

Canadian Cardiovascular Ultrasound Research Excellence Award for Technology & Education – The CREATE Grant

Vision: The Canadian Society of Echocardiography (CSE) is committed to the promotion and advocacy for quality, innovation, and excellence in echocardiography in Canada. One of the main pillars of the CSE is to lead research initiatives including clinical studies, basic science, translational knowledge, population health, education, and technologic innovation involving cardiovascular ultrasound. To accomplish this, the CSE has developed the CSE Cardiovascular Ultrasound Research Excellence Award for Technology & Education (CREATE) is a competition that funds collaborative national level projects.

General: Up to 1 award of \$50,000.00 will be granted annually based on the adjudication and recommendations of a review committee and **contingent** on annual budget availability. Geographic diversity (representation from Eastern, Central, and Western Canada) is encouraged. Specifically, prospective or retrospective studies are encouraged to involve at least 3 centres. The deadline for submission for the 2024 CSE CREATE grant competition will be **September 30**, 2024, with decisions expected by **December 2024**. Funding will commence **January 1**st, 2025.

Cardiovascular ultrasound should represent a major component of the proposal. Application in the following categories will be considered:

- 1. Clinical research involving cardiovascular ultrasound
- 2. Basic science research related to cardiovascular ultrasound
- 3. Translational research (bedside application of basic science research)
- 4. Medical education related to cardiovascular ultrasound
- 5. Quality improvement and patient safety in cardiovascular ultrasound
- 6. Information Technology/Electronic medical record related research pertaining to cardiovascular ultrasound.

Grant Duration:

- 1. The award is in the amount of \$50,000.00 for 2 years. Funding will be allocated in 2 tranches of \$25,000.00, with the second tranche awarded following a one-page acceptable progress report to the research committee after the first year.
- 2. The award can be used to cover research operating costs, equipment, research assistants, consumables, graduate student stipends, travel, open access fees, and knowledge translation activities. Please note that the CSE CREATE grant cannot be used as salary support for the applying faculty members nor for indirect costs.
- 3. Funding priorities will be prioritized as follows:
 - a. The PI (i.e. physician lead or cardiac sonographer lead) must be a member of the CSE.



- b. Faculty members of the CSE in good standing.
- c. The PI's can be awarded funding once every other cycle. Specifically, if a PI is awarded for one 2-year cycle, then the PI cannot be awarded a second grant until after an intervening 2 years.
- d. Representation from across Canada to ensure geographic diversity (Eastern, Central, and Western Canada).
- e. Multidisciplinary teams involving junior faculty members, residents, and allied professionals including cardiac sonographers are encouraged.
- f. Proposals with matching support from industry and/or partner organizations or Societies will be prioritized (i.e. CCS, ASE etc.).

Application Elements:

1) Proposal

- a. **Length:** Maximum of 5 pages for the project description. Additional pages are allowed for budget (maximum 1 page), reference list (maximum 2 pages) and supplementary Figures/Tables (up to 3 additional pages). There is no minimal page requirement.
- b. **Formatting:** Text must be single-spaced, using Arial (11 pt) or Times New Roman (12 pt) fonts. Margins of at least 2 cm around the entire page.
- c. **Structure:** All proposals should have the following information, in order:
 - i. Title of the research project, investigators (indicate resident(s) and/or cardiac sonographer partners with an asterisk, as well as primary investigator contact information for all team members)
 - ii. Background / Rationale
 - iii. Significance / Purpose of Study
 - iv. Hypotheses, objectives, and research questions
 - v. Methods
 - vi. Analyses (including sample size estimate when appropriate) and expected outcomes
 - vii. Impact/significance
 - viii. Timeline
 - ix. Outline the role of each co-investigator, with emphasis on the role of any trainees
 - x. Dissemination and Knowledge Translation / Transfer Plans
 - xi. Budget (maximum 1 additional page)
 - xii. Supporting references (maximum 2 additional pages)
 - xiii. Supplementary Figures and Tables (up to 3 pages)
- **2)** Curriculum Vitae: Each member of the research team must submit a 2-page abbreviated CV. The CV may include a brief narrative description of the applicant's experience conducting this type of research or highlight components that support the application.



3) Submission: The proposal and CV's must be submitted via email as an attachment merged into a single pdf document that is addressed to the attention of the CSE at cse@ccs.ca with the subject heading of CSE CREATE Award Application.

Timeline and review process: The call for applications will open in June 2024. The deadline for submitting the full application is September 30, 2024. Incomplete applications, or those submitted after this date will not be considered. Funding decision will be communicated in December 2024 with grant starting on January 1, 2025. For the current cycle, please send application forms to the CSE at cse@ccs.ca. The mid-term progress report will be due on November 1, 2025, and assessed by the current review committee. An adequate progress report will be required before the release of funding for the second year.

The Research Review Committee will use the following criteria to evaluate proposals:

1. Research Approach

- a. Clarity of the proposal
- **b.** Appropriateness of the research design and methods
- **c.** Feasibility of the research approach
- **d.** Anticipation of potential limitations and difficulties and plans for management.

2. Originality of the Proposal – Creativity and Innovation

- **a.** Potential for the creation of new knowledge/workflow/innovation.
- **b.** Originality of the hypotheses, technology, methodology, and/or novel applications of current technology/methodology.

3. Applicants

- **a.** Qualifications of the applicants relative to career stage (training, experience, independence)
- **b.** Experience and expertise of the applicants in the proposed area of research and with the proposed methodology.
- **c.** Potential to disseminate research findings successfully and appropriately.
- **d.** Appropriateness of the team of applicants to carry out the proposed research, in terms of complementary expertise and synergistic potential.
- e. Inclusion of applicants at different career stages.

4. Research Environment

- **a.** Availability and accessibility of personnel, facilities and infrastructure required to conduct research.
- **b.** Suitability of the environment to conduct the proposed research.
- **c.** Suitability of the environment (milieu, projects, and mentors) for the training of personnel (if applicable).
- d. Representation of different geographic regions across Canada.



5. Impact of research/Innovation:

- **a.** Research proposal addresses a significant need or gap in health and/or the health care system related to cardiovascular ultrasound.
- **b.** Potential for a significant contribution to the improvement of people's health and/or to the development of more effective application of cardiovascular ultrasound
- **c.** Appropriateness and adequacy of the proposed plan for knowledge dissemination and exchange.

6. General Alignment with CSE Research Pillar Mission:

- **a.** Potential for collaborative research for the development of Pan-Canadian research networks.
- **b.** Potential for peer reviewed funding opportunities from national agencies including Heart and Stroke Foundation of Canada and Canadian Institutes of Health Research.
- **c.** Potential for the communication and dissemination of the proposed research and knowledge translation (KT) to the CSE community and beyond.
- **d.** Any project-related manuscript(s) or presentations should acknowledge the CSE CREATE Award as a source of support. The author(s) will present their research at the annual CSE Echo Weekend meeting. Authors must send the CSE Executive Board a copy of the manuscript at the time of acceptance.