American Diabetes Association Research Programs

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Diabetes: A Growing Health Crisis with Costs that are Out of Control

5 Years Ago

Today

2050



1 in 13
Americans Had
Diabetes
= 23.6M People

1 in 11
Americans Has
Diabetes
= 29.1M People

1 in 3
Americans Will Have
Diabetes
= 100M+ People

Cost

\$174 Billion/Year

\$245 Billion/Year

Catastrophic



Minorities are Disproportionately Affected by Diabetes, Obesity and Complications of Diabetes

- Diabetes1.7x higher
- Obesity1.5x higher
- Heart Disease
 Risk increased by diabetes and obesity

2050



1 in 2
Americans in High-Risk
Minority Groups
Will Have Diabetes



Blood Glucose Control is **Vital** for Good Health

Good Health Requires Normal Range

Too Low

NORMAL

Too High

Short Term

Unconsciousness,
Death

Blood Becomes Acidic; Organ Damage / Death

Long Term

Oxygen Deprivation
Impairs
Brain Function

Entire Body Bathed in Excess Sugar;
Blood Vessel / Organ Damage

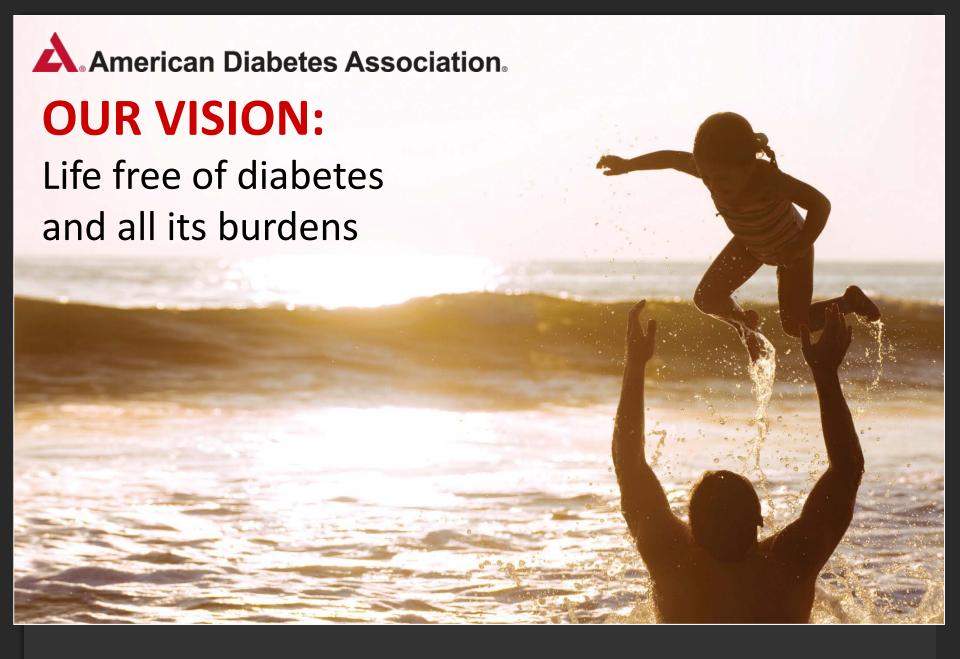
LT Complication of Diabetes: Heart Attack, Stroke, Kidney Failure, Blindness, Nerve Damage, Amputation



But, Maintaining Normal Blood Glucose is Hard

Constant Complex Costly Overwhelming







American Diabetes Association Mission

To prevent and cure diabetes and to improve the lives of all people affected by diabetes

Professional Resources

Scientific Sessions

Professional education

Peer-reviewed journals

DiabetesPro

Medical Information

Clinical Practice Recommendations (treatment guidelines)

Medical publications

RESEARCH

Direct research funding

Advocacy

Research support
Diabetes prevention and care
Legal advocacy and support
Legislative action

Communities

Community health education programs

Center for Information & Community Support

Forecast magazine

Diabetes.org



American Diabetes Association Research

The Association has been supporting research in the academic community for more than 60 years, significantly contributing to the landscape of diabetes research

Since we funded our first research grant in 1952:

- Supported more than 4,500 research projects
- Invested more than \$735 million in diabetes research

In 2015 alone, the American Diabetes Association:

- Made more than \$31 million available for research
- Supported 354 active research projects
- Supported investigators at 145 institutions across the United States



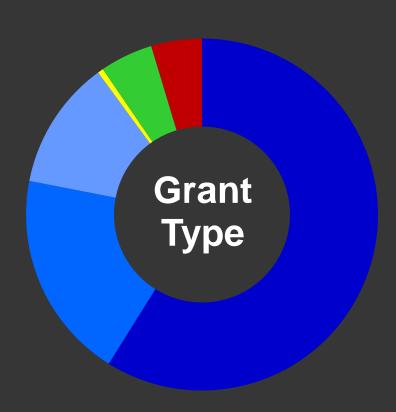
American Diabetes Association Research Programs

Association Research Activities fall into three distinct programs:

- Core Research Program
 - Majority of Annual Research Budget (~90%)
 - Investigator-initiated research, development and training grants
 - Standing annual grant cycles
- Pathway to Stop Diabetes®
 - New initiative started in 2013
 - Applications by institutional nomination only (one per institution)
 - Standing annual grant cycle
- Targeted Research Program
 - Call for applications in specific topic area where there is a need
 - Periodic Call for Applications



2015 Research Funding (millions of dollars)



- Core Research (\$18.4 M)
- Core Development (\$6.0 M)
- **■** Core Training (\$3.7 M)
- □ Co-Support (\$0.2 M)
- Collaborative Targeted (\$1.5 M)
- Pathway (\$1.5 M)



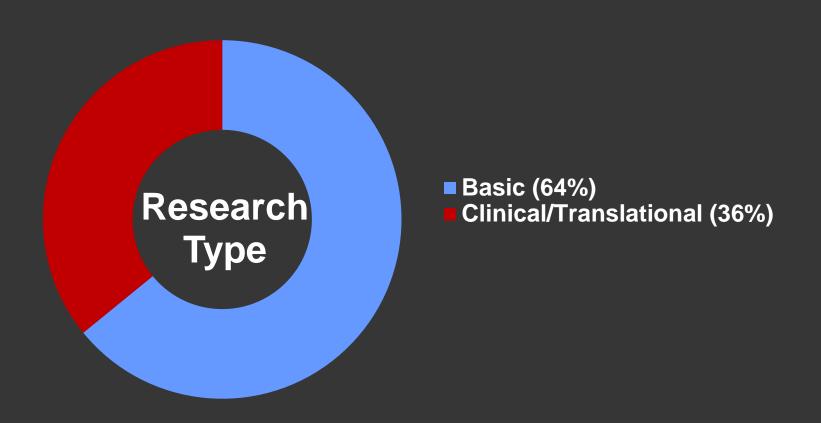
2015 Research Funding (% of dollars)



- Type 1 Diabetes (16%)
- Both Type 1 and Type 2 (19%)
- Type 2 Diabetes (29%)
- Gestational DM (3%)
- Pre-Diabetes (17%)
- Obesity (16%)

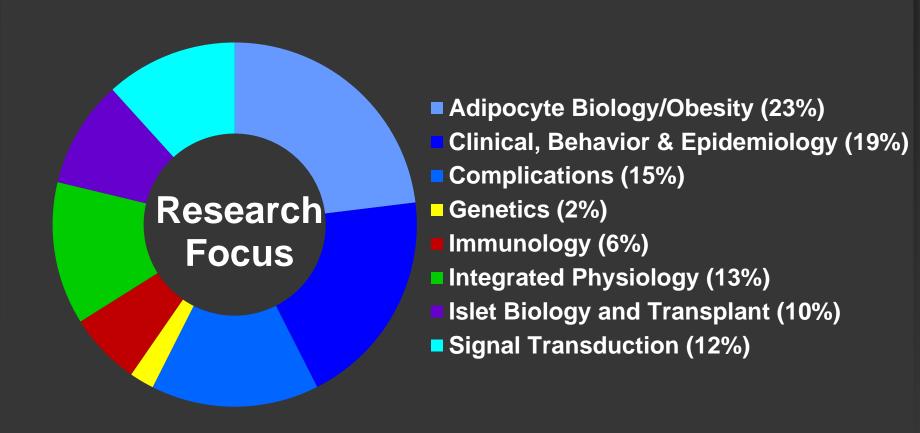


2015 Research Funding (% of dollars)





2015 Research Funding (% of dollars)



Core Research Program

Objectives

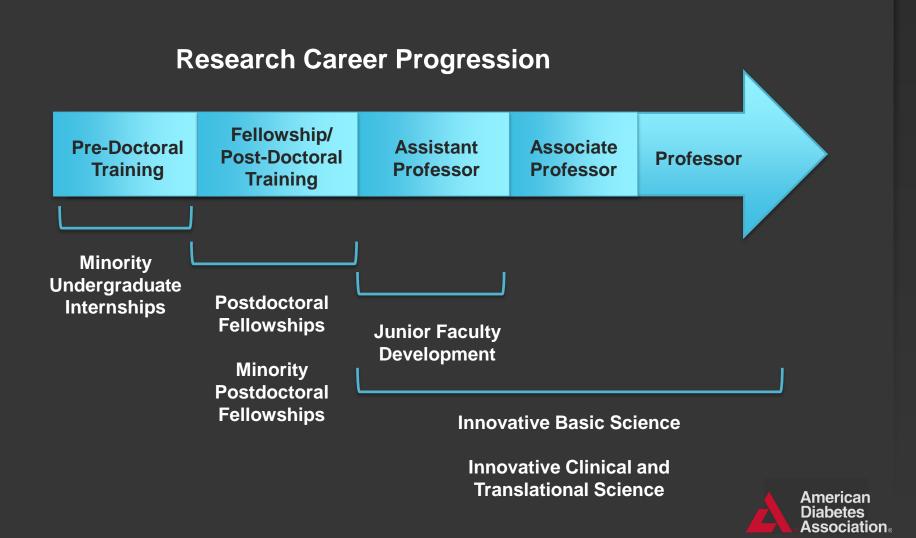
- Support innovative research with a high potential to have a significant impact for people with diabetes
- Encourage new investigators to dedicate their careers to diabetes research
- Support high-quality science across the spectrum of diabetes

Grant Opportunities

- Support for basic, clinical and translational research projects in topics relevant to all types of diabetes and diabetes-related disease states
- Span the entire career spectrum, including personnel grants for training and development, as well as project grants for independent investigators
- Unique opportunities for groups that are under-represented in biomedical research



Opportunities Across Career Stages



CORE RESEARCH PROGRAM FUNDING OPPORTUNITIES

Any level faculty

Faculty up to and

Professor or

equivalent

Postdoctoral

Postdoctoral

Current ADA-

investigators

Fellow

Fellow

funded

including Assistant

Innovative Basic

Science Awards

Science Awards

Junior Faculty

Postdoctoral

Minority

Minority

Postdoctoral

Fellowship Awards

Fellowship Awards

Undergraduate

Internship Awards

Clinical/Translational

Development Awards

Innovative

AWARD TYPE	APPLICANT	ELIGIBILITY	MAXIMUM FUNDING
RESEARCH			

DEVELOPMENT

TRAINING

research in their laboratories

MD, MD/PhD, PhD, DVM with confirmed

research support

research support

Any level faculty New and established PIs with <\$500,000 current

postdoctoral position by award start date

development support

MD, MD/PhD, PhD, DVM with confirmed postdoctoral position by award start date

New and established PIs with <\$500,000 current

Junior faculty in independent position, <10 years

research training, pre-R01, no concurrent career

Stipend to support an undergraduate from an underrepresented minority group to perform

\$55,272/year,

3 years \$3,000 one-time stipend

\$115,000/year,

\$200,000/year,

\$138,000/year,

2-4 years

\$42,000-

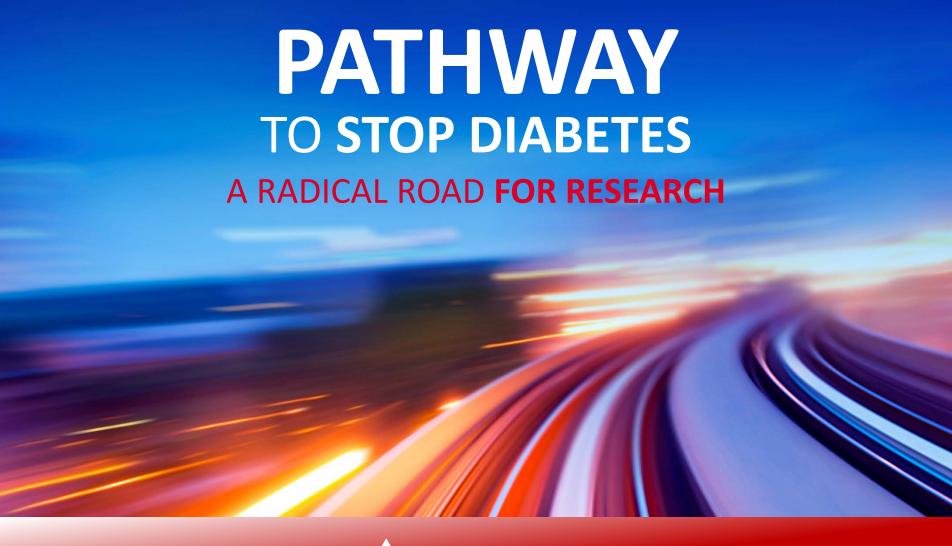
3 years

\$42,000-

\$55,272/year,

3 years

3 years



American Diabetes Association®



Attract Brilliant
Minds at the Peak of
Their Creativity

PATHWAY TO STOP DIABETES

2

Invest in People,
Not Projects

3

Provide Freedom, Autonomy and Resources



Pathway to Stop Diabetes

What Differentiates Pathway from Other Programs?

Nomination ... Rigorous institutional competition

Funding ... Awards of Up to \$1.625 Million

Security ... 5 to 7 Years of Support

Autonomy ... The Freedom to Innovate, to Explore,

to Blaze New Trails

Mentoring ... Guidance from Distinguished Scientists,

Business Leaders and Other Major

Donors

Collaboration ... Opportunities to Advance Research and Careers Through Symposia, Speaking Opportunities and Technology

PATHWAY PROGRAM FUNDING OPPORTUNITIES Support Term Indirect Costs

\$100,000/year

maximum

\$325,000/year

maximum

\$325,000/year

maximum

\$325,000/year

maximum

\$325,000/year

maximum

10% of directs

30% of directs

30% of directs

30% of directs

30% of directs

2 years

5 years

5 years

3 years

2 years

Up to \$1.625M

in two phases

Up to \$1.625M

in two phases

Phase 1

(mentored)

Phase 2

(independent)

Up to \$1.625M

Phase 1

Phase 2

(renewal)

Award

Initiator Award

Researchers in

Postdoctoral Training

Accelerator Award

Early-Career Diabetes

Visionary Award

New to Diabetes

Research

Established Investigators,

Investigators

Pathway to Stop Diabetes Progress

- Three completed annual cycles with >100 nominations per year
- To date, 17 awardees selected
- Call for Nominations Now Open (July 1 application deadline)
- Productivity of current awardees
 - > 16 papers published by *Pathway* scientists, most in high-impact journals
 - More than 100 presentations delivered
 - Two Pathway scientists who received Initiator awards successfully transitioned from training into their first faculty positions; one is currently negotiating a faculty offer
 - Three patent applications submitted
 - Results garnering media attention (Washington Post, CBS News)



Our Research Programs Promote Success



>5 publications and 13 scientific presentations



75% earn faculty promotions



92% receive subsequent research funding



99% remain in diabetes research careers



American Diabetes Association Funding Provides Critical Research & Career Support



"I can outline a

progressive exponential
growth in my career from
the seed that was planted
by the ADA funding."

--Charles F. Burant, MD, PhD University of Michigan



"The ADA gave me my first grant to do diabetes research in 1999. Without that funding, I would not have entered the diabetes field."

--Laura McCabe, PhD Michigan State University



Key Dates and Deadlines

Core Research Program

- » April 15: Submission Deadline
- » October: Grant Review Meeting
- November/December: Funding Notifications



Pathway to Stop Diabetes

- July 1: Submission Deadline
- November: Mentor Advisory Group Meeting
- » December: Funding Notifications

Targeted Research Initiatives

» As available, advertised on diabetes.org/grants



Please Become Involved!

Apply for Grants

Share your Data

- » Scientific Sessions (June 10-14 in New Orleans)
- Publish in Diabetes and Diabetes Care
- » Local presentations





Volunteer

- » Grant Review
- Scientific Sessions
- » National Committees
- » Local Committees

Participate in Special Events

Walk and Ride







Resources

Submission deadlines, detailed application instructions, and open Requests for Applications (RFAs)

diabetes.org/grants

Research Programs Contacts:

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Thank You!



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