

NSERC Research Tools & Instruments (RTI) Workshop

8th May 2025

This workshop is being video and audio recorded

BE WHAT THE WORLD NEEDS

Land Acknowledgement

*As we gather here today, we acknowledge we are on
Treaty 6 Territory and the Homeland of the Métis.*

*We pay our respect to the First Nations and Métis
ancestors of this place and reaffirm our relationship with
one another.*

Schedule

12:00 – 12:05	Welcome
12:05 – 12:45	RTI session with Q&A
12:45 – 13:00	Break

13:00 – 13:05	Welcome
13:05 – 13:15	Overview of the Evaluation/Rating process at NSERC
13:15 – 13:30	Tips on HQP, EDI and CCV considerations
13:30 – 13:35	USask Internal Review program
13:35 – 14:00	Panel with NSERC DG Evaluation Group members
14:00 – 14:30	Q&A followed by networking opportunity

Research Tools & Instruments (RTI)

Suresh Tikoo

Professor, School of Public Health

Director, Vaccinology and Immunotherapeutics Program

Associate Member, Department of Veterinary Microbiology (WCVM)

1. NEED , URGENCY AND SUITABILITY (40%)

- A) The equipment is essential for the research and there is no other most cost-effective ways of obtaining the results
- B) Availability of similar equipment / facilities/services in the vicinity; If yes-----justify
- C) Impact of delay in acquisition of equipment on research and pace of research
- D) Degree of utilizations.

2. FEASIBILITY AND IMPACT (40%)

- A) Quality and significance of research programs, potential for major advances and impact in the discipline
- B) Feasibility of the plan to use equipment
- C) Existing experience or training plan for applicants to use the system.
- D) EDI (Team)

3. TRAINING OF HQP (20%)

- A) Quality & extent of training
- B) Opportunity for hands on training
- C). Potential to provide marketable skills for trained students
- C) EDI

1. NEED , URGENCY AND SUITABILITY (40%)

A) The equipment is essential for the research and there is no other most cost-effective ways of obtaining the results

B) Availability of similar equipment / facilities/services in the vicinity; If yes-----justify

C) Impact of delay in acquisition of equipment on research and pace of research

D) Degree of utilizations.

1. Need , urgency and suitability (40%);

A) The equipment is essential for the research and there is no other most cost-effective ways of obtaining the results)

✓ _important for research, ✓ HQP training ✓ number of users to be benefited (NSERC funded). ✓ Essential for establishing collaborations

B) Availability of similar equipment/facilities/services in the vicinity; If yes-----justify

✱ Functioning equipment ✓ # of users, ✓ feasibility of moving samples, ✓ limited access to the instrument, ✓ drawback in existing Equip.
✱ Replace failed equipment ✓ need costly repair every 3-6 months, ✓ no availability of parts
✱ Upgrade or replace obsolete instrument. ✓ new analysis software, ✓ changed technology

C) Impact of delay in acquisition of equipment on research and pace of research

✓ delay in publication ✓ delay creates problem with existing/ future collaborations; ✓ building competitive research program.
✓ delay in HQP training /completion ✓ force HQP to work irregular hrs (without supervision)

D) Degree of utilizations.

✓ as many researchers / HQP as possible

(Even non applicant researchers)

2. FEASIBILITY AND IMPACT (40%)

- A) Quality and significance of research programs,
potential for major advances and impact in the discipline
- B) Feasibility of the plan to use equipment
- C) Existing experience or training plan for applicants to use the system.
- D) EDI (Team)

A) Quality and significance of research programs, potential for major advances and impact in the discipline

✧ Team:

✓ Include **ECR**; ✓ Avoid member with well funded human health research .

✧ Simple language

✓ **reviewer may not be from your area**

✧ Advances / impact

✓ Immediate impact --- **Scientific** ; ✓ long run Impact. ---economic potential

B) Feasibility of the plan to use equipment.

✓ **Supervised** (may be by an appointed technician),

✓ **separate accessible space**;

✓ **Time booking system**,

✓ **user fee** (future repairs, partial salary etc);

✓ **ordering system**

C) Existing experience or training plan for applicants to use the system.

✓ (**PIs & technician well trained**).

D) EDI ✧ Team / applicants

✓ **Gender**,

✓ **minority**,

✓ **Indigenous** ----- (Considered for allotting marks)

3. TRAINING OF HQP (20%)

- A) **Quality & extent of training**
 - B) **Opportunity for hands on training**
 - C). **Potential to provide marketable skills for trained students**
- EDC)**

Eligible applications 94

Awarded **29**

success rate of **30.9%**

- A) Quality & extent of training
- ☆ Past ✓ **HQP Track record**
 - ☆. Future. ✓ **Help increase HQP #**
- B) Opportunity for hands on training:
- ✓ **Beneficial if industry involved,**
 - ✓ **Senior HQP /technician provide training**
 - ✓ **Need Training plan**
- C) Potential to provide marketable skills for trained students
- ✓ **which help in securing jobs in industry**
- D) EDI
- ☆ Emphasis need to be
 - ✓ **University resources to build a diverse team**
 - ✓ **Mentorship** (involving diverse team in making decision, Involvement in analysing data, problem solving etc)
 - ✓ **Plan to host indigenous students for recruiting,**
 - ✓ **MOU /access to indigenous community.**
 - ✓ **Representing different countries with diverse ethnicity.**
 - ✓ **Male / Female HQP recruitment**

#	10%	20%		30%		30%		20%		10%
Score	1	2	3	4	5	6	7	8	9	10

General Guidelines

Adjunct professors

Full-time position in industry or government can only be co-applicants.

Primary employment at an eligible Canadian university can apply as either the applicant or a co-applicant

A comprehensive system is one in which

- Each tool or instrument forms part of an integrated system of operation
- Requests that bundle unrelated tools and instruments together WILL NOT BE ACCEPTED

Equipment

- New,
- Used or refurbished equipment,
- The repair, upgrade
- Rental of equipment
- Fabrication of equipment that is not readily available off the shelf
- Equipment that is purchased or rented after the application deadline

Duration-----1 year

Value-----Up to 150K. (a net cost between \$7,001 and \$250,000;

Net cost:

purchase **cost of the equipment after any discount from the vendor** and before taxes, customs and importation fees, transportation and shipping charges, and assembly and installation costs

Type of Expenditure	Eligible Costs	Ineligible Costs (ineligible costs must not be included in the application)
Equipment	<u>Purchase or rental</u> of equipment, including taxes, shipping and handling	
Other	<u>Transportation / shipping costs</u> for purchased equipment <u>Fabrication, assembly and installation</u> of equipment <u>Extended warranty</u> or service contract <u>Brokerage and customs</u> charges for the importation of equipment and supplies <u>Testing/calibrations costs</u> <u>On-site costs of training staff to use</u> Equipment <u>Software licensing or upgrades</u>	<u>Salaries</u> and benefits <u>Travel</u> required for the supplier to install, repair and/or refurbish equipment is an eligible cost <u>Insurance costs</u> for equipment and research vehicles <u>Laboratory infrastructure</u> (including but. not limited to ventilation systems, wiring, power units or electrical outlets, floors, ceilings, walls, plumbing, lighting and storage) <u>Costs of the construction</u> , renovation or rental of laboratories or supporting facilities <u>Equipment or items intended to render other equipment</u> compliant with health and safety standard <u>Consumables</u>



The next session will start at
1 pm

NSERC Discovery (DG) and Research Tools & Instruments (RTI) Workshop

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Overview of the Evaluation/Rating process at NSERC

Ron Borowsky

University NSERC Leader, Office of the Vice-President Research
Director, Cognitive Neuroscience Lab
Professor, Cognition and Neuroscience Program
Department of Psychology and Health Studies, College of Arts & Science

The Merit “Grid”

DISCOVERY GRANTS MERIT INDICATORS

The Merit Indicators should be used in conjunction with the Peer Review Manual, which outlines how reviewers arrive at a rating.							
		EXCEPTIONAL	OUTSTANDING	VERY STRONG	STRONG	MODERATE	INSUFFICIENT
Excellence of the Researcher		Acknowledged as a leader in terms of research excellence, accomplishments, and service. Contributions presented in the application are of the highest level of quality .	Research excellence, accomplishments, and service are far superior to others. Contributions presented in the application are of high quality .	Research excellence, accomplishments, and service are superior to others. Contributions presented in the application are above average in quality .	Research excellence, accomplishments, and service are significant . Contributions presented in the application are of good quality.	Research excellence, accomplishments, and service are reasonable . Contributions presented in the application are of reasonable quality.	Research excellence, accomplishments, and service are below an acceptable level . Contributions presented in the application are limited in quality.
		Impact and importance of the work is clearly evident and groundbreaking .	Impact and importance of the work is clearly evident and influential .	Impact and importance of the work is clearly evident .	Impact and importance of the work is evident .	Impact and importance of the work is somewhat evident .	Impact and importance of the work is not clearly evident .
Merit of the Proposal		Proposed research program is clearly presented, is extremely original and innovative and is likely to have impact by leading to groundbreaking advances in the area and/or leading to a technology or policy that addresses socio-economic or environmental needs. Long-term vision and short-term objectives are clearly defined .	Proposed research program is clearly presented, is highly original and innovative and is likely to have impact by contributing to groundbreaking advances in the area, and/or leading to a technology or policy that addresses socio-economic or environmental needs. Long-term goals are clearly defined and short-term objectives are well planned .	Proposed research program is clearly presented, is original and innovative and is likely to have impact by leading to advancements and/or addressing socio-economic or environmental needs. Long-term goals are defined and short-term objectives are planned .	Proposed research program is clearly presented, is original and innovative and is likely to have impact and/or address socio-economic or environmental needs. Long-term goals and short-term objectives are clearly described .	Proposed research program is clearly presented, has original and innovative aspects and may have impact and/or address socio-economic or environmental needs. Long-term and short-term objectives are described .	Proposed research program, as presented lacks clarity , and/or is of limited originality and innovation . Objectives are not clearly described and/or likely not attainable.
		The methodology is clearly defined and appropriate .	The methodology is clearly described and appropriate .		The methodology is described and appropriate .	The methodology is partially described and/or appropriate .	The methodology is not clearly described and/or appropriate .
		The application clearly demonstrates how the research activities to be supported are distinct from those funded (or applied for) by other sources.					The application does not clearly demonstrate how the research activities to be supported are distinct from those funded (or applied for) by other sources or does not clearly demonstrate a program of research in the NSE.
Training of Highly Qualified Personnel	Past Training of HQP	Past training is at the highest level in terms of the research training environment provided and HQP contributions to research. Most HQP move on to highly impactful positions that require skills gained through the training received.	Past training is far superior to other applicants in terms of research training environment provided and HQP contributions to research. Most HQP move on to impactful positions that require skills gained through the training received.	Past training is superior to other applicants in terms of the research training environment provided and HQP contributions to research. HQP generally move on to impactful positions that require skills gained through the training received.	Past training compares favourably with other applicants in terms of the research training environment provided and HQP contributions to research. HQP generally move on to positions that require skills gained through the training received.	Past training is modest relative to other applicants in terms of the research training environment provided and HQP contributions to research. Some HQP move on to positions that require skills gained through the training received.	Past training is below an acceptable level in terms of the research training environment provided and HQP contributions to research. HQP rarely move on to positions that require skills gained through the training received.
	Training Philosophy & Research Training Plan	Training philosophy and research training plans are of the highest quality: highly appropriate, clearly defined and expected to produce top quality results in terms of the overall approach and specific projects for HQP.	Training philosophy and research training plans are far superior: highly appropriate, clearly defined and expected to produce high quality results in terms of the overall approach and specific projects for HQP.	Training philosophy and research training plans are superior: highly appropriate, clearly defined and expected to produce quality results in terms of the overall approach and specific projects for HQP.	Training philosophy and research training plans are appropriate and clearly defined in terms of the overall approach and specific projects for HQP.	Training philosophy and research training plans are partially appropriate and partially defined in terms of the overall approach and specific projects for HQP.	Training philosophy and research training plans are not appropriate and not clearly defined in terms of the overall approach and specific projects for HQP.
		Challenges related to equity, diversity and inclusion specific to the institution and field of research are clearly described .		Challenges related to equity, diversity and inclusion specific to the institution and field of research are described .	Challenges related to equity, diversity and inclusion specific to the institution and/or field of research are described .	Challenges related to equity, diversity and inclusion specific to the institution and/or field of research are partially described .	Challenges related to equity, diversity and inclusion specific to the institution and/or field of research are inaccurate or not described .
		Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are clearly defined .		Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are defined .	Specific actions to support the recruitment of a diverse group of HQP and/or an inclusive research training environment are defined .	Specific actions to support the recruitment of a diverse group of HQP and/or an inclusive research training environment are partially defined .	Specific actions to support the recruitment of a diverse group of HQP and/or an inclusive research training environment are not appropriate or not defined .

Now :
“Equity, diversity and inclusion considerations in the research process (e.g. the research questions, design of the study, methodology, analysis, interpretation, and dissemination of results), are integrated where relevant.”

Excellence of the researcher	<input type="checkbox"/> Exceptional <input type="checkbox"/> Strong	<input type="checkbox"/> Outstanding <input type="checkbox"/> Moderate	<input type="checkbox"/> Very Strong <input type="checkbox"/> Insufficient
<ul style="list-style-type: none"> Knowledge, expertise, and experience of the researcher in the NSE Quality and impact of contributions to the proposed research and/or other areas of research in the NSE Importance of contributions to, and use by, other research and end-users 	Rationale for rating: <ul style="list-style-type: none"> Knowledge, expertise, and experience of the researcher in the NSE <ul style="list-style-type: none"> current/past positions, PDF, PhD, etc (in what areas?) awards/recognition/service (research, teaching, NSE community, may apply to the probes below also)? Quality and impact of contributions to the proposed research and/or other areas of research in the NSE <ul style="list-style-type: none"> grants awarded (co-I or PI?) editorial boards? publications (quantity/quality, lead/senior author, HQP on them and marked with * ?) presentations (invited?) most significant contributions (number of citations; for long-term themes capturing current work, recent impact?) Importance of contributions to, and use by, other research and end-users <ul style="list-style-type: none"> knowledge translation? media coverage? 		
Merit of the proposal	<input type="checkbox"/> Exceptional <input type="checkbox"/> Strong	<input type="checkbox"/> Outstanding <input type="checkbox"/> Moderate	<input type="checkbox"/> Very Strong <input type="checkbox"/> Insufficient
<ul style="list-style-type: none"> Originality and innovation Significance and expected contributions to NSE research; potential for policy- and/or technology-related impact Clarity and scope of objectives Clarity and appropriateness of methodology Feasibility Extent to which the scope of the proposal addresses all relevant issues Consideration of sex, gender and diversity in the research design, if applicable to the field Consideration of interdisciplinary methods or practices in research Appropriateness of, and justification for, the budget Demonstration that the DG proposal is distinct conceptually from research supported (or submitted for support) through CIHR and/or SSHRC Clear explanation why DG funding is essential to carry out the research proposed in the DG application (for applicants who hold or receive funds from a CIHR Foundation Grant) 	Rationale for rating: <ul style="list-style-type: none"> use summary to help outline this! <ul style="list-style-type: none"> Originality and innovation <ul style="list-style-type: none"> developed new experimental paradigms, techniques, combined approaches? Significance and expected contributions to NSE research; potential for policy- and/or technology-related impact <ul style="list-style-type: none"> model/theory development, long-term “story”, socioeconomic/environmental impact? Clarity and scope of objectives <ul style="list-style-type: none"> long term goals/vision (model/theory?) and short term objectives (experiments/studies?) clearly defined? Clarity and appropriateness of methodology <ul style="list-style-type: none"> understandable for general scientific audience, credibility (publications involving these methods)? Feasibility <ul style="list-style-type: none"> can be done by their lab, has relevant experience (if not, clear plan, but “story” should fit you) Consideration of sex, gender and diversity in the research design, if applicable <ul style="list-style-type: none"> if not applicable, should clearly state why, but give this careful consideration Extent to which the scope of the proposal addresses all relevant issues <ul style="list-style-type: none"> you control the scope of this “story”, not too big or too small... Appropriateness of, and justification for, the budget <ul style="list-style-type: none"> reasonable, use tables for clarity (e.g., funds for HQP in which years), “get the funding then do what you want” Demonstration that the Discovery Grant proposal is distinct conceptually from research supported (or submitted for support) through CIHR and/or SSHRC <ul style="list-style-type: none"> summaries from grants, but clear statements of “no conceptual or budgetary overlap” are helpful Clear explanation why Discovery Grant funding is essential to carry out the research proposed in the DG application (for applicants who hold or have applied for a CIHR Foundation Grant) <ul style="list-style-type: none"> why couldn’t the CIHR Foundation grant cover this work? 		
Contributions to the training of highly qualified personnel	<input type="checkbox"/> Exceptional <input type="checkbox"/> Strong	<input type="checkbox"/> Outstanding <input type="checkbox"/> Moderate	<input type="checkbox"/> Very Strong <input type="checkbox"/> Insufficient
<ul style="list-style-type: none"> Quality and impact of past training <ul style="list-style-type: none"> Training environment HQP awards and research contributions Outcomes and skills gained by HQP Quality, suitability and clarity of the planned training <ul style="list-style-type: none"> Training philosophy <ul style="list-style-type: none"> Mentorship approach and enhancement of the research and training environment Challenges or barriers to inclusion and advancement of under-represented groups Planned approach to promote participation of a diverse group of HQP Research training plan for individual HQP 	Rationale for rating: <ul style="list-style-type: none"> Past contributions to the training of HQP <ul style="list-style-type: none"> UGs, Masters, PhDs, PDFs, techs, all count, knowing where they ended up shows you care and are proud! <ul style="list-style-type: none"> Training environment <ul style="list-style-type: none"> lab(s), training, techniques and equipment, academic programming, seminars HQP awards and research contributions highlight scholarships and research contributions (students in lead roles?) Outcomes and skills gained by HQP HQP go on to PDF, faculty, industry jobs, etc Training plan <ul style="list-style-type: none"> Training philosophy pedagogical approaches, frequent interaction (not just “weekly lab meetings”), social aspects (team building), HQP research training plan name HQP where possible in proposal, and provide details here about who is doing what and why EDI of HQP! (see slides from our next 2 presenters) 		

EXCEPTIONAL	OUTSTANDING	VERY STRONG	STRONG	MODERATE	INSUFFICIENT
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Impact and importance of the work is clearly evident and groundbreaking .	Impact and importance of the work is clearly evident and influential .	Impact and importance of the work is clearly evident .	Impact and importance of the work is evident .	Impact and importance of the work is somewhat evident .	Impact and importance of the work is not clearly evident .

Excellence of researcher - rationale for rating:

- **Knowledge, expertise and experience of the researcher in the NSE**
 - current/past positions, PDF, PhD etc. (in what areas?)
 - awards/recognitions/service (research, teaching, NSE community, may apply to the probes below?)
- **Quality and impact of contributions to the proposed research and/or other areas of research in the NSE**
 - grants awarded (co-I or PI?)
 - editorial boards
 - publications (quantity/quality, lead/senior author, HQP on them marked with *?)
 - presentations (invited?)
 - most significant contributions (no. of citations; long term themes capturing current work, recent impact?)
- **Importance of contributions to, and use by, other researchers and end-users**
 - knowledge translation?
 - media coverage?

EXCEPTIONAL	OUTSTANDING	VERY STRONG	STRONG	MODERATE	INSUFFICIENT
Proposed research program is clearly presented, is extremely original and innovative and is likely to have impact by leading to groundbreaking advances in the area and/or leading to a technology or policy that addresses socio-economic or environmental needs.	Proposed research program is clearly presented, is highly original and innovative and is likely to have impact by contributing to groundbreaking advances in the area, and/or leading to a technology or policy that addresses socio-economic or environmental needs.	Proposed research program is clearly presented, is original and innovative and is likely to have impact by leading to advancements and/or addressing socio-economic or environmental needs.	Proposed research program is clearly presented, is original and innovative and is likely to have impact and/or address socio-economic or environmental needs.	Proposed research program is clearly presented, has original and innovative aspects and may have impact and/or address socio-economic or environmental needs.	Proposed research program, as presented lacks clarity , and/or is of limited originality and innovation .
Long-term vision and short-term objectives are clearly defined .	Long-term goals are clearly defined and short-term objectives are well planned .	Long-term goals are defined and short-term objectives are planned .	Long-term goals and short-term objectives are clearly described .	Long-term and short-term objectives are described .	Objectives are not clearly described and/or likely not attainable.
The methodology is clearly defined and appropriate .	The methodology is clearly described and appropriate .		The methodology is described and appropriate .	The methodology is partially described and/or appropriate .	The methodology is not clearly described and/or appropriate .
The application clearly demonstrates how the research activities to be supported are distinct from those funded (or applied for) by other sources.					The application does not clearly demonstrate how the research activities to be supported are distinct from those funded (or applied for) by other sources or does not clearly demonstrate a program of research in the NISS.

Merit of the proposal - rationale for rating:

Use summary to help outline this!

- **Originality and innovation**
 - developed new experimental paradigms, techniques, combined approaches?
- **Significance and expected contributions to NSE research; potential for policy- and/or technology-related impact**
 - model/theory development, long term “story”, socioeconomic/environmental impact?
- **Clarity and scope of objectives**
 - long-term goals/vision (model/theory?) and short-term objectives (experiments/studies?) clearly defined?
- **Clarity and appropriateness of methodology**
 - understandable for general scientific audience, credibility (publications including these methods?)
- **Feasibility**
 - can be done by their lab, has relevant experience (if not, clear plan, but “story” should fit you)
- **Consideration of sex, gender and diversity in the research design, where applicable**
 - give this careful consideration
- **Extent to which the scope of the proposal addresses all relevant issues**
 - you control the scope of this “story”, not too big or too small...
- **Appropriateness of, and justification for, the budget**
 - reasonable, use of tables for clarity (e.g., funds for HQP in which years), “get the funding then do what you want”(NSE)
- **Demonstration that the Discovery Grant proposal is distinct conceptually from research supported (or submitted for support) through CIHR and /or SSHRC)**
 - summaries from grants, but clear statements of “no conceptual or budgetary overlap” are helpful.
- **Clear explanation why Discovery Grant funding is essential to carry out the research proposed in the DG application**
 - (for applicants who hold or have applied for a CIHR Foundation Grant)
 - why couldn’t the CIHR Foundation Grant cover this work?

EXCEPTIONAL	OUTSTANDING	VERY STRONG	STRONG	MODERATE	INSUFFICIENT
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Training of HQP - rationale for rating:

Past contributions to the training of HQP

- UGs, Masters, PhDs, PDFs, techs, all count, knowing where they ended up shows you care and are proud!
- Training environment
 - lab(s), training, techniques and equipment, academic programming, seminars
- HQP awards and research contributions
 - Highlight scholarships and research contributions (students in lead roles?)
- Outcomes and skills gained by HQP
 - HQP go on to PDF, faculty, industry job, etc.

Training plan

- Training philosophy
 - pedagogical approaches, frequent interaction (not just “weekly lab meetings”), social aspects (team building)
- HQP research training plan
 - name HQP where possible in proposal, and provide details here about who is doing what and why
- EDI of HQP (see upcoming slides!)

Training of Highly Qualified Personnel (HQP)

Danielle Baron

Manager
Research and Graduate Studies
College of Agriculture and Bioresources

HQP Considerations (Appendix 5, 2024-25 Peer Review Manual)

Contributions to the training of highly qualified personnel

- Quality and impact of past training
 - Training environment
 - HQP awards and research contributions
 - Outcomes and skills gained by HQP
- Quality, suitability and clarity of the planned training
 - Training philosophy
 - Mentorship approach and enhancement of the research and training environment
 - Challenges or barriers to inclusion and advancement of under-represented groups
 - Planned approach to promote participation of a diverse group of HQP
 - Research training plan for individual HQP

HQP Considerations (Appendix 5, 2023-24 Peer Review Manual)

Contributions to the training of highly qualified personnel

- Quality and impact of past training
 - Training environment
 - HQP awards and research contributions
 - Outcomes and skills gained by HQP
- Quality, suitability and clarity of the planned training
 - Training philosophy
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Past training:

- **Don't worry if you are an ECR and this is your first research program!**
- Undergrads, Masters, PhD, PDFs, technicians, research assistants, summer students
- Highlight your lab facilities, specialized equipment/techniques, academic programs/training
- Discuss past awards, presentations that HQP did
- Where they are now – industry, academia – show that you have kept in touch!

HQP Considerations (Appendix 5, 2024-25 Peer Review Manual)

Contributions to the training of highly qualified personnel

- Quality and impact of past training
 - Training environment
 - HQP awards and research contributions
 - Outcomes and skills gained by HQP
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 - Training philosophy
 - Mentorship approach and enhancement of the research and training environment
 - Challenges or barriers to inclusion and advancement of under-represented groups
 - Planned approach to promote participation of a diverse group of HQP
 - Research training plan for individual HQP

Training plan:

1) Training philosophy

- Your approach to supervising students and mentorship
- Team building, frequent (virtual) interactions, pedagogical approaches

2) Research training plan

- Do not just list your HQP!
- Describe specifically which HQP will be responsible for which aspects of the research and WHY
- Ensure this is mirrored in your methods section in your proposal
- Can include a Gantt chart in your budget just.
- Use names where possible



Equity, Diversity, and Inclusion (EDI)

Tera Ebach

Research Office Analyst
Research and Graduate Studies
Western College of Veterinary Medicine

Equity Diversity and Inclusion (EDI) for NSERC Discovery Grants

1. Incorporate EDI throughout the grant
2. Clearly describe EDI challenges in the Institution and College/Field of Research
3. Clearly define your own specific actions for HQP recruitment that address EDI Challenges.
4. Clearly define your own specific actions to support an inclusive training environment

The Canadian Common CV (CCV)

Graham Fairhurst

Research Facilitator
School of Environment and Sustainability

Completing the Canadian Common CV

Top tips

- Start early! Impending deadline = heavy user traffic = problems/lags/crashes.
- Use the NSERC CCV template (select 'Funding' on the 'CV' tab).
- Follow the PDF Instruction Guide provided by NSERC in the NSERC template.
- Make good use of extra space in text boxes.
- Mark your HQP with asterisks following their surnames.

More advice and examples

- Attend the fall Discovery Grant application clinic (date TBA later in the summer).
- Watch [NSERC's video on completing the CCV](#).
- Visit USask's Grants Repository to see samples of CVs from past successful applications (<https://vpresearch.usask.ca/events/grants-calendar.php>).
- Contact your Research Facilitator or RASI with questions or issues.

CV → Funding



Franglais Home

Welcome CV Versions History

Funding CV - List of Sections

2024-04-29 22:40 EST

Load Preview Submit

* Funding Source NSERC

* CV Type NSERC_Researcher

"NSERC" & "NSERC_Researcher"

Franglais Home Contact Us Help Logout

Welcome CV Versions History Consent Utilities PIN/System Account Account

Funding CV - List of Sections

2024-04-29 21:37 EST

Please revise the entries marked with an "X".

Load Preview Submit

* Funding Source NSERC

* CV Type NSERC_Researcher

Specific instructions from NSERC

Publications ?			
		Journal Articles	29/29 2024-04-29 21:35:32
		Journal Issues	0/0 No Entry
		Books	0/0 No Entry
		Book Chapters	2/2 2024-04-29 21:33:22
		Reports	0/0 No Entry
		Manuals	0/0 No Entry
		Conference Publications	1/1 2024-04-29 21:32:53
Intellectual Property ?			
		Patents	0/0 No Entry

Follow the PDF instructions

Click on the pencil icon to edit items marked "X"

Journal Articles ?

Submit All ☒

Submit?	Article Title
<input checked="" type="checkbox"/>	Can synchronizing feather-based n
<input checked="" type="checkbox"/>	An investigation of physiological el
<input type="checkbox"/>	Feather corticosterone of a nestlin
<input checked="" type="checkbox"/>	Cover Image, Volume 49, Issue 4.
<input checked="" type="checkbox"/>	Experimental variation in the spati

1. "Trash" unwanted items
2. Uncheck boxes to remove items that you want to keep

Journal Articles

Symbols

Done

Undo

B I U

* Article Title

Feather-based measures of stable isotopes and corticosterone reveal a relationship between trophic position and physiology in a pelagic seabird over a 153-year period [Use this space to include, e.g., if highly cited paper, awards received, etc.]

Take advantage of the space in text boxes and provide additional information [in brackets] about entries

Mark your HQP with one of more asterisks following their surname, and explain the usage in your "Additional Information on Contributions" section in the application

* Year 2024

Open Access? Yes

* Authors

Smith*, A., Jones**, B., Fairhurst, G.D.

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USask Internal Review Program & Research Support

Michaela Lynds

Research Development Specialist (NSERC)
Office of the Vice President Research

Internal Review program



INTENTION TO APPLY / REQUEST FOR INTERNAL REVIEW

NSERC DISCOVERY GRANT (DG) AND/OR RESEARCH TOOLS AND INSTRUMENTS (RTI) GRANT

Oct/Nov 2025 APPLICATION

Please submit this form to grant.review@usask.ca anytime before July 25, 2025. The information provided will be made available to the appropriate Associate/Vice-Dean Research, Associate Director Research, and administrative staff for the purposes of the NSERC DG/RTI internal review process.

Form Submission Date

Date of Academic Appointment

Principal Applicant

College / School

Department

Email

Phone

Which NSERC grant are you applying for?

Please choose one ...

Suggested NSERC Evaluation Group (EG) for your proposal

Please choose one ...

Other

Which NSERC applicant category applies to you?

☐ Early Career Researcher

Early career researchers (ECR) are applicants who have held their first independent academic position within the last five years.

☐ Established Researcher Renewing a Discovery Grant

Currently holding a DG

☐ Established Researcher Not Holding a Discovery Grant

Application Title (DG)

Application Title (RTI)

Internal Review

Would you like your application to be peer reviewed?

☐ Yes

☐ No

If yes, please suggest 3 USask researchers who would be able to provide an expert and arms-length scientific review without conflict of interest. If you are also applying for RTI grants, these should be the same 3 names you suggested for the DG internal review.

1. Name

Email

2. Name

Email

3. Name

Email

For RTI Applicants Only

In addition to NSERC's [Eligibility Criteria for Faculty](#), applicants and co-applicants must each currently hold, or be applying for one of the following NSERC research grants at the time of application: Discovery Grant, Strategic Partnerships Grants, Collaborative Research and Development Grants, Canada Research Chairs, and/or Canada Excellence Research Chairs.

Researchers will be able to participate on one application per RTI competition, either as an applicant or a co-applicant, but not both. This requirement does not apply to Subatomic Physics applicants.

List of RTI Co-Applciant(s)*

NSERC Research Grant(s) Currently Held for RTI Principal Applicant and Co-Applciant(s)*

Principal Applicant	NSERC Grant Type	Start Year	End Year	Amount Awarded
	NSERC Grant Type ...			
	NSERC Grant Type ...			
	NSERC Grant Type ...			
	NSERC Grant Type ...			
	NSERC Grant Type ...			
	NSERC Grant Type ...			
	NSERC Grant Type ...			
	NSERC Grant Type ...			
	NSERC Grant Type ...			
	NSERC Grant Type ...			

Other

- You can put forward your preferences, but this cannot be guaranteed
- Reviewers can be from your dept./college but there must be no conflicts of interest
- If you are not sure who to suggest, refer to tables in next slides and the [List of USask DG/RTI holders \(past & present\)](#) or contact grant.review@usask.ca
- We encourage applicants to be in regular direct contact with their reviewers.
- Access the form [HERE](#)

Discovery EG members

(past & present)

DG- Evaluation Group	Faculty Name	Department & College	DG- Evaluation Group	Faculty Name	Department & College
1501: Genes, Cells & Molecules	Susan Detmer Meena Sakharkar Julia Boughner Yan Zhou Jack Gray Mirek Cygler Daniel MacPhee Heather Wilson	Veterinary Pathology, WCV Pharmacy & Nutrition APP, College of Medicine VIDO Biology, Arts & Science BMI, College of Medicine Veterinary Biomedical Sciences, WCV Veterinary Microbiology, WCV	1507: Computer Science	Chanchal Roy Julita Vassileva Fangxiang Wu Zadia Codabux Seok-Bum Ko	Computer Science, Arts & Science Computer Science, Arts & Science Computer Science, Arts & Science Computer Science, Arts & Science Electrical & Computer Engineering, CoE
1502: Biological Systems & Functions	Jaswant Singh Joel Lanovaz John Howland Ron Borowsky Greg Penner Yangdou Wei Jack Gray John P Giesy Jon Farthing	Veterinary Biomedical Sciences, WCV College of Kinesiology APP, College of Medicine Psychology, Arts & Science Animal & Poultry Science, AgBio Biology, Arts & Science Biology, Arts & Science Veterinary Biomedical Sciences, WCV College of Kinesiology	1508: Math & Statistics	Raymond Spiteri Longhai Li Juxin Liu	Computer Science, Arts & Science Math & Statistics, Arts & Science Math & Statistics, Arts & Science
1503: Evolution & Ecology	Robert Clark Timothy Jardine	Global Institute for Water Security Environment & Sustainability	1509: Civil, Industrial & Systems Engineering	Ehab Diab	Geography & Planning, Arts & Science
1504: Chemistry	David Palmer Robert Scott	Chemistry, Arts & Science Chemistry, Arts & Science	1510: Electrical & Computer Engineering	Ramakrishna Gokaraju Safa O Kasap	Electrical & Computer Engineering, CoE Electrical & Computer Engineering, CoE
1505: Physics	John Tse Alexander Moewes Andrei Smolyakov Chijin Xiao	Physics & Eng. Physics, Arts & Science Physics & Eng. Physics, Arts & Science Physics & Eng. Physics, Arts & Science Physics & Eng. Physics, Arts & Science	1511: Materials & Chemical Engineering	Ildiko Badea Ajay Dalai	Pharmacy & Nutrition Chemical & Biological Engineering, CoE
1506: Geosciences	Cherie Westbrook Adam Bourassa Yuanming Pan Steven Siciliano	Geography & Planning, Arts & Science Physics & Eng. Physics, Arts & Science Geological Sciences, Arts & Science Soil Sciences, AgBio	1512: Mechanical Engineering	Carey J Simonson James Johnston Xiongbiao (Daniel) Chen	Mechanical Engineering, CoE Mechanical Engineering, CoE Mechanical Engineering, CoE

RTI EG members

(past & present)

RTI Evaluation Group	Faculty Name	Department & College
Genes, Cells & Molecules	Sureesh Tikoo Thomas Fisher Wei Xiao	School of Public Health, VIDO APP, College of Medicine BMI, College of Medicine
Environmental Sciences	Robert Clark Christy Morrissey	Global Institute for Water Security Toxicology Centre, College of Arts and Science
Biological Systems and Functions	Jaswant Singh Valerie Thompson	Veterinary Biomedical Sciences, WCVM Psychology, College of Arts and Science
Chemistry	Michel Gravel Timothy Kelly	Chemistry, College of Arts and Science Chemistry, College of Arts and Science
Materials & Chemical Engineering	Amira Abdelrasoul Qiaoqin Yang Bishnu Acharya	Chemical and Biological Engineering, CoE Mechanical Engineering, CoE Chemical and Biological Engineering, CoE
Engineering	Ildiko Badea	College of Pharmacy and Nutrition
Physics	Gordon Sarty	Physics and Engineering Physics, College of Arts and Science

Timeline

DG	RTI	Stage	Deadline
X	X	Applicants initiate their intention to apply and/or request for internal review by submitting the Intention to Apply/Request for Internal Review Form for NSERC DG/RTI to grant.review@usask.ca. Please put 'Lastname NSERC DG/RTI' in the subject heading.	25th July 2025
X		NSERC Deadline for Submission of DG Notification of Intent (NOI) to Apply NOI must be submitted to NSERC through the NSERC Research Portal.	1st August 2025
X		Applicants participating in the internal review program to email a copy of your submitted NSERC DG NOI to grant.review@usask.ca . Please put 'Lastname NSERC DG' in the subject heading.	8th August 2025
X	X	Applicants consult with their suggested reviewers, Research Facilitators, Associate/Vice-Deans Research, and/or mentorship teams to strategize and prepare their draft application.	Until 12th September 2025
X	X	Applicants submit draft DG and/or RTI application and CCV for internal review to their internal reviewers and copy to grant.review@usask.ca . Please put 'Lastname NSERC DG/RTI' in the subject heading.	12th September 2025
X	X	Internal reviews are returned to the applicants and copied to grant.review@usask.ca directly from internal reviewers (or from Tri-Agency team if assistance is needed).	6th October 2025
X	X	Applicants consult with their suggested reviewers, Research Facilitators, Associate/Vice-Deans Research, or mentorship teams to incorporate reviewer feedback. Research Facilitator reads for the logistical flow and completion of the proposal.	RTI: 6th-13th October 2025 DG: 6th-20th October 2025
X	X	College/Unit Internal Approval Applicants must submit a full application package including CCV through the University Research System (UnivRS) for Department and College academic approval. Applicants to comply with college/unit-specific internal approval processes and deadlines.	Please check with your Research Facilitator or Associate/Vice Dean Research/Director
	X	Research Acceleration and Strategic Initiatives (RASI) Compliance Review and Approval (RTI) College/school/unit of the applicant must review the application, decide on approval and submit the decision in University Research System (UnivRS). RSEO will review for eligibility, conduct a final compliance review check and provide Institutional approval. Applicants will have the opportunity to incorporate any required changes they wish to address or as noted by RASI. Paper applications will not be accepted.	On or before 17th October 2025
	X	NSERC RTI Submission Deadline Final application must be submitted by applicants to NSERC through the NSERC Research Portal.	27th October 2025
X		Research Acceleration and Strategic Initiatives (RASI) Compliance Review and Approval (DG) College/school/unit of the applicant must review the application, decide on approval and submit the decision in University Research System (UnivRS). RSEO will review for eligibility, conduct a final compliance review check and provide Institutional approval. Applicants will have the opportunity to incorporate any required changes they wish to address or as noted by RASI. Paper applications will not be accepted.	On or before 24th October 2025
X		NSERC DG Submission Deadline Final application must be submitted by applicants to NSERC through the NSERC Research Portal.	3 rd November 2025

2025 Important Dates

- Non-negotiable
- Communication is key
- OVPR is here to support you
- Refer to [NSERC DG & RTI Application Deadlines 2025](#)

NSERC Rules and Deadlines

- If applying for DG, you must submit a NOI to NSERC via their portal by 1st August. NSERC will not accept a full application if you don't.
- NSERC deadline times are given in ET – remember to check the time zone where you are when you submit!

It is time to start preparing your Discovery Grant application. A notification of intent to apply (NOI) must be submitted by the deadline date of August 1, 2025, 8:00 p.m. (ET).

The NOI is mandatory when applying for a Discovery Grant. Applicants who do not submit an NOI cannot submit a full application. The information contained in the NOI allows NSERC to start some aspects of the review process, including the preliminary assignment to an evaluation group, the selection of external reviewers and the verification of the eligibility of the subject matter.



Research Data Management

Research data management (RDM) refers to the collection, documentation, storage, sharing, and preservation of research data throughout the lifecycle of a research project. Good RDM practices improve research efficiency, support research integrity and replication, and enhance research visibility and impact. These outcomes benefit researchers and their institutions, funders, and the research enterprise in Canada and internationally.

[Tri-Agency Research Data Management Policy](#)

[USask Research Data Management](#)

[USask Research Data Management Strategy & Roadmap](#)

[USask Research Data Management Guide](#)

Contact: rdm.inquiries@usask.ca

Research Security

STRAC policy (2024)

Sensitive Technology Research and
Affiliations of Concern

[Government of Canada: STRAC policy](#)

[USask - Safeguarding Your Research](#)
[Tri-Agency Guidance on Research Security](#)
[Research Security Resources](#)

Contact:

Lisa Belhumeur belhumeur.lisa@usask.ca

Ty Pellerin ty.pellerin@usask.ca

NSERC Research Facilitators and Administrators

NSERC Leader: Ron Borowsky (until June 30th, 2025)

Research Development Specialist (NSERC): Michaela Lynds

College of Agriculture and Bioresources: Danielle Baron

College of Arts and Science: James Dobson

School of Environment and Sustainability: Graham Fairhurst

Edwards School of Business: Ernest Leung

College of Engineering: Rana Mustafa

College of Pharmacy and Nutrition: Gen Clark

College of Dentistry: Janice Michael

College of Education: Sanjukta Choudhury

College of Kinesiology: Vacant

College of Law: Vacant

College of Nursing: Robin Thurmeier

College of Medicine:

Biochemistry, Microbiology & Immunology; Anatomy, Physiology & Pharmacology: Bruna Bonavia-Fisher

Medicine: Ozlem Sari

Psychiatry: Mariam Alaverdashvili

Surgery: Karen Mosier

Pediatrics: Tova Dybvig

Community Health & Epidemiology: Maryam Madani Larijani

Family Medicine; Medical Imaging; Obstetrics & Gynecology; Oncology; Ophthalmology; Pathology & Lab. Medicine: Mark Milne

Research Acceleration and Strategic Initiatives (RASI) Research Support

Arts and Science; Education Edwards School of Business Johnson Shoyama School of Public Policy Law Library Centre for Forensic Behavioural Science and Justice Studies Canadian Centre for the Study of Co-operatives Community-University Institute for Social Research	Nicole Benning Laurie Schimpf
Agriculture and Bioresources Engineering Global Institute for Food Security Global Institute for Water Security School of Environment and Sustainability Toxicology Centre Vaccine & Infectious Disease Organization Western College of Veterinary Medicine	Brenda Meyer- Burt Gerelt Trost
Medicine Pharmacy and Nutrition Nursing Dentistry Kinesiology School of Public Health Saskatchewan Population Health and Evaluation Research Unit Canadian Centre for Health and Safety in Agriculture Indigenous Peoples' Health Research Centre	Cameron Berg Centaine Raginski
International Office	Leila Tang
Research Data Management	Colleen Cochran

EG 1501 Genes, Cells and Molecules

Julia Boughner

Professor

College of Medicine: Department of Anatomy, Physiology and Pharmacology



Think & plan EARLY
(like, *now*): LOI



Walks, do coffees:
'PUNCH HOLES'



Refer to The Grid
carefully & often



Find, then TELL
the meaning



Get ALL the eyes
that you can



Allow the EG to
score you higher

EG 1502: Biological Systems and Functions

Jon Farthing

Professor
College of Kinesiology

- Pay very close attention to the grid wording for each of the merit indicators – focus on how to obtain **Strong or Very Strong scores** to be competitive for funding. Address every statement in the grid wording
- **Spend a lot of time on the narrative sections** to provide evidence for most significant contributions, accomplishments, impact of your research and HQP
- **Only contributions in the NSE** are considered – if there is overlap with health, tackle this directly... Justify why the work in a clinical model or in a patient population is relevant for NSE, or direct reviewers to your NSE focused work
- Merit of the Proposal – **be aware of some “proposal killers”** – unclear objectives or objectives related to health, outlining several projects rather than a program of research, one study split into pieces, lack of feasibility, unclear figures
- Up-to-date and polished CCV – **inconsistencies annoy reviewers**, and they waste time trying to figuring things out or just dismiss it as unclear

EG 1502: Biological Systems and Functions

John Howland

Professor

College of Medicine: Department of Anatomy, Physiology and Pharmacology

- No matter how tired you are writing your grant, the reviewers will be even more tired reading it. Make it easy for them in every section.
- Limit abbreviations, including ones you think ‘everyone should know.’
- Use all the space available for each section because other applicants will, and reviewers will compare between grants for scope.
- The long-term objectives section is critical and should CLEARLY differentiate your NSE program from your health-related research.

EG 1507: Computer Science

Zadia Codabux

Associate Professor
College of Arts & Science: Department of Computer Science

CCV

- Update dates of items and ensure the items are in the appropriate section (e.g., grant is completed? Move it to the “completed” section)
- Exclude declined or rejected grants
- Ensure all items are under the correct headings

Proposal

- Adhere to the correct format/template for the proposal
- Incorporate the most recent and relevant literature
- Clearly state your goals (i.e., they should not be hidden within the text or the reviewers should not need to infer)
- Ensure your budget is reasonable and explain how you plan to complement DG funding with other funding sources

EG 1508: Math and Statistics

Raymond Spiteri

Professor

College of Arts & Science: Department of Computer Science

Associate Member in Mathematics and Statistics

- Start early!
- Read the instructions; follow the instructions.
- Get feedback.
- “The onus is on the applicant.”
 - Clearly explain your role in publications, supervision, collaborations, committees, other funding.
 - Ensure consistency between CCV and application.
 - Don’t take EDI lightly.
 - No matter how clear things are in your mind, do not assume reviewers can read it.
 - Write in plain language for the educated non-specialist.
 - Less can be more, but sometimes less is just less.
- Have fun! Have your excitement/enthusiasm come through!

Useful Resources

[USask Tri-Agency Research Support – OVPR
Grants Repository](#)

[Instructions for completing the NOI to apply for a Discovery grant](#)

[Instructions for completing a Discovery grant application](#)

[Discovery grant - Peer review manual](#)

[Instructions for completing a RTI grant application](#)

[Research Tools and Instruments grant - Peer review manual](#)

[Resource Videos](#)

[Guide on integrating EDI considerations in research](#)

[HQP - Frequently Asked Questions](#)

[How to complete NSERC's version of the CCV](#)



Thank you!