The Australian Diabetes Society (ADS) and our lens

- **90%** of our members care for people living with diabetes every single day.
- **80%** of members are active researchers.
- **80%** of members are the chairs/program co-ordinators, peer-reviewers and recipients of Australian and International diabetes research schemes including for NHMRC, MRFF, JDRF, DARP, Diabetes UK, MRC, NIH-NIDDK, including goal setting.
- **50%** of members partner with industry, biotech and pharmaceutical companies to research, test and deliver novel devices and treatments now and for the future.
- **Our membership of diabetes researchers are Endocrinologists, GPs/other Specialists, Scientists, Dietitians, Exercise Physiologists, Podiatrists and Consumer Body Representatives.**

Our Plan is to drive change in Diabetes and Obesity Care by Championing and supporting a Vibrant and Sustainable Research Workforce via equitable funding who can:

- Reduce the number of Australians of all ages affected by diabetes and obesity.
- Decrease the impact of diabetes and obesity on all those affected across their life-course.
- Understand risk factors responsible for the development of diabetes and obesity.
- Improve outcomes from acute and chronic complications of diabetes and obesity.
- Ensure that the best technologies, medicines and care are equitably available to all Australians with diabetes and obesity.
- Inform health policy and public health interventions for diabetes and obesity.
- Identify barriers and co-design solutions to facilitate the implementation of value-adding care while enabling de-implementation of low-value care in the healthcare system.

This is because we work in the system every day and our core business also involves:

- ♦ Support and advocacy for roll out of new medicines and services for people living with diabetes through our ongoing membership on professional panels such as PBAC, TGA, MBS services, MESAC.
- ♦ Nationwide education of our members, GPs, Diabetes educators and other health care professionals in diabetes including for new technology and best practice for diabetes.
- ♦ Nationwide promotion, support and monitoring of hospital and GP diabetes care models via our NADC sub-company.
- ♦ Expert contribution of FRACP and FRACGP manuals for diabetes care.
- ♦ Development/approval of national guidelines for best practice in diabetes.
- ♦ Advocacy for people living with diabetes.
- ♦ Ongoing collaboration and partnership with national and state diabetes and obesity, health care and research organisations.
- ♦ Conceiving and Supporting Equity globally through insulin provision programs such as “Life for a Child”.

An unsustainable period of diminished research funding for diabetes and obesity despite growing prevalence

The Diabetes Epidemic

The global diabetes epidemic is one of the largest and most complex health challenges Australia has ever faced[1]. There are almost 1.9 million Australians living with all types of diabetes including around 500,000 people living with silent, undiagnosed type 2 diabetes[2]. The three common types of diabetes are Type 1 Diabetes, Type 2 Diabetes and gestational diabetes. Each has a distinct cause but there are many similarities with respect to prevention strategies, day to day management and complications and the challenges and stigma faced by those who are affected[1].

In Australia, there has been a 220% increase in the number of people diagnosed with diabetes since 2000[3] now affecting 5.5% of our population, ~1.9 million people. The fiscal costs of diabetes in Australia are estimated to exceed $17.6 billion/annum and continue to grow[4,5]. Investing in diabetes research not only directly reduces these diabetes costs but provides a 400% return for every research dollar spent[6].

Diabetes is a serious, chronic health condition that impacts every part of the body. It can lead to a range of serious and potentially life-threatening complications including kidney failure, blindness, heart disease, stroke and foot infection leading to amputation[1]. Diabetes is a major risk factor for dementia, cancer, liver failure, tooth decay and life-threatening infections[1]. Living with or caring for people who have diabetes presents serious mental health challenges including treatment-related distress, anxiety and depression. Australian Institute of Health and Welfare data shows that over the past two decades, direct health care costs have increased by 289%, hospital costs have increased by 308% and Pharmaceutical Benefits Scheme costs have jumped by 282%[7].

Research is critical for reducing the impact of the diabetes epidemic

Australia's diabetes researchers and research facilities are world-class[8]. They are focussed on a better understanding the complexity and improving care of all types of diabetes and potential new life-changing treatments, but their progress is limited by an ongoing decline in research funding. Research benefits are exemplified by the health outcomes being delivered by the latest generation of diabetes medicines and technologies, improving quality of life, management of blood glucose levels, reducing risk of diabetes-related complications and making weight loss more achievable. Despite excellent outcomes, these new medicines and technologies are not magic bullets and a majority of diabetes health challenges remain, including research to reform to our healthcare systems to deliver better care in partnership with people with diabetes.



[1] International Diabetes Federation Atlas. 10th Edition. 2021. www.diabetesatlas.org

[2] National Diabetes Services Scheme (NDSS). Snapshots https://www.ndss.com.au/wp-content/uploads/snapshots/2013/ndss-data-snapshot-201312-all-types-diabetes.pdf. *15/07/23*

[3] "Change the Future:Reducing the Impact of the Diabetes Epidemic". Report, Diabetes Australia. 2022

[4] Lee C, Colagiuri R, Magliano D, Cameron A, Shaw J, Zimmet P, and Colagiuri S, 2013. The cost of diabetes in adults in Australia. Diabetes Research and Clinical Practice, 99(3), pp.385-390.

[5] Deloitte Access Economics. (2014) Productivity impacts of diabetes.

[6] Rynne B and Schilling C (2018) *Economic Impact of Medical Research in Australia*. KPMG. Sydney. https://aamri.org.au/wp-content/uploads/2018/10/Economic-Impact-of-Medical-Research-exec-summary.pdf

[7] Australian Institute of Health and Welfare (2022) Diabetes: Australian facts, AIHW, Australian Government, accessed 31 October 2022.

[8] World Top 2% of Scientists, Stanford University/Elsevier (2022) https://elsevier.digitalcommonsdata.-com/datasets/btchxktzyw/4?fbclid=IwAR0u4xhKMuKGIsi_prZLxOIOaMPzVLNCmoIlDYua90eybIVIyE6SI70vyc

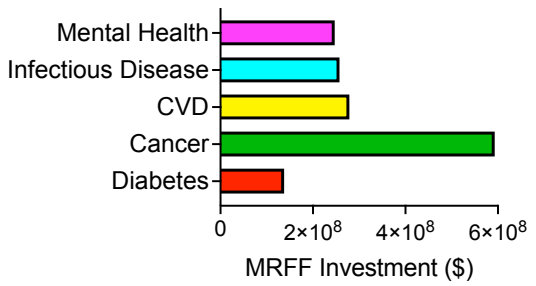
Current Investment in Diabetes and Obesity Research - The problem

Unfortunately, investment in diabetes research in Australia is less than 1% of what is required for diabetes care and support. This is in sharp contrast to other major disease areas (*see Figure 2, NH&MRC investment[9] and Figure 3, MRFF Investment[10], below*). The COVID-19 pandemic has delivered additional challenges including declining income to medical research charities for diabetes, which may be further eroded given the current global economic climate.

Figure 2: NH&MRC expenditure ($m) by Former National Health Priority Areas 2013 to 2021[7]

Priority Areas	2013	2014	2015	2016	2017	2018	2019	2020	2021
Arthritis/Osteoporosis	23.7	22.7	24.7	19.3	18.9	17.5	18.3	16.1	14.8
Asthma	21.5	23.6	22.7	15.3	13.3	15.7	13.8	13.3	14.1
Cancer	179.2	188.3	191.4	170.6	175.8	**178.9**	**181.6**	**170.2**	**153.7**
Cardiovascular Disease	117.1	129.4	130	114.9	111.4	**105.3**	**112.6**	**107.6**	**102.5**
Dementia[1]	24.9	31.5	33.4	45.6	50.2	60.9	71.2	64.1	55.3
Diabetes	**65.2**	**70.2**	**70.3**	**65.0**	**57.7**	**50.7**	**46.5**	**45.6**	**42.6**
Injury	45.4	58.4	61.5	45.8	44.2	49.9	51.1	49.8	46.6
Mental Health[2]	85.1	95.9	100	91.1	93.4	**104.9**	**110.2**	**103.9**	**102.3**
Obesity	**41.7**	**40.7**	**39.0**	**28.1**	**27.6**	**23.0**	**23.5**	**24.3**	**23.1**

Worryingly, this decline in funding by >30% has persisted while the number of people diagnosed with diabetes has increased by 36% in the last decade. In addition, diabetes is causative of or exacerbates many of the conditions listed above. **That means that in 2013, the NH&MRC provided $59 in research funding for every person living with diabetes. In 2021, that figure fell to $30 per person, despite a 35% increase in the number of people with diabetes over this period[9].**



The Medical Research Future Fund (MRFF) actual awarded dollars were calculated from year by year data since inception (Figure 3, left, %) and show a complete disparity in equitable funding made available for research to benefit people at risk for/or living with diabetes [10]. CVD - cardiovascular disease.

Research drives Economic Growth

Research drives economic growth by developing innovative ways to improve efficiency and productivity making healthcare more convenient, effective and economically viable for people living with diabetes. Together these can also contribute to health sector reform driving creation of new business models minimising duplication and redundancy. Sustainable research also supports job creation, biotechnology and industry start-up companies and is key to meeting the greatest of health care challenges, exemplified recently by the ability to combat the COVID-19 pandemic. Each of these ultimately save money and generate new revenue streams which benefit all Australians.

[9] National Health and Medical Research Council of Australia. https://www.nhmrc.gov.au/funding/data-research/research-funding-statistics-and-data.

[10] Financial assistance to support the Australian Medical Research and Innovation Priorities 2020–2022. A report on Medical Research Future Fund (MRFF) activities and funding (2023) https://www.health.gov.au/resources/publications/financial-assistance-to-support-the-australian-medical-research-and-innovation-priorities-2020-2022?language=en

The Pathway to Equitable, Fair and Sustainable Research Funding and Workforce in Diabetes and Obesity – The Solution

The National Diabetes and Obesity Research Alliance

The Australian Diabetes Society (ADS) have championed research reform in our sector in conjunction with other major Health Care Professional bodies including Diabetes Feet Australia, Endocrine Society of Australia, Australian and New Zealand Obesity Society, Australian Diabetes Educators Association, National Association of Clinical Obesity Services, Australian Diabetes in Pregnancy Society, Australian and New Zealand Paediatric Endocrine Society, Royal Australian College of Physicians and General Practitioners, Australian and New Zealand Metabolic and Obesity Surgery Society and Consumer Groups Diabetes Australia, Diabetes Victoria and JDRF Australia. A National Diabetes Research Strategy, which will complement a National Obesity Research Strategy, advocates for an alliance of key organisations that will come together to establish research priorities in the Australian context. To help identify research priorities we will undergo a DELPHI process, engaging research, health professionals, industry and people living with diabetes. We will also use other methodologies to ensure equitable voices from regional and remote communities as well as vulnerable groups impacted by diabetes and obesity including Aboriginal and Torres Strait Islander Peoples, younger people, those with less common forms of diabetes and those with difficult Socioeconomic circumstances. Any existing collections of consumer, government, industry or health professional voices for diabetes and obesity priorities would also be identified and considered eg. already published research priority reports from DELPHI processes[11,12]. Once we have these research priorities in hand, we will use these to advise and advocate for these at all levels in a co-ordinated, sustainable and fair manner, including to both State and Federal Governments. The first stage is the establishment of a Taskforce including researchers who are members of the health professional societies and consumer organisations listed above to oversee the development and instigation of the MRFF Diabetes and Obesity Mission and the National Diabetes (and potentially concomitant Obesity) Research Alliance. **The national taskforce should be chaired by an independent experienced researcher in another field with non-voting capacity** and will also be informed by and consult with governments, industry and consumers and include early career researcher representation. The penultimate goal is to create a permanent collaborative working structure to assure ongoing equitable access to research funding for all people living with diabetes.

The MRFF Diabetes and Obesity Mission – Part of a Solution for Equitable Funding

The Objective

To retain and grow a sustainable, vibrant research workforce and sector for diabetes and obesity, informed by people with lived experience of diabetes, health care professionals, industry and government and other relevant stakeholder groups.

The Mission

The Diabetes and Obesity Health Mission will provide $270 million over 10 years under the Medical Research Future Fund to improve all aspects of diabetes and obesity for every Australian person. Diabetes and obesity are a serious, ongoing and growing threat to Australian individuals and our economy. These conditions contribute to, impact and accelerate the progression of most serious health care conditions faced by our population and globally, including mental health issues, cancer, infectious diseases, chronic kidney disease, lower extremity amputations, and cardiovascular disease which are Australia's biggest killers. Research funding is also commonly very poor for diabetes associated complications such as diabetes related foot disease which constitute a majority

of the cost of diabetes to the healthcare system. Conservatively, diabetes alone costs around $17.6 billion in direct healthcare costs every year[4,5] contributing to premature death, disability and avoidable hospital admissions and diabetes is present in around 25% of all people admitted to hospital[13,14]. Many hospital studies continue to observe strong associations between diabetes and poorer outcomes such as healthcare-associated infections, low and high blood sugar emergencies, increased risk of death, longer duration in hospital and high readmission rates, compared to individuals with normal blood glucose. People with diabetes also make >6.5 million visits to a GP practice annually[15] although these numbers are extremely conservative since they often have complex health issues requiring more frequent, longer visits and health care professional referrals.

Despite Australia's significant gains over past decades, we still have extensive knowledge gaps in diabetes and obesity, ranging from understanding the development and progression of these complex disorders, all the way to delineating systems for equitable and best available health-care delivery for all people at risk for and living with diabetes and obesity. Australian researchers are well positioned to discover, develop and implement transformative solutions with this substantial strategic investment, combined with leadership and collaboration across our sector as the Australian Diabetes and Obesity Research Alliance. There is no doubt that this Mission will improve health and save lives[16] by mobilising and co-ordinating research efforts, supporting a vibrant and sustainable workforce and developing collaborative and translational platforms. It will encompass broad innovations to benefit all Australians, with particular effort to improve equity and outcomes for Aboriginal and Torres Strait Islander people and other vulnerable groups disproportionately impacted by diabetes and obesity.

The Goals

To make transformative improvements in diabetes and obesity to improve health for all Australians through:

- Reducing the number of Australians of all ages affected by diabetes and obesity
- Decreasing the impact of diabetes and obesity on all those affected across their life-course
- Understanding risk factors responsible for the development of diabetes and obesity
- Improving outcomes from acute and chronic complications of diabetes and obesity
- Ensuring that the best technologies, medicines and care are equitably available to all Australians with diabetes and obesity based on the best available evidence.
- Informing health policy and public health interventions for diabetes and obesity.

Governance of the Mission

At least three appointed representatives from ADS/ESA/ANZOS who will appoint the chair of the Mission by election from nominees from their membership. Rotating equitable representation from other relevant Health Care professional bodies and their committees/membership in diabetes and obesity eg. ADIPS, ANZPED, ANZMOSS, ADEA, NACOS, RACGP, NACCHO and relevant consumer organisations Diabetes Australia and JDRF Australia. At least 75% of this committee must be current researchers in diabetes and/or obesity. There must also be an advisory group of people with lived experience of diabetes and early career researchers and interface with the National Taskforce. Project administration officers (x2) will be required over the longevity of the Mission for MRFF administration/integration and other admin such as project milestone assurances and Mission/Alliance support. Peer review panels for Research support will be convened by the Mission Leadership Committee with MRFF support in accordance with MRFF policy. The Mission governance group will also ensure that funding is not directed to areas that will duplicate research already being undertaken in Australia or overseas.

The Plan

Objective 1 - To support, attract and retain a vibrant and sustainable research workforce

People drive change. Australian has incredible, internationally competitive diabetes and obesity researchers that need sustainable support. This Mission will also attract world-class talent to the sector and support the development of the next generation of global leaders in diabetes and obesity research. There is clear evidence that the Australian obesity and diabetes research workforce has been eroded by the lack of research funding support over the past 10 years[9,10]. As an example, the number of research project abstracts for new diabetes discoveries submitted to the annual meeting of the Australian Diabetes Society (~1500 delegates) has reduced by 58% since 2015. There has also been a concomitant drop in philanthropic research funding for diabetes (such as Diabetes Australian Research Program from ~60 to 13 grants in 2023), some of which is due to stigma associated with diabetes and obesity, particularly impacting early career researchers. This is despite continued research excellence globally from Australian diabetes and obesity researchers[8] exemplified by roll out of new medicines and technology around the world transforming care for people with diabetes and obesity. This fight however is far from over and there is a long way to go to achieve equity of access to research that translates to better care for people with diabetes and obesity.

1.1 – Retention of Existing and recruitment of new expertise in Diabetes and Obesity

To reduce duplication and administrative burden, we would ask that candidates submit leadership fellowships through the NH&MRC Early leadership and Leadership scheme and that those awarded a fellowship through that scheme remain there. However, the success rates for those schemes are in the order of 5% which, added to the erosion of researcher numbers in diabetes and obesity makes the case for awarding of additional merit-based fellowships that also achieve the recommended for funding scores but are not awarded due to the NH&MRC budget restrictions for that scheme reaching capacity. This approach is already used by disease specific missions in other disorders such as cancer. Five year fellowships are recommended at each of the levels listed below.

Early Career Researchers 0-15 years post-doctoral award

Early Career Researchers are the largest and most diverse group of individuals engaged in diabetes and obesity research in Australia. They include discovery scientists and clinicians (including medical doctors, nurses and other allied health professionals). Discovery scientists can be graduate students, post-doctoral fellows and newly appointed independent investigators. Career stages for clinician ECRs can range from medical student to a fellowed specialist such as an Endocrinologist or General Practitioner. Allied Health Professional researchers that are ECRs also range from graduates to experienced clinicians. Despite ECRs making up a large proportion of the research workforce and being the future leaders of the field, they face significant barriers. These are compounded in Diabetes and Obesity by the inequitable research funding and their numbers are seriously dwindling in Australia. We strongly recommend that each of these also be available part time, with reduced salary support, down to 40% at lowest time allocation, which may work well for clinician-researchers and people with carer responsibilities. The reduction would not be appropriate for people working full-time in research. The suggested step wise approach is outlined below:

- Early career Fellowships <6 years following award of post-doctoral (PhD) degree

NH&MRC current funding of emerging leader Investigator grant fellowship salary support (EL1) at this level is $82408 pa. For these junior researchers, we recommend an additional ~$70,000 per year in research costs per year. Budget for 4 fellowships per year, each year for 5 years (20 total researchers).
Total for 20 fellows = $15,240,800

- Early Career Fellowships 5-10 years following award of post-doctoral (PhD) degree

NH&MRC current funding of emerging leader Investigator grant fellowship salary support at this level (EL2) is $117,238 p.a. For these researchers, we recommend an additional $100,000 per year in research costs per year. Budget is for 4 fellowships per year, each year for 5 years.
Total for 20 fellows = $21,723,800

- Early-Mid Career Fellowships 8-15 years following award of post-doctoral (PhD) degree

NH&MRC current funding of Leadership level 1 (L1) investigator grant fellowship salary support at this level is = $153,931 p.a. For these researchers, we recommend an additional $150,000 per year in research costs per year. Budget is for 4 fellowships per year for 5 years. $903,000 each
Total for 20 fellows = $30,393,100

Experienced Researcher Fellows >15 years post-doctoral award

Early Career researchers are not the only Diabetes and Obesity researchers impacted by dwindling research funding. This group of experienced researchers in particular have shown ongoing and outstanding global contribution to Diabetes and Obesity across all aspects of research. They also provide structured and productive research environments, leadership and mentorship for the next generation of researchers and have a strong and wide representation on the leadership panels of most health care professional societies, committees and groups across the entire sector of Diabetes and Obesity.

NH&MRC current funding of Leadership level 2/3 (L2-3) investigator grant fellowship equivalent. Budget is for 5 fellowships per year with 5 years funding. $2,500,000 each.
Total for 20 fellows = $50,000,000

1.2 – Encouraging and Supporting Recruitment of New Talent - PhD Scholarships

PhD scholarship support for attracting new students to the diabetes and obesity research sector are not consistent throughout Australia and in some institutes, universities and hospitals are unsustainably competitive, making it difficult for equitable support across all sectors of health care.

Scholarship stipends for completion of post-doctoral (PhD) degrees in Diabetes and/or Obesity

4 per year for 5 years for diabetes and / or obesity focused PhD candidates who do not have other salary support for their Research higher Degree (PhD). $35.000 per year, 3.5y = $122,500 per student.
Total for 20 scholarships= $2,450,000

1.3 – Training and Support of Talent

An important component of any workforce that aims to facilitate and bring about change for People living with Diabetes and Obesity is constantly challenging and extending their vision to incorporate the latest global innovations. Hence these types of training opportunities for our next generation of Diabetes and Obesity researchers are key but mostly not supported by other means. This could include activities such as support for skill-based learning activities overseas; support to attend International meetings/training programs; workforce development in areas such as large-scale bioinformatics, data analysis, data management and interpretation; Translational training (e.g. project management, strategic workforce design and development of models of care).

Objective 2 - Innovation and "high risk" frontier research in Diabetes and Obesity

New frontier, innovative or high risk research is often overlooked in mainstream funding programs. However, historically, the greatest progress often comes from thinking outside the box and then facilitating the rapid adoption of these innovations once proven and rigorously tested for their safe application to and relevance for people living with diabetes and obesity. These lessons are well-learned from studying the Nobel Prizes for Medicine and more recently the COVID-19 pandemic, where those innovations that have transformed diseases have transcended barriers and the length of time for translation given their ultimate impact on prevention, treatment or management of disease.

A) Industry partnered pilot/feasibility funding for drug discovery and biomedical engineering.

Targeted development of new therapies, incorporating emerging biology and development, implementation and translation of biomedical engineering approaches for diabetes and obesity to improve diagnosis, precision treatment and outcomes, using devices and 3D tissue-engineered products, novel wound healing products for diabetes and obesity related foot ulcers and using bioengineering models to maximise data use and prediction. Partnered with MTP connect or equivalent.

Industry partnered pilot/feasibility funding for drug discovery and biomedical engineering.
(i) 1 year "take a risk" grants; 20 x $150,000 = $3,000,000
(ii) 3 year "accelerator" grants; 20 x $500,000 = $10,000,000

B) Pilot and seed funding in diabetes and obesity research

Pilot feasibility funding in diabetes and obesity research across all research areas**.**
$130,000 over 1-2 years.
10 grants per year for 9 years = $11,700,000

C) Precision medicine for early disease detection and Response to treatment

Embedding multi-omic platforms, computational bioinformatics and artificial intelligence based algorithms within well-characterised clinical cohorts to discover new markers for early disease detection and personalised risk prediction and identify mechanisms to provide evidence-based targeted and tailored treatment.
-omics/bioinformatics or Artificial Intelligence based algorithms
10 grants of $1,500,000 over 5 years = $15,000,000

Objective 3 – Specific support of identified research priorities for Diabetes and Obesity

This part of the Mission aims to support projects in specific Research Priority Areas set by fair and equitable processes encompassing as many views as possible to represent and use the integrated power of the voices of people living with diabetes and obesity, health care professionals, researchers, industry, policy makers and membership of the stakeholder organisations in Diabetes and Obesity. These projects and programs include research focused on implementing effective and efficient prevention and care, including supporting evidence-informed clinical and policy decision making. Identifying barriers and co-designing solutions to facilitate implementation of value-adding care but also de-implementation of low-value care will also be a focus. Clinical trials would aim to rigorously test innovative interventions in primary care, acute care, rehabilitation and in community settings.

A) Projects - Limited to a *maximum* of $1M for any particular grant, for work of 3-4 years duration (so $250,000-333,000/year maximum. People should only be able to hold 1 of these at a time. A proportion of these may be near miss NH&MRC ideas grants to minimize the need for re-submitting projects that are already deemed in a fundable range by external robust peer-review processes.

6 project grants awarded each year over 5 years ie 30 x projects = $30,000,000

B) Investigator Led Cohorts, Clinical Trials, Implementation, Vulnerable and/or underserved Populations in Diabetes and Obesity research.

30 x $2 million awarded over first 4-5 years of the Mission. Can be of any duration of up to 5 years. =$60,000,000

Objective 4 – Connected and Collaborative - Development of Research Platforms for Diabetes and Obesity

This objective involves establishment and maintenance of sustainable partnerships to facilitate integrated and connected platforms for research aiming to improve the lives of people living with diabetes. In other successful missions, this has included strategies such as integration of large-scale national and state data linkage systems (eg NDSS, National Integrated Health Services Information, Multi-Agency Data Integration Project) and primary care data linkage systems to develop large-scale data platform/s integrating clinical, state, national and other data sources such as private health insurers and other entities to enable data security, software development while enabling governed access for research. Existing clinical registries, trial networks and cohorts with biobanks could be integrated to create national resources. Funding could be leveraged by incentivising sustainable partnerships with commercial diagnostic companies, and international collaborations with world-class facilities. Specific integration with other MRFF missions to reduce duplication of these platforms and capacity building in regional/rural and underserved populations in terms of access and contribution to research would also be desirable. Some examples are included in the Table of the Mission costs below. **We would also recommend that infrastructure support awarded to the JDRF Australia via the MRFF for their Clinical Research Network should continue as an exemplar of the effectiveness of targeted research for type 1 diabetes prevention and screening.** This Diabetes and Obesity Mission would work in an integrated manner with JDRF to ensure no duplication and that opportunities for collaboration and leveraging were maximised.

Mission in a Nutshell

MRFF Mission Objective	Specific Support	Investment Over 10 Years
Objective 1 - To support, attract and retain a vibrant and sustainable research workforce		
	Early Career Fellowships (<6 years) – 5 years	20 Fellows $15,240,800
	Early Career Fellowships (5-10 years) – 5 years	20 fellows = $21,723,800
	Early/Mid Career Fellowships (10-15 years) – 5 years	20 fellows = $30,393,100
	Experienced Research Fellows >15 years	20 Fellows = $50,000,000
	PhD Scholarships to attract new talent. $35.000 per year, 3.5y = $122,500 per student.	20 scholarships = $2,450,000
	Training Activities to Support Talent – Media Workshops, Dissemination of Knowledge Activities eg. support for skill-based learning activities overseas to bring state of the art learning back to Australia; support to attend International meetings/training programs)	$2,000,000
	Subtotal	**$121,807,700**

Objective 2 - Innovation and "high risk" frontier research in Diabetes and Obesity		
	Industry partnered pilot/feasibility funding for drug discovery and biomedical engineering	1 year "take a risk" grants 20 x $150,000 = 3,000,000 3 year "accelerator" grants 20 x $500,000 = 10,000,000
	Pilot feasibility funding in diabetes and obesity research across all research areas	$130000 over 1-2 years. 10 per year for 9 years = $11,700,000
	Precision Medicine for early disease detection and Response to treatment	-omics/bioinformatics/AI 10 x $1,500,000 = $15,000,000
	Subtotal	**$39,700,000**
Objective 3 – Specific support of identified research priorities for Diabetes and Obesity		
	Projects - Limited to a *maximum* of $1M for any particular grant, for work of 3-4 years duration	6 per year over 5 years ie 30 projects = $30,000,000
	Investigator Led Cohorts, Clinical Trials, Implementation, Vulnerable and/or underserved Populations in Diabetes and Obesity research.	3-5 year grants 30 x $2 million over 4 years =$60,000,000
	Subtotal	**$90,000,000**
Objective 4 – Connected and Collaborative - Research Platforms for Diabetes and Obesity		
251507700	Monitoring the state of diabetes and obesity - Integrated big data	$5,000,000
	Supporting and Establishing Sustainable National Capacity for Clinical Trials	$250,000 year for 5 years. $1,250,000
	Regional and Rural Research or Disadvantaged Capacity Focused Projects	$10,000,000
	Subtotal	**$16,250,000**
Mission Support – Responsible Governance and Transition to Sustainable National Research Alliance		
	Mission Administrative Project officers 2 x full time $110,000 per year per person over the 9 years of funding.	$1,980,000
Mission Total		**~$270,000,000**

[11] Heindrieck C et al (2023). Diabetes Research Matters Report. DA Victoria/ACBRD/IHT/DA.
[12] Perrin B et al (2021) Establishing the national top 10 priority research questions to improve diabetes-related foot health and disease: a Delphi study of Australian stakeholders. BMJ Open Diab Res Care 2021;9:e002570. doi:10.1136/bmjdrc-2021-002570
[13] Ekinci EI et al (2018) The Presence of Diabetes and Higher HbA1c Are Independently Associated With Adverse Outcomes After Surgery Diabetes Care 41:1172–1179 https://doi.org/10.2337/dc17-2304
[14] Donavan P et al (2021) The Queensland Inpatient Diabetes Survey (QuIDS) 2019: the bedside audit of practice. MJA 2021; 215 (3): 119-124. doi: 10.5694/mja2.51048
[15] Gordon J (2022) General Practice Statistics in Australia: Pushing a Round Peg into a Square Hole. Int J Environ Res Public Health. 2022 Feb; 19(4): 1912.
[16] Australian Institute of Health and Welfare (2019). Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015, AIHW, Canberra.