

## **Request for Applications**

## Innovative Research to Improve the Lives of Women with Diabetes Across the Lifespan

**Background**: Diabetes is one of the leading causes of cardiovascular disease (CVD), blindness, kidney failure, neurological complications, and lower-limb amputations in women. Gender-specific differences affect screening, diagnostic and treatment strategies, as well as the risk for developing severe complications and mortality rates. Impaired glucose and lipid metabolism, body fat distribution and energy balance, and associated CVD are greatly influenced by steroidal and sex hormones. Compared with men, women have 25-50% greater excess risk for CVD with lower survival rates and poorer quality of life. Women with diabetes have a 19% greater risk for the development of vascular dementia than men. Women with diabetes also have a higher risk for end stage kidney disease than men with the same condition suggesting that the female gender could accelerate disease progression. Furthermore, the pharmacokinetics and side-effects of drug therapies are different between the sexes. Despite these, risk factors control, and management are less likely to be as aggressive at the point of care in women with diabetes compared with men.

The burden of diabetes is unique and can affect both mothers and their unborn children. In the United States, about 1-2% of pregnant women have pre-existing diabetes and about 6-9% develop gestational diabetes (GDM). Asian and Hispanic women have higher rates of GDM and black and Hispanic women have higher rates of pre-existing diabetes during pregnancy. Having diabetes during pregnancy increases the risk of babies being born large for gestational age (LGA) or developing obesity and type 2 diabetes (T2D) in the future. Higher HbA1c levels are associated with significantly increased risk of congenital malformations and stillbirth. Women with GDM have 5- to 7-fold increased risk of developing T2D within 5-10 years however only 30-70% of women receive screening after delivery.

As such, a better understanding of the sex and gender differences may improve care delivery and lead to better outcomes (more personalized care) for women with diabetes across the lifespan.

**Goal:** The mission of the American Diabetes Association is to prevent and cure diabetes and improve the lives of all people affected by diabetes. This request for applications (RFA) is soliciting proposals for research to better understand clinically important sex and gender differences to optimally inform prevention, diagnosis, and treatment strategies for women across the lifespan and the development of sex-specific clinical guidelines where warranted.

**Scope:** While this call is broad in scope and encompasses basic through clinical research, significant emphasis will be placed on diabetes clinical research and translation. Examples of eligible applications may include, but are not necessarily limited to projects involving:

- Research to delineate clinically relevant sex-specific drivers of disparity in the risk for cardiovascular, kidney, cognitive complications (eg. translational mechanistic studies using confirmed relevant models of human disease, human validation studies leveraging predictive biomarkers, clinical data sets, patterns in recommending, and in access and adherence to guidelines directed therapies, pilot clinical trials testing new strategies etc.)
- Research to improve screening and pregnancy outcomes in women with diabetes and reduce the risk
  of subsequent T2D in those with GDM.
- Research to define genetic and psychosocial factors contributing to the unique aspects of diabetes in women across the lifespan.
- Research to improve understanding of disparities in process of care (for example CV and obesity management).



Importantly, submissions should indicate how the proposed research will have a significant impact on outcomes. For the purposes of this RFA, research proposals focusing on non-diabetic obesity and pre-diabetes are considered out of scope.

Applications that do not directly address the defined scope of the RFA will be triaged and will not move forward to peer review.

**Application procedure:** Two stage process consists of a Letter of Intent followed by an invitation to submit a Full Application. Instructions, link to online application portal and applicable forms are available on the grants page of ADA's website.

Review Criteria: Applications will be evaluated on the potential of the research, if successful, to have a major impact on the development, dissemination or implementation of effective interventions or strategies that improve outcomes for women with diabetes across the lifespan. Alignment with the goals of the RFA, degree of innovation and scientific rigor are key considerations. Relevant experience of the Principal Investigator, availability of the appropriate facilities and resources, the ability of the investigator/site to recruit target populations, and/or show access to, and availability of, data sources, samples, and study medications (if applicable) are also pertinent. The specific timeline for progress of enrollment, data analyses and/or other major project milestones and an appropriate budget allowing for the completion of the proposed work need to be stated.

Only LOIs invited to submit a full application will receive reviewer critiques, which will be sent within one (1) month of final notification. This applies to both funded and unfunded submissions.

Please note that this funding opportunity does not offer postdoctoral fellowships awards. Instead, ADA will be launching a separate open call for postdoctoral fellowship awards across all diabetes topic areas in Spring 2024.

All applications must be submitted through ADA's online grant portal. Please visit our website at <a href="https://professional.diabetes.org/content-page/current-funding-opportunities">https://professional.diabetes.org/content-page/current-funding-opportunities</a> for full program details and application instructions for each grant type.

Questions about this request for applications should be addressed to: <a href="mailto:grantquestions@diabetes.org">grantquestions@diabetes.org</a>



## **OPEN WINDOW AND DEADLINES:**

	OPEN DATE	SUBMISSION DEADLINE	EARLIEST AWARD START DATE						
DEVELOPMENT									
Junior Faculty Development	<ul> <li>Letter of Interest (LOI):         Monday October 2, 2023</li> <li>Invitation to apply from ADA:         Wednesday December 20<sup>th</sup>,         2023</li> </ul>	<ul> <li>LOI Deadline: Thursday November 30<sup>th</sup>, 2023, 5:00pm ET</li> <li>Full Proposal Deadline: Thursday February 1<sup>st</sup>, 2024, 5:00pm ET</li> </ul>	July 1, 2024						
RESEARCH									
Innovative Clinical or Translational Science	<ul> <li>Letter of Interest (LOI):         Monday October 2, 2023</li> <li>Invitation to apply from ADA:         Wednesday December 20<sup>th</sup>,         2023</li> </ul>	<ul> <li>LOI Deadline: Thursday         November 30<sup>th</sup>, 2023, 5:00pm         ET     </li> <li>Full Proposal Deadline:         Thursday February 1<sup>st</sup>, 2024, 5:00pm ET     </li> </ul>	July 1, 2024						
Innovative Basic Science	<ul> <li>Letter of Interest (LOI):         Monday October 2, 2023</li> <li>Invitation to apply from ADA:         Wednesday December 20<sup>th</sup>,         2023</li> </ul>	<ul> <li>LOI Deadline: Thursday November 30<sup>th</sup>, 2023, 5:00pm ET</li> <li>Full Proposal Deadline: Thursday February 1<sup>st</sup>, 2024, 5:00pm ET</li> </ul>	July 1, 2024						

## **AWARD MECHANISMS**

AWARD	AWARD TERM	APPLICANT	ELIGIBILITY	MAXIMUM FUNDING	SUPPORT	INDIRECT SUPPORT		
DEVELOPMENT								
Junior Faculty Development	Up to 3 years, contingent on previous career development award funding (NIH K, etc.)	Faculty up to & including Asst Prof or equiv.	Junior faculty in independent position, <10 years research training post terminal degree, pre-R01, no concurrent development support	\$138,000/year, plus student loan repayment (\$10k/yr)	Project support & PI salary up to \$75K (excludes fringe)	Up to 10% directs		
RESEARCH								
Innovative Clinical or Translational Science	Up to 3 years	Any level faculty	New & established Pls with <\$500K current research support	\$200,000/year	Project support & PI salary up to 20% total cost	Up to 10% directs		
Innovative Basic Science	Up to 3 years	Any level faculty	New & established Pls with <\$500K current research support	\$115,000/year	Project support & PI salary up to 20% total cost	Up to 10% directs		



\* The ADA's Grants Program aligns with NIH's Stipend Standards for any given year. The ADA will adjust and communicate any changes prior to award distribution, as needed,