’ or other scientific end-products. The evaluation should also appreciate how research aims to create societal impact.*”

The guide sets out an evaluation framework that includes goals and suggested indicators for the subcategories of Structure, Process and Outcomes



3. Outcomes (based on Standard Evaluation Protol 2015-2021)	3.1 Research products for peers	Describe the three most important research products for peers, consisting of key publications other forms of research output, such as scientific/scholarly books, instruments, infrastructure, intellectual property, datasets, software tools or designs that the unit has developed; number of dissertations	<p>EXAMPLES</p> <ul style="list-style-type: none"> <li>- Key publications</li> <li>- Researchers from our unit set up a patient cohort</li> <li>- Researchers developed a bioinformatics tool</li> </ul>
	3.2 Research products for societal target groups	Provide the three most important examples of research products for societal target groups, e.g. reports (for example for policymaking); articles in professional journals for non-academic readers; other outputs (instruments, infrastructure, intellectual property, datasets, software tools or designs that the unit has developed) for societal target groups; or outreach activities, for example lectures for general audiences and exhibitions.	<p>EXAMPLES</p> <ul style="list-style-type: none"> <li>- Researcher X co-wrote a policy report used by the government</li> <li>- Research Y created a dataset available to other researcher</li> <li>- Researcher Z was invited on a television show to explain his/her research or as an expert in the field</li> </ul>
	3.3 Use of research products by peers	Provide the three most important examples on how research products are being used, e.g. in terms of citations for selected articles; the use of datasets, software tools, etc. by peers; use of research facilities by peers	<p>EXAMPLES</p> <ul style="list-style-type: none"> <li>-One of our papers from last year (plus reference), gathered X citations or downloads</li> <li>-Colleagues from a foreign research institute used our assay or our dataset</li> </ul>
	3.4 Use of research products by societal groups	Provide the three most important examples of use of research products by societal groups, e.g. implementation of new treatments/acceptance as standard of care (also by health insurers); incorporation of products in guidelines; use of research facilities by societal parties; projects in cooperation with societal parties; contract research	<p>EXAMPLES</p> <ul style="list-style-type: none"> <li>-Provisionary reimbursement of new treatment by Zorginstituut</li> <li>-Professional society changes treatment guideline based on research by our unit</li> </ul>
	3.5 Marks of recognition from peers	Provide the three most important examples of recognition from peers, e.g. science awards/scholarly prizes; research grants awarded to individuals; invited lectures; membership of scientific committees, editorial boards, etc.	<p>EXAMPLES</p> <ul style="list-style-type: none"> <li>-Researcher X received a prize from a scientific society</li> <li>-Researcher Y received a prestigious personal grant from a national funder</li> </ul>
	3.6 Marks of recognition from societal groups	Provide the three most important examples of marks of recognition from societal groups, e.g. public prizes, appointments/positions paid for by societal parties, membership of civil society advisory bodies; valorisation funding	<p>EXAMPLES</p> <ul style="list-style-type: none"> <li>-Prof. X advises the minister of Health about health care policy</li> <li>-Associate professor Y is member of the Health Council</li> <li>-Researcher Z received a prize from patient organization X</li> </ul>



GROUP  
DISCUSSION

## Discussion question:

1. *What other key incentives exist for rewarding societal impact of research at your institution?*
  - *Any emerging practices that you would like to share?*



# 2. EMBEDDING SOCIETAL IMPACT INTO INSTITUTIONS

# IMPACT CULTURE AND MINDSET



- Starting with the **Why** – institutional **purpose** and desired **impact**
- To bridge traditional “communities” of academics and non-academics, **trust** and **informal knowledge** sharing are key enablers
- Knowledge flourishes in trust-based communities (ask questions, understand partner organisations, etc.)
- Different cultures across stakeholder groups (language, norms, speed, what is credible evidence etc.)



*“Culture isn’t just one aspect of the game, it is the game, an organization is nothing more than the collective capacity of its people to create value”*

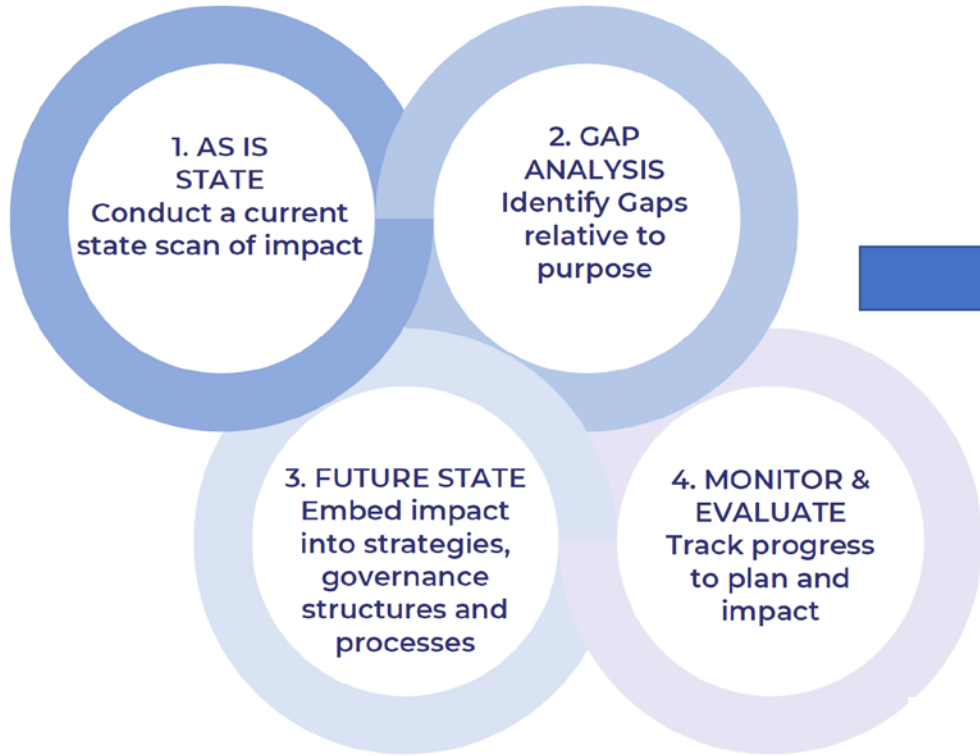
*Louis V. Gerstner Jr., Former IBM CEO*

# IMPACT TOOLSET

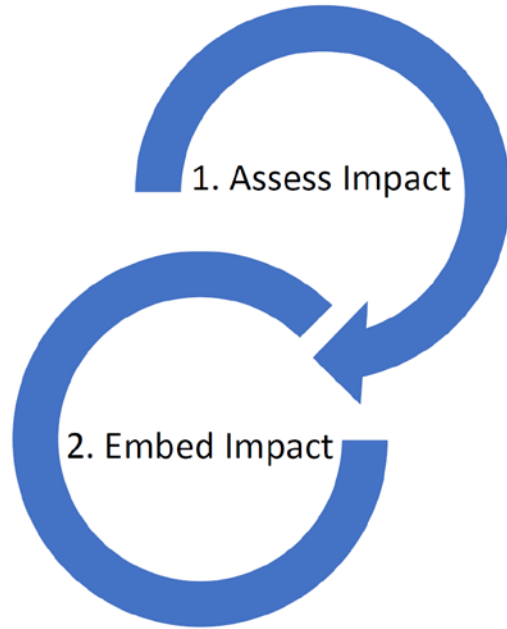


## Institutional Societal Impact

Process Steps



Action Plan –  
Two Concurrent Streams



# ACTION PLAN



*Embed Impact Strategy*

*Structures and Process for Action  
Working Groups*



**Impact Literacy and Capacity Building**

- Scan
- Self-assess
- Training

**Integration into recognition and rewards**

- Recruitment and Hiring
- Tenure & Promotion
- Awards and Recognition

**Impact Assessment**

- Qualitative and Quantitative
- Identify Best Practices and Standards
- Measurement and tools

Leadership and Governance  
Engagement and Communications Strategies  
Tool Box

Monitor progress to plan  
Phased approach

# SHARED LESSONS - UNIVERSITIES EMBEDDING IMPACT (EXAMPLES)



## Kings College (UK) – Service and Societal Impact

Universities need new social contract with public, new book argues

Social respo

New Learning about Learning

Jonathan Grant  
**The New Power University**  
 The social purpose of higher education in the 21st century



<https://www.kcl.ac.uk/news/universities-need-new-social-contract-with-public-new-book-argues>

## University of Manchester (UK)

MANCHESTER 1824 StaffNet  
 The University of Manchester

Research and Business Engagement

Business Engagement Contracts Ethics and integrity PGR and Researcher Development Research strategy Research Services

StaffNet / Research and Business Engagement / Research strategy / Impact

Impact

Research Impact at Manchester

The creation of positive economic and societal impacts and benefits from our research is integral to the [University's 2020 strategy](#) and cuts across all our fields of activity.

Our aim is to be at the leading edge of realising and communicating the impact of our excellent research and advanced training.

UK Research & Innovation (UKRI) define impact as: the demonstrable contribution that excellent research makes to society and the economy. This occurs in many ways - through creating and sharing new knowledge and innovation; inventing groundbreaking new products, companies and jobs; developing new and improving existing public services and policy; enhancing quality of life and health; and many more.

Why does impact matter?

<https://www.staffnet.manchester.ac.uk/rbe/research-strategy/impact/>

## University of Wollongong (Australia)

UNIVERSITY OF WOLLONGONG AUSTRALIA

About our Research Impact Stories Case Studies

Home / About our Research Impact

About our Research Impact

For over 40 years, the University of Wollongong has created pathways for research to have beneficial impacts in the broader community. From its very beginning, UOW has encouraged and nurtured engagement with industry, community and government to tackle the most pressing challenges, introduce disruptive technologies and change our world for the better.

The University of Wollongong has formalised its commitment to meaningful change through the Research Impact Strategy White Paper. This documents outlines the University's vision for supporting researcher development at UOW, addressing the UN Sustainable Development Goals (SDGs) and strengthening our research engagement and impact. The implementation of the recommendations made in the Research Impact Strategy White Paper will ensure that the University's research continues to make contributions to the economy, to society, the environment and to culture. Its researchers are committed to engaging with organisations and individuals outside of the University that will directly benefit from the results of the collaboration.

This site is designed to give UOW's partners, stakeholders and the broader community interested in its work an introduction to the advances it's making in engagement and real-world impact.

<https://research-impact.uow.edu.au/research-engagement-and-impact-at-uow/>

## Impact Rankings

THE WORLD UNIVERSITY RANKINGS

PROFESSIONAL CAMPUS JOBS EVENTS RANKINGS

Rank	Name	Best scores by rank				Overall
1	Western Sydney University Australia	6 90.0	12 93.3	5 80.3	17 99.0	99.1
2	Arizona State University (Tempe) United States	11 94.6	14 97.9	15 97.7	17 93.3	98.5
3	Western University Canada	1 93.5	2 89.8	9 97.5	17 95.4	97.8

<https://www.timeshighereducation.com/world-university-rankings>



GROUP  
DISCUSSION

## Discussion questions:

1. *What type of structures, processes, and/or practices have you found useful for embedding impact into your institution?*





# 3. TEAMSET

SKILLS AND COMPETENCIES FOR TOMORROW

# TEAMSET - SKILLS AND COMPETENCIES FOR TOMORROW



*Acquiring the right skills and core competencies to maximize the impact of institutional, team/individual research*

## Three Case Examples

- **ARIS (US)** advances individual and institutional capacity to communicate research impacts to society
- **AI Impact Action Lab (Canada)** enhances individual, institutional and ecosystem capacity to activate impact of research and innovation
- **CIHR (Canada)** Health Impact fellowship provides a new set of skills and competencies amongst the University/Health workforce

# ARIS TRAINING – US



The National Science Foundation (NSF) awarded a \$5.2 million grant to fund the Center for Advancing Research Impact in Society (ARIS). The ARIS Center is housed at the University of Missouri and works with scientists and engagement practitioners to build capacity, advance scholarship, grow partnerships and provide resources to help them engage with and demonstrate the impact of research in their communities and society.



## ARIS Training Initiative

Mission – To advance individual and institutional capacity to communicate *research impacts* to society

### Team

- Megan Heitmann – Iowa State University
- Janice McDonnell – Rutgers University
- Jory Weintraub, PhD – Duke University

### Programs

- Courses and Workshops
- Resource/Curriculum Development
- Expanding Institutional Capacity for RI Support (ORIC)

# ARIS CONTINUED



## ARIS Program to Enhance Organizational Research Impact Capacity (ORIC)

<https://researchinsociety.org/training/program-to-enhance-organizational-research-impact-capacity-oric/>



Jory Weintraub, PhD  
ARIS Co-PI/Leadership Team/Training Team  
jory@duke.edu

### ORIC Overview

Objective: To support institutions and organizations as they build or enhance internal capacity to support *research impacts* (RI) efforts

1-year, cohort-based program  
(5 institutions/orgs per cohort)

Provides training, mentoring,  
resources, community-building

Built around a series of RI  
milestones

RI Team (RI Professionals and  
Administrative Partner)

The ultimate goal is to increase the number of institutions which are actively and effectively supporting RI efforts (through the creation of RI positions, RI office, or simply through increased RI visibility, support and infrastructure).



### How Do Participating Institutions Benefit?

Establishment or enhancement of institutional RI support infrastructure

Access to ARIS training materials

ARIS Certification

All of this will lead to better institutional RI training and support and, ultimately, more competitive grant submissions

RI Professional training and PD from ARIS Training Team

Ongoing RI support and mentoring from ARIS

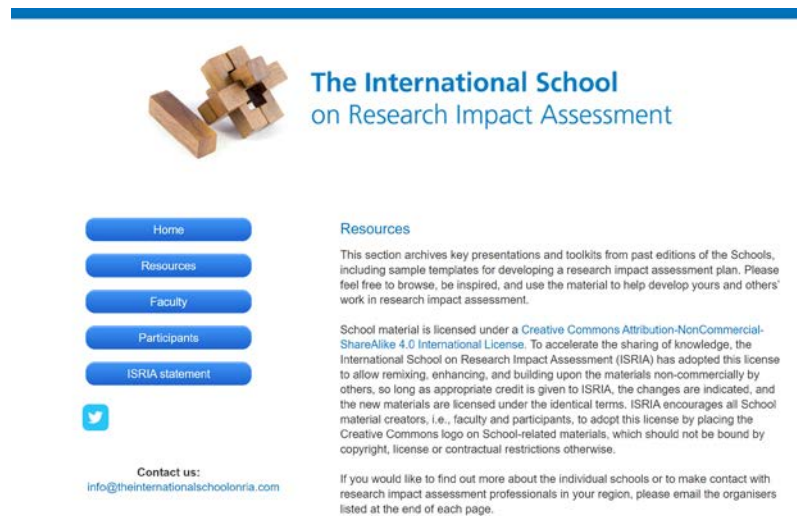
Inclusion in an RI community of practice



# AI – IMPACT ACTION LAB



*Vision: collaborate globally for excellence in research and innovation impact across all fields of science to address local needs*



The International School on Research Impact Assessment

Home  
Resources  
Faculty  
Participants  
ISRIA statement

Contact us:  
info@theinternationalschoolonria.com

Resources

This section archives key presentations and toolkits from past editions of the Schools, including sample templates for developing a research impact assessment plan. Please feel free to browse, be inspired, and use the material to help develop yours and others' work in research impact assessment.

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If you would like to find out more about the individual schools or to make contact with research impact assessment professionals in your region, please email the organisers listed at the end of each page.



<https://www.theinternationalschoolonria.com/resources.php>

**EMPOWER** participants' impact capacity and skills  
**ADVANCE** impact evidence to inform policy and practice decisions  
**BUILD** collaborative capacity with the community

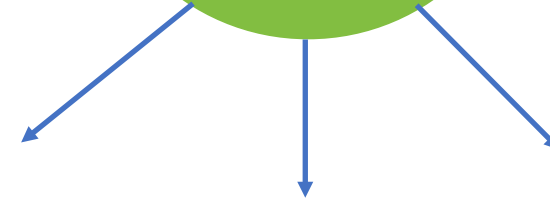
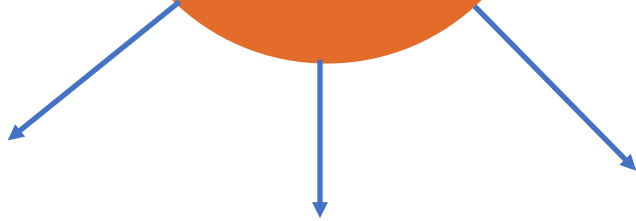
# IMPACT ACTION LAB OFFERINGS

Thought Leadership

Training

Impact Services

Ecosystem Partnerships



**Ecosystem**  
Impact policy frameworks

- Institutional**
- Impact assessment
  - Planning for impact
  - Scaling up for impact

- Individual**
- Impact planning
  - Impact narratives
  - Measuring Impact

**Ecosystem**  
Develop & implement impact frameworks

**Institutional**  
Embed impact systems into organizations

**Individual**  
Incorporate impact into grants and initiatives

R&I Impact 101 Courses & Workshops  
R&I Impact Master Class  
Custom Delivery

Lean delivery  
Comprehensive

# CIHR HEALTH SYSTEM IMPACT FELLOWSHIP PROGRAM



## Objectives: The Health System Impact Fellowship



1

### Support Impact-Oriented Career Paths

- Elevate PhD trainees' and post-doctoral fellows' career readiness and ability to make an impact in a broader range of employment sectors.

2

### Expand and Enrich the Traditional Training Environment

- Engage health system and related organizations in preparing a cadre of promising PhD-trained individuals for successful, impactful careers.

3

### Increase Research Capacity within Health System Organizations

- Provide health system organizations with direct opportunities to realize and harness the benefits that PhD-trained individuals can bring to such organizations.

Our goal: Prepare the next generation of health services and policy PhD graduates with the professional skills, competencies, experiences and networks to make meaningful and impactful contributions throughout their careers, within and outside of academia.

## Key Design Elements



**Immersion in a health system organization**  
(expansion of traditional training environment)

**Impact-oriented project of high priority to health system organization**  
(adapt PhD skills to complex challenges in complex settings)

**Co-supervision and mentorship**  
(from health system & academic leaders)

**Emphasis on Enriched Core Competencies**  
(supported with a professional development training allowance)

**Protected academic time**  
(for post-doctoral research /doctoral commitments)

**National Cohort & Learning Collaborative**  
(to build community & connect with other fellows & mentors)



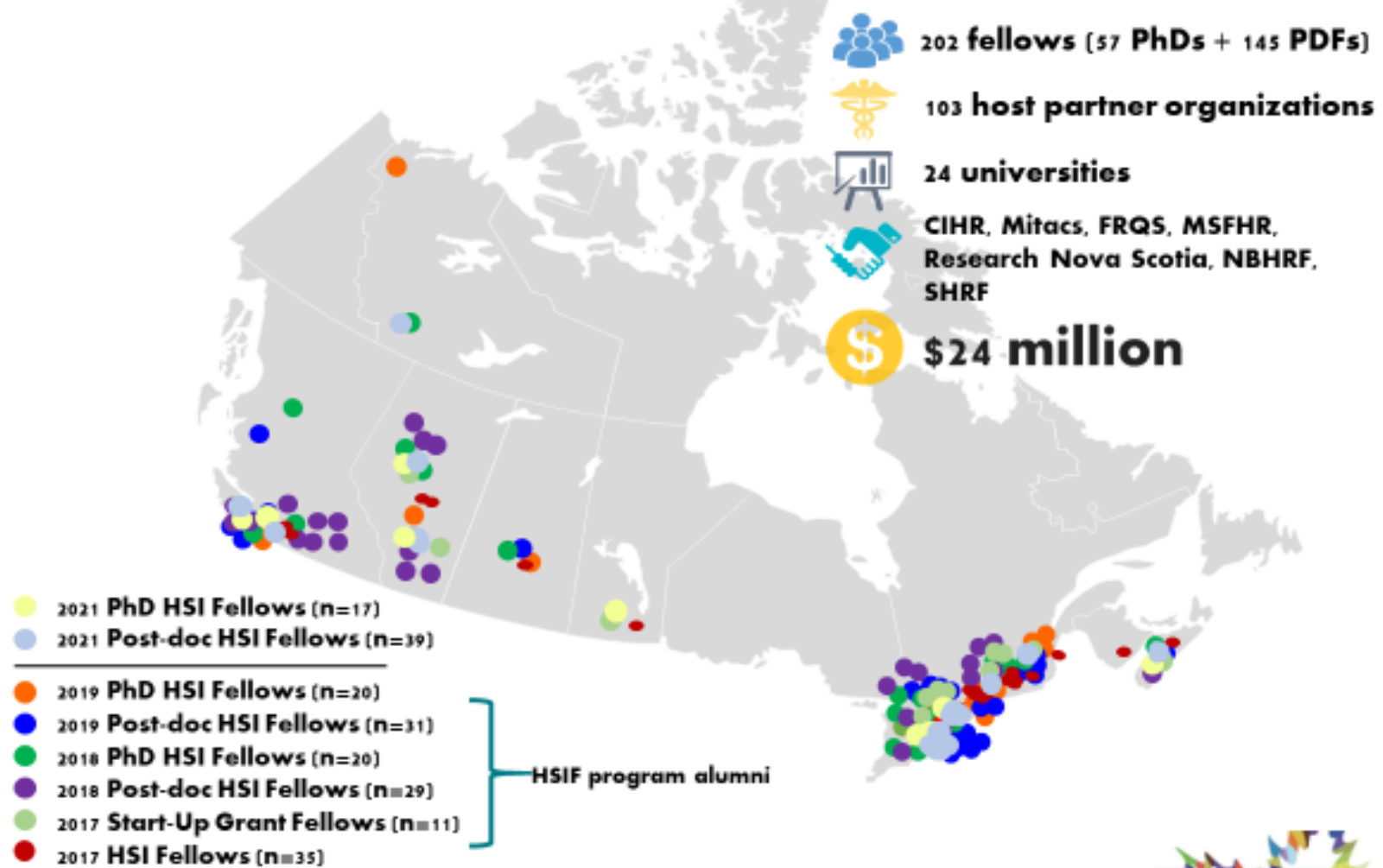
Discoveries for life



# CIHR IMPACT FELLOWSHIP PROGRAM

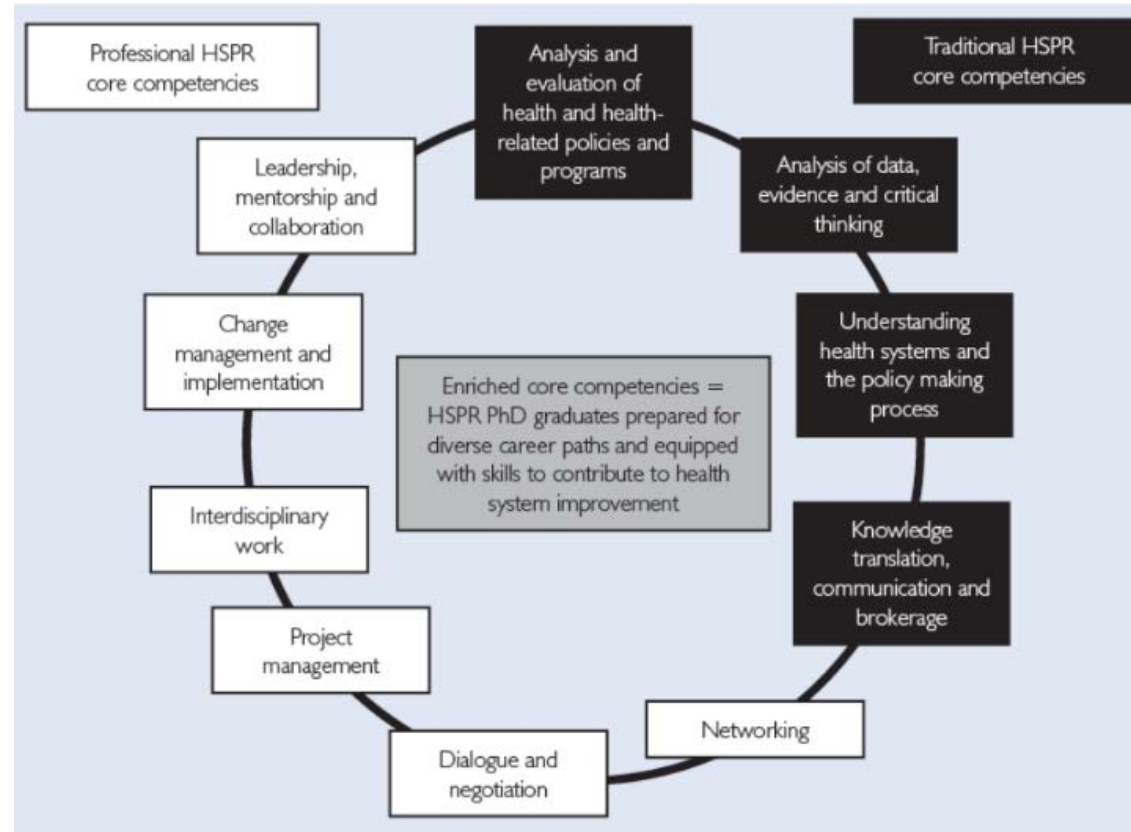


## The National Cohort in numbers





# ENRICHED CORE COMPETENCY DEVELOPMENT, LEADERSHIP AND RESEARCH SKILLS



Research Paper

Healthcare Policy (Special Issue) October 2019 : 61-72 doi:10.12927/hcpol.2019.25079

**Developing Competencies for Health System Impact: Early Lessons learned from the Health System Impact Fellows**

Meghan McMahon, Adalsteinur Brown, Stephen Domstel and Robyn Tomblin

Key message: The HSI Fellowship provides an opportunity to develop the full suite of enriched core competencies, particularly in competency domains that are not currently emphasized in HSPR doctoral curriculum. An updated analysis using 3 years of data is underway.



GROUP  
DISCUSSION

## Discussion question:

1. *What is the #1 idea or action you would like to apply to your institution after today's session?*

# KEY MESSAGES



- Work together to create an impact culture and mindset
  - Fund and Fellowship
- Realigning incentives to recognize community engagement and impact
  - Evaluation criteria linked to desired competencies and skills
- Training to support the development of impact skills for tomorrow
  - Support scientists and teams in developing and accessing impact skill sets
  - Experiential learning experiences



**Don't underestimate the change management effort....**

# KEY RESOURCES



Grant J. (2021). [Academic incentives and research impact: Developing reward and recognition systems to better people's lives](#). Horizon Scan. AcademyHealth

Adam P, et al. (2018). [ISRIA statement: ten-point guidelines for an effective process of research impact assessment](#). *Health Research Policy and Systems*, 16, 8.

VSNU, NFU, KNAW, NWO and ZonMw. (2019). [Room for everyone's talents. Towards a new balance in the recognition and reward of academics](#)

Wellcome Trust (2020). [What Researchers Think About the Culture They Work In](#). Wellcome Trust, London. [Available from <https://wellcome.org/reports/what-researchers-think-about-research-culture>, accessed November 2020]



**THANK YOU!**

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