

Request for Applications

Innovative Research to Tackle the Epidemic of Youth-Onset Type 2 Diabetes

Background: Type 2 diabetes (T2D) is increasing at alarming rates in adolescents and young adults. This disease entity poses unique challenges in both research and clinical care. The SEARCH for Diabetes in Youth Study has shown that the number of diagnosed cases of T2D in American youth is surging. From 2001 to 2017 the number of people under age 20 living with T2D grew by a shocking 95% with youth of ethnic/racial minorities and from disadvantaged backgrounds being disproportionately affected. Youth-onset T2D occurs in complex psychosocial and cultural environments that often make durable lifestyle changes elusive and medication adherence a struggle. Youth-onset T2D clearly differs from Type 1 Diabetes (T1D). The pathophysiology of youth-onset T2D more closely resembles that of adult-onset T2D, particularly the link to obesity. Youth-onset T2D, however, displays unique aspects such as rapidly progressive beta cell decline, severe insulin resistance for handling glucose, and accelerated development of diabetes complications. Treatment options include the promotion of healthy lifestyles, metformin, insulin and GLP1 receptor agonists, yet remission is rarely achieved. As such, comprehensive, coordinated, and innovative strategies for the prevention, treatment, and remission of youth-onset T2D are urgently needed.

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 to address key knowledge gaps in youth-onset T2D in order to better understand, prevent, treat, and ultimately induce remission for the rapidly increasing numbers of affected individuals. Applications that focus on disadvantaged lower socioeconomic level families where the burden of disease is greatest are strongly encouraged.

Scope: Emphasis will be placed on clinical research and translation. Research areas may include, but are not limited to, an improved understanding of the unique physiological features of youth-onset T2D and similarities and differences with adult-onset T2D. Also, an improved understanding of the ways in which the environment contributes to the disease pathophysiology as well as challenges in treatment including the role of obesity and its causes. Applicants are encouraged to leverage existing cohorts of well-characterized youth with or at risk for T2D where feasible (e.g. TODAY, RISE, SEARCH). ADA's consensus report "Youth-Onset Type 2 Diabetes Consensus Report: Current Status, Challenges and Priorities" provides a broad overview of youth-onset T2D and the knowledge gaps that are in scope for this RFA. Importantly, submissions should indicate how the proposed research will have a significant impact on outcomes for youth with T2D.

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: Application instructions, the link to our online application portal and applicable forms are available on the <u>grants page</u> of the ADA website.

Review Criteria: Applications will be evaluated on the potential of the research, if successful, to significantly improve understanding of the unique aspects of youth-onset T2D and ultimately preventing onset, optimizing care or achieving remission of the disease. 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. For fellowships, relevant experience and training history of the Mentor will be strong considerations. 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 Postdoctoral Fellowship (PDF) applications that are moved to full review will receive reviewer critiques, which will be sent within 1 month of final notification. This applies to both funded and unfunded submissions.

For all other award mechanisms (Junior Faculty Development, Innovative Basic Science, Innovative Clinical/Translational Science): Only LOIs invited to submit a full application will receive reviewer critiques, which will be sent within 1 month of final notification. This applies to both funded and unfunded submissions.

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

Questions about this request for applications should be addressed to: grantquestions@diabetes.org

OPEN WINDOW AND DEADLINES:

| AWARD TYPE | OPEN DATE | SUBMISSION DEADLINE | AWARD START DATE | | | | | | |
|---|---|---|---------------------|--|--|--|--|--|--|
| TRAINING | | | | | | | | | |
| Postdoctoral Fellowship | September 19, 2022 | November 7, 5PM ET (LOI not required) | April 1, 2023 | | | | | | |
| DEVELOPMENT | | | | | | | | | |
| Junior Faculty Development | Letter of Interest (LOI): September 19, 2022 | LOI: November 14, 2022, 5pm ET | July 1, 2023 | | | | | | |
| | Invitation to apply from ADA: January 30, 2023 | Grant application: March 13, 2023, 5pm ET | | | | | | | |
| | RESEAR | СН | | | | | | | |
| Innovative Clinical or Translational Science | Letter of Interest (LOI): September 19, 2022 | LOI: November 14, 2022, 5pm ET | July 1, 2023 | | | | | | |
| | Invitation to apply from ADA: January 30, 2023 | Grant application: March 13, 2023, 5pm ET | | | | | | | |
| Innovative Basic Science | Letter of Interest (LOI): September 19, 2022 | LOI: November 14, 2022, 5pm ET | July 1, 2023 | | | | | | |
| | Invitation to apply from ADA: January 30, 2023 | Grant application: March 13, 2023, 5pm ET | | | | | | | |



AWARD MECHANISMS

| AWARD | AWARD TERM | APPLICANT | ELIGIBILITY | MAXIMUM FUNDING | SUPPORT | INDIRECT SUPPORT | | |
|---|--|--|--|---|---|--|--|--|
| TRAINING | | | | | | | | |
| Postdoctoral Fellowship | Up to 3 years | Postdoctoral Fellow | MD, MD/PhD, PhD, DVM with confirmed postdoctoral position by award start date | \$54,840- \$66,600*/year salary stipend, plus \$5K/year research allowance and \$5K/year fringe benefits | Salary support, plus allowances for training & fringe / health insurance | \$5K/year fringe & health insurance | | |
| 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 following terminal degree, pre-R01, no concurrent career 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.