



# Ludeman Family Center for Women’s Health Research

UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

## 2024 Funding Opportunities in Women’s Health & Sex and Gender Differences Research

**SUBJECT:** Call for Applications for the Ludeman Family Center for Women’s Health Research Women’s Health and Sex and Gender Differences Awards

**FROM:** Judith G. Regensteiner, PhD, Director; Wendy Kohrt, PhD, and Jane EB Reusch, MD, Associate Directors, Ludeman Family Center for Women’s Health Research

**DUE: Friday, June 7, 2024, by 5:00 PM MT**

**A. The Ludeman Family Center for Women’s Health Research announces the availability of the following awards:**

Award	Funds	Eligibility	Purpose
Early-Career Faculty Research Development Awards	\$25,000 each	CU-AMC full-time MD, MD-PhD, PhD, DO and PharmD faculty and fellows.  Up to six seed grants of \$25,000 will be available to scientists with projects relevant to the areas of research focus for the Ludeman Center.	Fund <b>pilot projects in women’s health or sex and gender differences research</b> with a focus on one of the following areas: <ol style="list-style-type: none"> <li>1) Cardiovascular disease</li> <li>2) Diabetes / metabolism</li> <li>3) Intersection of mental and physical health</li> </ol>
Health Equity Award for Intersectional Research in Women’s Health	\$50,000	CU-AMC full-time MD, MD-PhD, PhD, DO and PharmD faculty and fellows.	Fund one project focusing on women’s health or sex and gender differences in <b>cardiovascular disease, diabetes, or mental health</b> with a focus on categories that address <b>health inequities including race, ethnicity, sexual orientation, gender identity, disability and other factors that contribute to health inequities.</b>
Interdisciplinary Research Awards in Women’s Health & Sex and Gender Differences  1. Cardiovascular Disease Focus  2. Mental Health as it impacts Physical Health Focus	\$50,000 each	CU-AMC full-time MD, MD-PhD, PhD, DO and PharmD faculty and fellows.  One \$50,000 award is available for each focus area.	Fund one <b>interdisciplinary project involving at least two investigators from different departments or divisions</b> in each of the following areas: <ol style="list-style-type: none"> <li>1) Cardiovascular disease</li> <li>2) Intersection of mental and physical health</li> </ol>

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<b>Award</b>	<b>Funds</b>	<b>Eligibility</b>	<b>Purpose</b>
<b>Specialized Center of Research Excellence (SCORE) on Sex Differences Pilot Grants</b>	<b>\$25,000 each</b>	CU-SOM MD, MD-PhD, and PhD postdoctoral fellows and Assistant Professors	Fund three projects to promote <b>translational research on the bioenergetic and metabolic consequences of the loss of gonadal function.</b>
<b>Jacqueline Leaffer Wish for the Heart Award</b>	<b>\$2,500</b>	CU-AMC full-time MD, MD-PhD, PhD, DO and PharmD faculty and fellows	One grant of \$2,500 will be offered to an investigator doing <b>outstanding research in women's heart disease.</b> Funding to be used to support research endeavors.

The Ludeman Family Center for Women's Health Research is dedicated to creating an inclusive environment that promotes and values diversity. We believe that diversity in age, gender identity, race, sexual orientation, physical or mental ability, ethnicity and perspective is essential.

The anticipated start of the funding period is September 2024.

**B. Description of Awards:**

**1. Early-Career Faculty Research Development Awards**

The awards are one-year grants, not to exceed \$25,000, for exceptional early-career faculty members and fellows conducting research focused on women's health or sex and gender differences in the underlying mechanisms, diagnosis, treatment, or management of CVD, diabetes, and/or mental health as it relates to physical health. Research focused on other diseases or physiological questions will be considered relevant if there is a connection to CVD, diabetes or the integration of physical and mental health on these diseases (e.g. cardiovascular complications of rheumatoid arthritis, oral health as it relates to CVD, etc.).

Eligibility spans the full spectrum of research (e.g. basic, clinical, translational, population science, implementation and biomedical informatics) across the lifespan. **Interdisciplinary approaches, innovative ideas and use of technologically advanced methodological approaches are encouraged.** Topics must focus on women's health or sex and gender differences. Examples of past focus areas of research are listed below.

- a. Sex and gender differences in CVD occurring throughout the lifespan:
  - i. Cardiovascular implications of menopause
  - ii. Sex differences in the cardiovascular consequences of diabetes
  - iii. Disparities in cardiovascular treatments in men and women
  - iv. Gender disparities in ventricular assist device use
  - v. Understanding dilated cardiomyopathy in boys and girls
- b. Sex differences in the metabolic response to insufficient sleep
- c. Type 1 or type 2 diabetes throughout the lifespan (as well as gestational diabetes)
- d. Developmental origins of health and disease
- e. Vascular mechanisms for the effects of loss of ovarian function on cognition in women
- f. Underlying causes of depression

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Because the long-term goal of this award is to enable a researcher to pursue a research career in women's health and/or sex and gender differences, priority for this award is reserved for **early-career faculty applicants**. However, **mid-level** and **senior faculty** will be considered if there is a clear reason why this type of funding would provide benefit to their research careers. Applications from exceptional postdoctoral **fellows** with strong research proposals and mentors/mentoring plans will also be considered.

## **2. Health Equity Award for Intersectional Research in Women's Health**

The \$50,000 award is a one-year grant for exceptional faculty members and fellows conducting research focused on women's health or sex and gender differences, with an intersectional lens towards health equity in the underlying mechanisms, diagnosis, treatment, or management of CVD, diabetes, and/or mental health as it relates to physical health. Research focused on other diseases or physiological questions will be considered relevant if there is a connection to CVD, diabetes or the integration of physical and mental health on these.

**Topics must focus on women's health or sex and gender differences with the intersections of additional categories that address health inequities, including race, ethnicity, sexual orientation, gender identity, disability and other factors that contribute to health inequities.**

The long-term goal of this award is to support change in the field of women's health research to incorporate a deeper intersectional lens towards health equity. Additionally, we are committed to ensuring a diverse field of researchers on the Anschutz Campus and encourage and welcome applications who are likely underrepresented in the University's workforce, including individuals from historically marginalized and underrepresented groups.

Eligibility spans the full spectrum of research types (e.g. basic, clinical, translational, population science, implementation and biomedical informatics) across the lifespan. Interdisciplinary approaches, innovative ideas and use of technologically advanced methodological approaches are encouraged.

## **3. Interdisciplinary Research Awards in Women's Health & Sex and Gender Differences**

Each award is for a one-year grant, not to exceed \$50,000. One interdisciplinary grant of \$50,000 will be offered for each focus area (i.e. cardiovascular disease; intersection of mental and physical health). Each project must involve at least two investigators with different areas of expertise conducting research focused on women's health or sex and gender differences.

Eligibility spans the full spectrum of research (e.g. basic, clinical, translational, populations science, implementation and biomedical informatics). Topics must focus on women's health or sex and gender differences.

Because the long-term goal of this award is to enable a researcher to pursue a research career in women's health and/or sex and gender differences, priority for this award is research for **early-career faculty applicants**. However, more **mid-level** and **senior faculty** will be considered if there is a clear reason why this type of funding would provide benefit to their research careers. Applications from exceptional postdoctoral **fellows** with very strong research proposals and mentors will also be considered.

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### **i. Focus on Cardiovascular Disease**

Projects must be focused on women's health or sex and gender differences in the underlying mechanisms, diagnosis, treatment, or management of CVD and who are from different divisions or departments. Research focused on other diseases or physiological questions will be considered relevant if there is a connection to CVD (e.g. cardiovascular complications of rheumatoid arthritis or oral health as it relates to CVD). Interdisciplinary research efforts are required.

### **ii. Focus on Intersection of Mental and Physical Health**

Projects must be focused on women's health or sex and gender differences in the underlying mechanisms, diagnosis, treatment, or management of the intersection of mental and physical health and who are from different divisions or departments. Interdisciplinary research efforts are required.

## **4. Specialized Center of Research Excellence (SCORE) on Sex Differences Pilot Grants**

The awards are 1-year grants, not to exceed \$25,000, for exceptional postdoctoral fellows and assistant professors conducting research focused on the bioenergetic and metabolic consequences of the loss of gonadal function, with a focus on translational research. Applications from established investigators will be considered if this represents a new research direction for the applicant. Three grants will be awarded.

## **5. Jacqueline Leaffer Wish for the Heart Award**

One grant of \$2,500 will be offered to an early-career investigator (fellow, instructor or assistant professor) conducting outstanding research in women's heart disease. Eligible candidates will be evaluated on criteria appropriate to measure progress in research. Such criteria will include, but are not limited to research funding obtained, papers written, presentations delivered, discoveries made, peer recognition, leadership in the field and overall commitment to research.

To apply, send your biographical sketch (in current NIH format) to [carly.pilius@cuanschutz.edu](mailto:carly.pilius@cuanschutz.edu) by June 7, 2024. In the personal statement, include specifically how you plan to use these funds and, in lay terms, how this award will support your research in heart disease for women. **Please note that the application for the Jaqueline Leaffer Wish for the Heart Award only requires your biographical sketch submission. You do not need to complete the additional pieces laid out below in the "Applications Guidelines" section.**

### **C. Considerations:**

1. Priority will be given to applicants who demonstrate the likelihood of being able to obtain further extramural funding. **Applicants can have other non-overlapping funding for the proposed project but must show a clear reason as to why their research career would benefit from this award.**
2. Applicants must be actively engaged in research in the areas prioritized for this proposal. Because the support is for one year, applicants must demonstrate that the work is likely to yield publishable results within the funding period.
3. Applications are due no later than **Friday, June 7, 2024, by 5:00 p.m.** Applications will be evaluated by the Ludeman Center Grant Review Committee. All applicants will receive feedback.

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4. Awardees will have the opportunity to participate in faculty trainings offered by the Ludeman Center focused on career building and professional skills development during the grant period and in future years.
5. Awardees may be asked to present their research findings at a venue or venues specified by the Ludeman Center. This may include both professional and lay audiences.
6. Awardees will be asked to communicate their accomplishments and career progress including additional grants and funding received, promotions, publications, and other accolades to the Ludeman Center during the grant period and in subsequent years.
7. Awardees must recognize the Ludeman Center and potentially, other funders, as noted in the award within any publication or presentation that is a result of the award.

**D. Application Guidelines:**

*Applications will be submitted via email to [Carly.Pilius@cuanschutz.edu](mailto:Carly.Pilius@cuanschutz.edu). Please email the full application in PDF format. Letters of recommendation and support may be emailed separately.*

1. **Face Page:** Provide the name of the applicant and mentor (if a fellow, instructor or assistant professor), including academic positions, schools, departments and campus mailing address.
  - **Project Title**
  - **Identify the grant for which you are applying**
  - **Lay summary:** Include a project lay summary (approximately five sentences) of the goals and significance of the study.
2. **Abstract:** Briefly describe the applicant's proposed research and research career goals.
3. **Budget and Budget Justification:** Include a detailed budget request for the award with all costs justified. The award can be used for salary support and/or project support.
4. **Biographical Sketch (current NIH Form):** Biographical sketches for both the applicant and mentor (where required, as stated above) are required, each of which lists all current and pending research support.
5. **Description of Applicant's Career Goals:** Describe career goals and how the Ludeman Center award will help in attaining them (one page). Include reasons for and history of interest in women's health and sex and gender differences research. Those newly interested in women's health and sex and gender differences are welcome, but we would like to know the source of interest.
6. **Role of the Applicant's Mentor (for fellows and early-career faculty):** Describe the mentor's role during the period of the award, including a mentorship plan (one page).
7. **Description of Proposed Research:** A complete, but concise (**no more than five pages**, single-spaced) description of the applicant's ongoing and proposed work must be included. Separate sections should be devoted to specific aims and hypotheses, background and significance, preliminary studies, experimental design and methods, and references cited. All figures, tables and other relevant data should be included within the body of the proposal (i.e., no appendices). References can be in addition to the **five-page limit**. **The importance of the proposed work, its relevance to women's health or sex and gender differences, translational impact, and potential for generating further funded research should be included.** Explanation

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of interdisciplinary approaches, innovative ideas and use of technological approaches within the research should be provided when applicable.

**E. Other Factors and Assurances**

1. **Letter(s) of Recommendation** (for fellows and early-career faculty): From the mentor, endorsing the applicant and stating that the mentor will support the applicant's research.
2. **Letter of Support:** From department chair, division head or section head stating the institutional commitments to the applicant and the availability of the requisite space and other forms of support (e.g. laboratory space, salary, technical assistance).

**F. Other Stipulations/Final Report**

1. Recipients of the award must submit a final report within 30 days of the conclusion of the grant period (typically 12 months after funding is received). Report needs to describe progress to date, including challenges and successes. Final reports should summarize the results of their studies supported by the grant, including copies of all publications, a list of those anticipated, and plans for and attempts to secure additional funding for the project(s).
2. Final Reports should be sent to: Carly Pilius ([carly.pilius@cuanschutz.edu](mailto:carly.pilius@cuanschutz.edu)) in one combined PDF.

**G. Submission**

1. **Applications must be submitted no later than Friday, June 7, 2024, by 5:00 PM Mountain Time.**

**Email full application in PDF format to [Carly.Pilius@cuanschutz.edu](mailto:Carly.Pilius@cuanschutz.edu)**