



NSERC Discovery and Research Tools & Instruments Grants Workshop

8th May 2024

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

10:00 – 10:05	Welcome and introductions
10:05 – 10:15	Overview of the Evaluation/Rating process at NSERC
10:15 – 10:30	Tips on HQP, EDI and CCV considerations
10:30 – 10:35	OVPR Internal Review service
10:35 – 11:00	Panel with NSERC DG Evaluation Group members
11:00 – 11:30	Q&A
11:30 – 12:00	RTI session with Q&A
12:00 →	Networking opportunity

Presenters and Panelists

Chair

Ron Borowsky, USask NSERC Lead
Professor, Psychology (Cognition and Neuroscience).

Presenters

Danielle Baron, Manager Research & Graduate Studies (Ag & Bio.Res.)
HQP: Highly Qualified Personnel.

Tera Ebach, Research Office Analyst (WCVM)
EDI: Equity, Diversity, & Inclusion.

Graham Fairhurst, Research Facilitator (SENS)
CCV: Canadian Common CV.

Michaela Lynds, Research Development Specialist (OVPR)
Internal Review service.

Suresh Tikoo, Professor (School of Public Health: Vaccinology)
RTI session.

Panelists

Robert Scott (EG 1504: Chemistry)
Professor, Chemistry.

Cherie Westbrook (EG 1506: Geosciences)
Professor, Geography & Planning.

Raymond Spiteri (EG 1508: Mathematics & Statistics) *Group Chair*
Professor, Computer Science.

Ildiko Badea (EG 1511: Materials & Chemical Engineering)
Professor, Pharmacy & Nutrition.

Daniel Chen: (EG 1512: Mechanical Engineering)
Professor, Mechanical Engineering & Biomedical Engineering.

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 . Impact and importance of the work is clearly evident and groundbreaking .	Research excellence, accomplishments, and service are far superior to others. Contributions presented in the application are of high quality . Impact and importance of the work is clearly evident and influential .	Research excellence, accomplishments, and service are superior to others. Contributions presented in the application are above average in quality . Impact and importance of the work is clearly evident .	Research excellence, accomplishments, and service are significant . Contributions presented in the application are of good quality . Impact and importance of the work is evident .	Research excellence, accomplishments, and service are reasonable . Contributions presented in the application are of reasonable quality . Impact and importance of the work is somewhat evident .	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 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 . The methodology is clearly defined and appropriate .	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 . The methodology is clearly described and appropriate .	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 . The methodology is clearly described and appropriate .	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 . The methodology is described and appropriate .	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 . The methodology is partially described and/or appropriate .	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 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 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. 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. Challenges related to equity, diversity and inclusion specific to the institution and field of research are clearly described . Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are clearly defined .	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. 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. Challenges related to equity, diversity and inclusion specific to the institution and field of research are described . Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are defined .	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. 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. Challenges related to equity, diversity and inclusion specific to the institution and field of research are described . Specific actions to support the recruitment of a diverse group of HQP and an inclusive research training environment are defined .	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. Training philosophy and research training plans are appropriate and 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/or field of research are described . Specific actions to support the recruitment of a diverse group of HQP and/or an inclusive research training environment are defined .	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. Training philosophy and research training plans are partially appropriate and partially defined in terms of the overall approach and specific projects for HQP. Challenges related to equity, diversity and inclusion specific to the institution and/or field of research are partially described . Specific actions to support the recruitment of a diverse group of HQP and/or an inclusive research training environment are partially defined .	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 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/or field of research are inaccurate or not described . 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.”

<p>Excellence of the researcher</p>	<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 	<p>Rationale for rating:</p> <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? 		
<p>Merit of the proposal</p>	<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) 	<p>Rationale for rating:</p> <ul style="list-style-type: none"> - use summary to help outline this! • 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? 		
<p>Contributions to the training of highly qualified personnel</p>	<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 	<p>Rationale for rating:</p> <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 • 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) 		

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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 *?)
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 - 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?

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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
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- 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
 - if not applicable, should clearly state why, but 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”
- 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
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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 slides from our next presenters!)

Training of Highly Qualified Personnel (HQP)

Danielle Baron

Manager

Research and Graduate Studies
College of Agriculture and Bioresources

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
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 - Mentorship approach and enhancement of the research and training environment
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HQP Considerations (Appendix 5, 2023-24 Peer Review Manual)

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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, 2023-24 Peer Review Manual)

Contributions to the training of highly qualified personnel

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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) 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

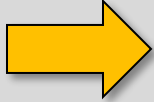
Top tips

- 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

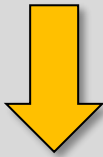
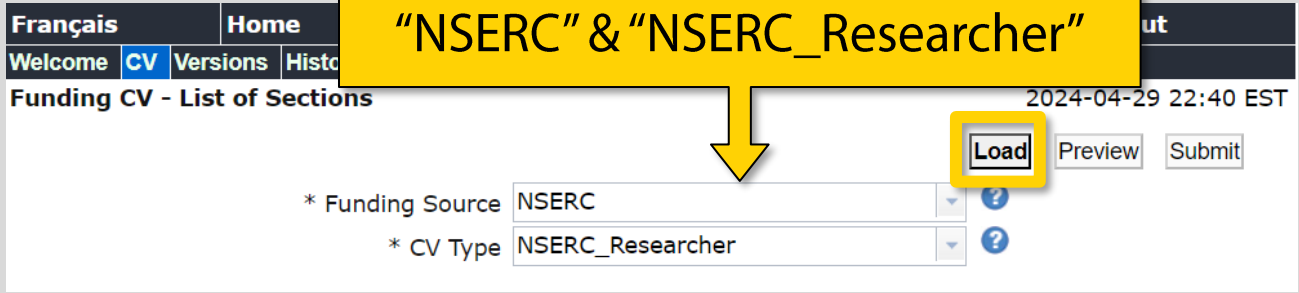
More advice and examples

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

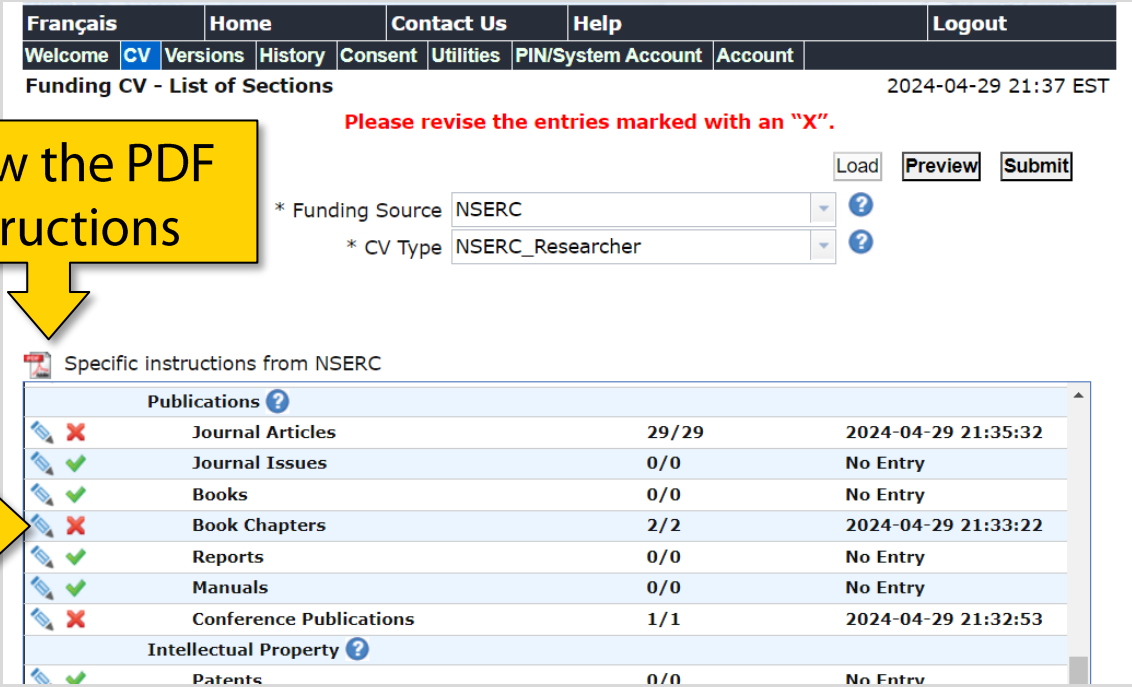
CV → Funding



"NSERC" & "NSERC_Researcher"



Follow the PDF instructions



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



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.]

4

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.

960

OVPR Internal Review service

Michaela Lynds

Research Development Specialist
Office of the Vice President Research

Internal Review service

UNIVERSITY OF SASKATCHEWAN

INTENTION TO APPLY / REQUEST FOR INTERNAL REVIEW
NSERC DISCOVERY GRANT (DG) AND/OR RESEARCH TOOLS AND INSTRUMENTS (RTI) GRANT
Oct/Nov 2024 APPLICATION

Please submit this form to grant.review@usask.ca anytime before July 26, 2024. 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?

Suggested NSERC Evaluation Group (EG) for your proposal
 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-Applicant(s)*

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

Principal Applicant	NSERC Grant Type	Start Year	End Year	Amount Awarded
<input type="text"/>	NSERC Grant Type ...	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	NSERC Grant Type ...	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	NSERC Grant Type ...	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	NSERC Grant Type ...	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Other	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- 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](#)

Internal Review service

DG- Evaluation Group	Faculty Name	Department & College	DG- Evaluation Group	Faculty Name	Department & College
1501: Genes, Cells & Molecules	Susan Detmer Troy Harkness Meena Sakharkar Julia Boughner Yan Zhou Peter Bretscher Jack Gray Mirek Cygler Daniel MacPhee Patrick Krone (Emeritus)	Veterinary Pathology, WCVM BMI, College of Medicine Pharmacy & Nutrition APP, College of Medicine VIDO BMI, College of Medicine Biology, Arts & Science BMI, College of Medicine Veterinary Biomedical Sciences, WCVM Anatomy & Cell Biology, College of Medicine	1507: Computer Science	Chanchal Roy Julita Vassileva Fangxiang Wu Zadia Codabux	Computer Science, Arts & Science Computer Science, Arts & Science Computer Science, Arts & Science Computer Science, Arts & Science
1502: Biological Systems & Functions	Jaswant Singh Joel Lanovaz John Howland Ron Borowsky Greg Penner Yangdou Wei Jack Gray John P Giesy	Veterinary Biomedical Sciences, WCVM College of Kinesiology APP, College of Medicine Psychology, Arts & Science Animal & Poultry Science, AgBio Biology, Arts & Science Biology, Arts & Science Veterinary Biomedical Sciences, WCVM	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	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 Chen	Mechanical Engineering, CoE Mechanical Engineering, CoE Mechanical Engineering, CoE

Internal Review service

RTI Evaluation Group	Faculty Name	Department & College
Genes, Cells & Molecules	Suresh Tikoo Thomas Fisher Wei Xiao Patrick Krone (Emeritus)	School of Public Health, VIDO APP, College of Medicine BMI, College of Medicine Anatomy & Cell Biology, 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	Chemical and Biological Engineering, CoE Mechanical Engineering, CoE
Engineering	Ildiko Badea	College of Pharmacy and Nutrition

Internal Review service



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.	26th July 2024
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 2024
X		Applicants participating in the internal review, please e-mail a copy of your submitted NSERC DG NOI to grant.review@usask.ca .	8th August 2024
X	X	Applicants consult with their mentorship team/s to strategize and prepare their draft application.	12th September 2024
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 .	13th September 2024
X	X	Internal reviews are returned to the applicants.	7th October 2024
X	X	Applicants consult with their reviewers to incorporate feedback. Research Facilitator reads for the logistical flow and completion of the proposal.	RTI: 7th-13th October 2024 DG: 7th-20th October 2024
X	X	College/Unit Internal Approval Applicants must submit a full application package including CCV through UnivRS for Department and College academic approval. Applicants comply with college/unit-specific internal approval processes and deadlines.	Please check with your Research Facilitator or Associate/Vice Dean Research/Director
	X	RASI Compliance Review and Approval Applicants approved by Dept./College must submit the decision in UnivRS at least 5 business days prior to the NSERC submission deadline to provide intuitional approval.	17th October 2024
	X	NSERC RTI Submission Deadline Final applications must be <i>submitted by applicants</i> to NSERC through the NSERC Research Portal.	25th October 2024
X		RASI Compliance Review and Approval Applicants approved by Dept./College must submit the decision in UnivRS at least 5 business days prior to the NSERC submission deadline to provide intuitional approval.	24th October 2024
X		NSERC DG Submission Deadline Final applications must be submitted by applicants to NSERC through the NSERC Research Portal.	1st November 2024

2024 Important Dates

- Non-negotiable
- Communication is key
- OVPR is here to support you
- Refer to [NSERC DG & RTI Application Deadlines 2024](#) for more detailed guidance

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: michaela.lynds@usask.ca (RDM Working Group rep.) or rdm.inquiries@usask.ca

EG 1504: Chemistry

Rob Scott

Professor
Department of Chemistry

Some of the issues I noted the past several years that led to poorer outcomes:

1. Description of EDI challenges in **both your field of research and institution**. **Explicitly** state what these challenges are for **both** and provide several concrete action plans.
2. Most Significant Contributions to Research: These should be used to describe **your expertise and the impact of your work** and need not be publication specific (i.e. they should not be paper abstracts). **Be specific about evidence of the impact of your work – i.e. your expertise has led to invited talks /publications / grants /awards /collaborations, etc.**
3. Collaborations: Many people collaborate, but it is incumbent to describe **your role** in all collaborations. If you publish with other co-PIs often, be explicit about what your role is.
4. Delays in Research: **Quantify your delays**. NSERC allows you to attach a supplementary contributions to research document. Only a minority of applicants take advantage of this.

EG 1506: Geosciences

Cherie Westbrook

Professor
Department of Geography and Planning
Centre for Hydrology

TIPS TO SCORING HIGH ON A DG APPLICATION

”

The onus is always on the applicant to provide a compelling case

1. Familiarize yourself with the merit indicators
2. Carefully curate your portfolio of publications and leadership roles, selecting those with the greatest individual or collective IMPACT on scholarship, policy, practice, pedagogical shifts, etc.
3. Avoid referring to webpages and impact factors
4. Proposed research shouldn't be pedestrian/overly safe [read: boring]. At least one objective should involve a degree of calculated risk that could contribute to groundbreaking advances or lead to a technology or policy (new or substantial revision).
5. ECR's: Recruit multiple trusted colleagues holding DGs to review your proposed research to ensure clear mapping of research challenge --> long-term goal --> short-term goals --> methodology and the feasibility of accomplishing these within 5 years
6. EDI statements: Provide concrete example(s) of what you've done previously and evidence of it 'working', and present a plan that will meaningfully build or expand an inclusive research training environment.



Cherie Westbrook (EG 1506)

EG 1508: Math and Statistics

Raymond Spiteri

Professor and Director of the Centre for High-Performing Computing
Department of Computer Science

- 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!

EG 1511: Materials and Chemical Engineering

Ildiko Badea

Professor
College of Pharmacy and Nutrition

Use Merit Indicators to guide writing as it is used by the reviewers

Excellence of the Researcher

- Outline clearly NSE contribution (e.g., nanomaterial development, fundamental processes, use in veterinary therapies)

Merit of proposal

- No specific comments to EG 1511

Training of HQP

- Past training – be specific on the achievements of past HQP in NSE
- Training philosophy – should be illustrated by examples that match past training
- Challenges related to EDI – avoid generic/institutional policy statements; personalize by describing specific actions

Consider all sections equally

EG 1512: Mechanical Engineering

Daniel Chen

Professor

Department of Mechanical Engineering
Division of Biomedical Engineering

Excellence of the researcher

1. Ensure to complete and/or update the information **precisely** on all sections of **your CCV**, including “Research Funding History (awarded and completed, and years”, “Presentations”, “Publications”, etc.
2. Strategically select the **attachments**, e.g., those demonstrating the more recent / high-quality / closely-related work and/or preliminary results, with the applicant being the first, corresponding, and/or senior author.

Merit of the proposal (5-page attached proposal)

Sections: recent progress, objectives, literature review, methods, and impact.

To explain: why, what and how.

1. Why: Research progress, literature review and **research issues** to be addressed, and impact
2. What: Research (both long- and short-term) objectives
3. How: Research methods with **essential details** (typically > 2 pages)

Contributions to the training of highly qualified personnel

Research training plan: focus on training, not repeat but complement to methods in Proposal.

Q & A

Research Tools & Instruments session

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.

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)

2. Feasibility and Impact (40%)

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 -----(Not 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
- C) EDI

2024
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.**
- ✓ **how you identify & mitigate potential barrier**
- ✓ **Male / Female HQP recruitment**

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

Q & A

NSERC Research Facilitators and Support Team

NSERC Leader: Ron Borowsky

Research Development Specialist: Michaela Lynds

College of Agriculture and Bioresources: Danielle Baron

College of Arts and Science: James Dobson

College of Dentistry: Janice Michael

College of Education: Sanjukta Choudhury

Edwards School of Business: Luke Heidebrecht

College of Engineering: Rana Mustafa

College of Kinesiology: Gen Clark

College of Law: Bonnie Hughes

College of Medicine (Department of Biochemistry, Microbiology and Immunology;

Department of Anatomy, Physiology, and Pharmacology): Bruna Bonavia-Fisher

Department of Community Health and Epidemiology: Maryam Madani Larijani (on leave); Mark Milne

Department of Medicine: Ozlem Sari

Department of Pediatrics: Tova Dybvig

Department of Psychiatry: Mariam Alaverdashvili

Department of Surgery: Karen Mosier

Department of Family Medicine, Medical Imaging, Obstetrics & Gynecology,

Oncology, Ophthalmology, Pathology and Laboratory Medicine: Mark Milne

College of Nursing: Robin Thurmeier

College of Pharmacy and Nutrition: Gen Clark

School of Environment and Sustainability: Graham Fairhurst

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 Security	Lisa Belhumeur Ty Pellerin
Research Data Management	Colleen Cochran

Research Security

[USask - Safeguarding Your Research](#)

[Tri-Agency Guidance on Research Security](#)

[Research Security Resources](#)

Information webinars by Tri-Agency

Webinars in English:

- Thursday, May 9: 1 - 2:30 pm EDT – [Register](#)
- Tuesday, May 28: 11 am - 12:30 pm EDT – [Register](#)

Webinars in French:

- Monday, May 6: 11 am - 12:30 pm EDT – [Register](#)
- Thursday, May 30: 1 - 2:30 pm EDT – [Register](#)

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!