The University of Ottawa Heart Institute (UOHI) is pleased to launch the 2020-21 Call for Applications for Endowed Fellowships and Scholarships. Further enhancement to this program is being implemented this year to better support postdoctoral and research-intensive clinical fellows; we thank our donors, the UOHI Foundation, and the University of Ottawa’s Faculty of Medicine for making this effort possible.

Timelines

Note: This year’s deadlines have been extended to accommodate any interruptions due to the pandemic slow-down.

July 3, 2020 – Notice of Intent deadline
July 31, 2020 – Application deadline
End of August 2020 – Notification of results
September 1, 2020 – Award start date

Highlight of Changes to the UOHI Endowed Fellowship Program 2020-21:

Enhancement to the UOHI Endowed Fellowship program aligns with the goals of the Institute’s ORACLE 2.5 Strategic Plan, which incorporates ORACLE 2.0, as well as the recent movement of Postdoctoral Fellows to employee status.

1. The total award amount of each Endowed Fellowship – for all award streams – is $58,000 per year. This represents an increase to the fellowship amount starting in this 2020-21 competition. The total award amount is inclusive of salary and benefits.

2. For the Strategic Research Fellowship only:
   a. For this year’s competition, we continue to maintain an increased number of Strategic Fellowships, dependent on the peer review assessment and funds availability.
   b. Priority includes support for senior Postdoctoral Fellows (years 3+) with highly productive track records in their PhD and postdoctoral training to date and in the final stages of training towards independence, dependent on the peer review assessment and funds availability.
ELIGIBILITY SUMMARY & HOW TO APPLY

Please submit your application through the UOHI FluidReview portal: [https://uottawaheart.fluidreview.com/](https://uottawaheart.fluidreview.com/).

<table>
<thead>
<tr>
<th>Supervisor holding primary appointment with the Division of Cardiology</th>
<th>Postdoctoral Fellow</th>
<th>Clinical Fellow (minimum 50% research time)</th>
<th>Graduate Student</th>
<th>Travel to another centre (a portion of the full award duration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Fellowships (up to 2-3 awards available)</td>
<td>Not required</td>
<td>✓</td>
<td>Not eligible</td>
<td>✓</td>
</tr>
<tr>
<td>Division of Cardiology Fellowship (2 awards available):</td>
<td>Required</td>
<td>✓</td>
<td>✓</td>
<td>Not eligible</td>
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<tr>
<td>1) Tucker Fellowship</td>
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<td>2) Vered-Beanlands Fellowship</td>
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<tr>
<td>University of Ottawa Cardiac Endowment Fund at the Heart Institute (2-3 awards available)</td>
<td>Not required</td>
<td>✓</td>
<td>Not eligible</td>
<td>Not eligible</td>
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1. Description

A key goal of the [ORACLE 2.0 Strategic Plan](#) (ORACLE stands for Ottawa Region for Advanced Cardiovascular Research Excellence), now incorporated into ORACLE 2.5, is to recruit the highest caliber trainees into our Innovation Hubs and priority research areas, with a specific focus on very high caliber Postdoctoral Fellows as well as research-focused clinical fellows. The UOHI Endowed Fellowships and Scholarships program serves as a tool to implement this strategy, to provide funding to recruit and retain high caliber talents.
2. **General Eligibility Requirements**

- Applicants must be supervised by a scientist/investigator with a primary appointment with the UOHI and be based at the UOHI.
- Graduate Students must be registered full-time with the University of Ottawa’s Faculty of Medicine.
- Candidates are not eligible to hold an Endowed Fellowship if they are currently holding an award of an equal or a greater value.
- An applicant’s research theme(s) can be in any of the four CIHR health research themes: biomedical; clinical; health systems/services; social, cultural, environmental and population health.
- Applicants who have previously held any internal Endowed Fellowship or Scholarship are not eligible to apply for another award.
- In the case of a new recruit to the Institute, the successful applicant must take up his/her position within three months of the notification of results.
- During the term of a Division of Cardiology Endowed Fellowship, or a uOttawa Cardiac Research Endowed Fellowship or Scholarship, if the awardee receives an external award, the awardee will no longer be eligible to simultaneously hold the Endowed Fellowship or Scholarship. The Endowed Fellowship or Scholarship will end prior to the start date of the external award. This requirement does not however apply to the Strategic Research Endowed Fellowship—see section 3a below for details.

3. **Specific Eligibility Requirements and Priority areas:**

   a. **Strategic Research Endowed Fellowship**

      The Strategic Research Fellowship is aimed at supporting a wide range of cutting-edge cardiovascular research that aligns with, and will help advance the goals of, the UOHI-led [ORACLE 2 Strategic Plan](#). A major goal of the ORACLE 2 strategy (2018-2024) is to recruit the highest caliber trainees to enable the goals of the [Innovation Hubs](#).

      For the 2020-21 competition, funding priority for the Strategic Research Fellowship stream, dependent on the peer review assessment and funds availability, is for Postdoctoral Fellows and Clinical Research Fellows who are:

      1) Working on a project that will enable the goals of an ORACLE 2 [Innovation Hub](#), and supervised by an Innovation Hub member.

      2) **NEW** Priority for the Strategic Research Fellowship stream includes support for senior Postdoctoral Fellows (years 3+) with highly productive track records in their PhD and postdoctoral training to date and in the final stages of training towards independence. Typically, they will have already held an external fellowship (e.g., CIHR or Heart & Stroke Foundation Fellowship). This support to senior Postdoctoral Fellows assists our research teams in reaching their goals, while supporting the new generation of researchers and boosting the reputation of the Institute with successful UOHI alumni researchers across the world. Funding can be provided up to year 7 of the postdoctoral tenure (post PhD training), in alignment with UOHI policy 8-220.

      3) New recruits (Canadian or international) whose research is expected to have a global impact.
Postdoctoral and Clinical Fellows are eligible to apply:

- Applicants must spend at least 75% of their time doing research.
- If a candidate who is awarded a Strategic Research Fellowship receives an external award of an equal or greater value (e.g., a CIHR or Heart & Stroke Foundation Fellowship), he or she will only be eligible for a top-up amount as long as the external award is active. The top-up amount for an external award/fellowship is up to a maximum of total award amount of $58,000 per annum.

b. Division of Cardiology Endowed Research Fellowships

- Applicants must be supervised by a scientist/investigator who holds a primary appointment with the UOHI’s Division of Cardiology.
- Postdoctoral and Clinical Fellows are eligible to apply.
- Applicants must spend at least 50% of their time doing research.
- For details regarding travel request to another centre to acquire advanced skills as portion of the full award duration (see section 4 below).

c. University of Ottawa Cardiac Research Endowed Fellowships and Scholarships at the Heart Institute

- Postdoctoral Fellows working or proposing to work with a scientist/investigator who holds a primary appointment within the Faculty of Medicine at the University of Ottawa are eligible.
- Postdoctoral Fellows must be registered with the University of Ottawa ie. within five years of their PhD.
- Graduate Students registered full-time in their program of study within the Faculty of Medicine at the University of Ottawa are eligible to apply.

d. Eligibility to Request Travel to Another Centre to Acquire Advanced Skills

The Strategic Fellowship and the Division of Cardiology Fellowships now support proposals that include travel to another centre to acquire new, advanced skills.

Only one award with a travel component is available in each year.

To be eligible:
- Incoming Postdoctoral Fellows (who are not yet at the UOHI at the time of the application) will be eligible to travel to another centre after completing at least the first year of a two-year award.
- Clinical Fellows must already be working with a scientist/investigator at the UOHI at the time of the launch of this Call for Applications.

Fellows who currently hold an Endowed Fellowship and wish to travel to another centre to acquire new, advanced skills during the remaining time of their award are required to submit a new application–see section 5 for details on how to apply.

4. Award Information and Terms

The award start date will be September 1, 2020. The award term is two years except where noted.
The annual award amount for all Endowed Fellowships is $58,000 which is inclusive of salary and benefits. The annual stipend for a Scholarship is $20,000.

Conditions of award will include maintaining eligibility criteria (see sections 2 & 3), the production of a satisfactory progress report (see below), proof of application for an external award, and presenting once a year at the UOHI Work-in-Progress Rounds during the award term. For the University of Ottawa Cardiac Endowment Fund at the Heart Institute, proof of postdoctoral registration with the Faculty of Medicine will be required.

An annual progress report to ResearchServices@ottawaheart.ca is required for review by the Selection Committee. For the Strategic Research and Division of Cardiology Fellowships, the progress reports will be shared with the UOHI Foundation and the donors; for the University of Ottawa Cardiac Research Endowed Fellowships and Scholarships, the progress reports will be shared with the Faculty of Medicine and the anonymous donor. The due date for the progress report will be stipulated in the award letter.

“Travel” Fellowship
The duration of a ‘travel’ fellowship may be a portion or the whole of a two-year award. For Clinical Fellows, during the ‘travel’ portion, the award will be paid out as a stipend (not a salary and without benefits).

Strategic Research Fellowship
A number of Strategic Research Fellowships is on offer this year, dependent on the peer review assessment and availability of funding. These fellowships are intended for exceptionally high-caliber Postdoctoral Fellows and research-intensive Clinical Fellows.

Division of Cardiology Fellowships
Funds are available for two Endowed Fellowships in cardiology research: 1) Tucker Fellowship and 2) Vered-Beanlands Fellowship.

The Ernest and Margaret Ford and Kaufman-Chan Fellowships are held by the current incumbents until June 30, 2021.

University of Ottawa Cardiac Research Endowed Fellowships and Scholarships at the Heart Institute
Funds are expected to support one Postdoctoral Fellowship and/or one or more Scholarships. An example of a funding scenario would be:

- Up to one Postdoctoral Fellow and one Graduate Student funded.

5. How to Apply

Send a Notice of Intent to ResearchServices@ottawaheart.ca by JULY 3, 2020. Include the following info in your NOI: name of the applicant; position (Postdoctoral Fellow; Clinical Fellow; or Graduate Student); and name of the supervisor.

Applicants are required to provide the following in the application package:

- **Proposal** (2-page limit): A description of the research including background, hypotheses, methodologies, sex and gender considerations as appropriate (see Appendix – UOHI Checklist for Sex- and Gender-based Research), anticipated outcomes and clinical relevance.

- **Training expectations** (1-page limit):
  - Provide an overview of how your previous research training, and/or experience outside of academia, relates to the present proposal (i.e., how previous experience will benefit current/upcoming postdoctoral/graduate work), and elaborate on your career goals, including how this may have been informed by careful career planning using tools such as CIHR Individual Development Plan.
  - Describe how the training to be acquired will contribute to your productivity and research goals you hope to achieve.
  - Indicate why you decided upon the proposed training location and what you expect to learn from the training experience.

- **A letter by the Primary Supervisor** (1-page limit) to include: i) recommendation of the candidate (half a page; and ii) grant funding and resources available to support the proposed project; the supervisor’s mentorship and supervisory experience; a training plan for the applicant (half a page).

  **For Clinical Fellows only**: Include in the supervisor’s letter confirmation of the percentage of time the Fellow will have for research;

- **CV of the applicant** – include the following sections: i) Academic & Training Background; ii) Awards & Other Honours; iii) Publications.

For applicants requesting a ‘travel’ Fellowship, include:

- in the proposal, a description of the work that will be done during the ‘travel’ portion;
- in the Primary Supervisor letter, a nomination for a ‘travel’ fellowship;
- a separate nomination letter for a ‘travel’ Fellowship by the Division Chief;
- a letter by, and a CV of, the Supervisor at the other centre.

*It is the responsibility of the applicants to ensure that all required documentation and information are provided.

6. Review Criteria and Process

A Selection Committee will be convened to review all the applications submitted. Conflict of interest rules will apply. A member of Research Services will be present at the review meeting.

The applications will be evaluated on the following criteria:

- Academic/Scientific achievement and track record;
- Quality of the applicant’s proposed research project;
- Applicant’s plans;
- Evidence that the candidate exhibits the skills or aptitude to learn the skills required to carry out the
proposed research;
• Training environment;
• Applicants must display significant promise for future excellence in cardiac research;
• Strategic Fellowship only: alignment with the goals of the applicable ORACLE 2 Innovation Hub.

The composition of the Review Committee will include:
• UOHI Chief Scientific Officer/VP Research or delegate, Chair
• A representative of UOHI Basic Scientists (may be the same as one of the members listed below)
• A representative of UOHI Clinical Scientists (may be the same as one of the members listed below)
• A representative of UOHI Bio-behavioural and Population Health Scientists (may be the same as one of the members listed below)

For the Division of Cardiology Fellowships stream:
• Chief of the Division of Cardiology or delegate, Co-Chair
• Director of Research, Division of Cardiology or delegate
• Director of Education, Division of Cardiology or delegate
• A representative from the various sections of the Division of Cardiology (e.g., Interventional Cardiology; Electrophysiology; Imaging; Heart Failure)

For the uOttawa Cardiac Endowment Fund stream:
• Dean of uOttawa Faculty of Medicine or delegate, Co-Chair
• Additional members with Faculty appointment

For queries, please contact:
Ann Nguyen
Senior Research Services Officer
Email: annguyen@ottawaheart.ca
Phone: 613-696-7000 ext. 18940
Sex- and gender-based research checklist for UOHI Researchers

1. For all UOHI researchers and trainees:

1a. Know your terminology! SEX pertains to biology (chromosomes, gene expression, hormones, physical features, anatomy... XX or XY). GENDER pertains to socially-constructed roles, behaviours, expressions and identities of girls, women, boys, men and gender diverse people. Use the appropriate terms accordingly. Avoid upsetting reviewers by using the term gender when sex should have been used instead (most common mistake).

1b. What is in it for you?
   - Accounting for gender and sex in health research has the potential to make health research more just, more rigorous and more useful.
   - Note that CIHR expects that all research applicants will integrate gender and/or sex into their research designs when appropriate. CIHR is placing great emphasis on this; your grant will be scored on this item and there will be sex/gender research experts at most if not all Review Committees.
   - In addition, the Heart and Stroke Foundation highlights that all applicants (irrespective of proposal focus) to the GIA and NNI programs are required to include a sex and gender-based analysis in their research design (or provide rationale as to why it would not be relevant to their project).
   - Having sex and/or gender-based hypotheses in your research allows you to be eligible for specific research calls/priorities, and for additional funding sources (Institute of Gender and Health, for example) that you would not otherwise be eligible for. CIHR and HSF have had several sex/gender-based grant competitions in the last couple of years.
   - When it is time to publish your data, performing sex and/or gender-based analyses will strengthen your paper and increase external validity, helping you reach a higher-impact journal. In some occasions, it may lead to a second paper out of the same dataset, increasing your productivity.
   - In summary, appropriately incorporating sex and/or gender-based hypotheses and analyses in your research will give you a better chance at receiving a grant, will enhance your academic impact and productivity, and will lead to more rigorous and useful Science!

1c. How can you do this?

Here are some simple steps to help you incorporate sex and/or gender as important variables in your research:

- Take the CIHR Online Training modules: [http://www.cihr-irsc-igh-isfh.ca/course/index.php](http://www.cihr-irsc-igh-isfh.ca/course/index.php) (1 module pertains to biomedical research; 2 modules pertain to human/clinical research. Save certificates)

- Check additional resources from CIHR: [http://www.cihr-irsc.gc.ca/e/32019.html](http://www.cihr-irsc.gc.ca/e/32019.html) (TONS of resources for biomedical and clinical researchers – bookmark this page and refer back when writing your grants/protocols/manuscripts)

- Incorporate the concepts you learn in your study design, experiment protocols and statistical analyses.

- The Canadian Women Heart Health Centre at UOHI, and the UOHI’s Women’s Heart Health Team have several researchers who are well versed in sex- and gender-based research. Feel free to contact us if you need help with your proposals or manuscripts. In addition, the Cardiovascular Research Methods Centre is always a great resource for study design and analyses when planning sex- and gender-specific hypotheses.
2. For ongoing research (post-design phase), when sex- or gender-based hypotheses were not part of the original study design:

Even if you did not consider sex/ gender in your original study design, we recommend that you still explore your data to determine whether sex is an important variable for your research question. There are simple ways to do this:

Step 1. Provided the sample is large enough, test an interaction term between sex and your predictor variable of interest in a model to predict your outcome variable of interest. For example, you are researching whether systolic blood pressure (SBP) is associated with left ventricular hypertrophy (LVH). Your next step is to add a sex*SBP interaction term in your model to predict LVH. If the interaction term is significant ($P \leq 0.05$), this means that sex is a significant effect modifier of the association of SBP with LVH, justifying stratification of the sample based on sex. Note that some agencies/reviewers will consider a higher $P$ value (e.g. $P < 0.15$) indicative of an interaction, because of sample size and power issues — although this is not uniformly accepted.

Step 2. If the interaction term is significant, you now have a solid justification for sex-specific analyses, although you still need to provide caveat that this is a post-hoc subgroup analysis and is considered exploratory. You may report your findings as follows: “We tested the sex*___ interaction term in the models, and determined that sex is a significant effect modifier of the association between ___ and ___. Thus, we performed sex-specific models and determined that ______ (Table ____).”

Step 3. If the interaction term is not significant, this could be because (1) the association you are exploring is not different in men and women, or (2) your sample size is not large enough to detect a significant interaction (the sample size needed to detect an interaction is larger than the sample size needed to detect main effects). If this is the case, we recommend the following:

- Run your models separately in men and women (or male and female animals/ tissues/ cells) separately, and compare the results. If results do not appear to be different based on sex, report the following: “We tested the sex*___ interaction term in the models, and determined that sex is not a significant effect modifier of the association between ___ and ____.”

- However, if results appear to be different in men vs. women (or in male vs. female animals/ tissues/ cells), it may still be helpful for you to report results in males and females separately after you report your main results, which will add information to your paper and serve as a basis for future hypotheses. This will allow you to design future studies that are powered to definitively answer the sex-based question. You may report your findings as follows: “Although our sample size was not large enough to detect an interaction between sex and ___ in the prediction of ___, in exploratory analyses we performed sex-specific models and observed that ______ (Table ____). This remains amenable to testing in future studies.”

Step 4 (optional): For both Human and Biomedical research, mediation modeling may be appropriate in some scenarios. If you consider this, we recommend you follow the principles outlined by Baron and Kenny (Baron RM and Kenny DA. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. Journal of personality and social psychology. 1986;51:1173-82). When in doubt, consult with the Cardiovascular Research Methods Centre.

The aforementioned steps pertain to exploring sex-based results in research data that has already been collected, which can be done by everyone. Performing gender-based analyses will be less straightforward in this scenario and can only be done if you collected relevant sociodemographic data as part of your study. Refer to the CIHR modules for this.
3. For new research (design phase):

- If you are currently designing a research protocol or writing a new grant proposal, you have the opportunity to control the design, the sample size and the planned statistical analyses to explore sex and/or gender-based hypotheses when appropriate.

- The first step is to perform a literature review, which will serve to justify your hypotheses and plans.

- After a literature review, if you do not think a sex- or gender-based hypothesis is appropriate for your research design, try to at least have a good plan for statistical analyses (‘sensitivity’ or ‘exploratory’ analyses – plan to explore interaction terms and/or perform sex-specific analyses in addition to your main analyses as described in page 2 above). This will give you a competitive edge and your application will be judged on this.

- On the other hand, if you have done a literature review and think it is appropriate to include a sex- and/or gender-based hypothesis in your research design, this will give you an even better competitive advantage at the grant review level. A few tips on how to accomplish this:

3.1. Human research:

- Include gender-based socioedemographic variables or validated gender role/identity/norms questionnaires in your research data collection to have the ability to do gender-based analyses (Refer to the aforementioned CIHR modules and resource page for a list).

- Consider recruitment strategies that will allow you to recruit your desired numbers of men and women.

- In the design stage of a RCT, considering sex/gender as a stratification factor in the randomization is one of the best ways that to incorporate sex or gender in your clinical trial.

- If your research hypothesis is based on a sex difference, consult with the Cardiovascular Research Methods Centre in order to calculate the required sample size and power your study effectively for this hypothesis.

- Have a solid statistical analysis plan to address your research question (i.e.: interaction term analyses, sex-specific analyses, incorporation of gender variables into the model, etc – see page 2 above).

- Incorporate sex and gender in your Knowledge Translation plans.

3.2. Biomedical research:

In biomedical research, gender will not be assessed, but you should include sex as a biological variable if (1) the disease in question occurs in men and women; (2) inclusion of animals/tissues/cells of different sexes will strengthen the study and (3) there is an opportunity to include animals/tissues/cells of different sexes. If so:

- Include male and female animals in your research. If using cells or tissues, consider male and female donors, and identify donors properly.

- Explain methods for documenting/controlling the hormonal status of experimental animals. Note that expert consensus indicates that controlling for gonadal hormones is unnecessary in most conditions, unless there is clear evidence that reproductive hormone variability affects the dependent measure considered in the research.

- Have a solid statistical analysis plan to address your research question (i.e.: interaction term analyses, sex-specific analyses – see page 2 above).