Executive Summary

We are pleased to present the 2018–2022 Alberta Diabetes Institute strategic plan, which includes our vision for this outstanding facility, the objectives we want to accomplish during the next five years and the plans to reach those objectives.

We’ve taken a number of steps to help us prepare the plan, such as recently hosting a members’ retreat, talking with our other stakeholders, participating in the development of the Faculty of Medicine & Dentistry’s strategic plan and developing a detailed business plan for the Alberta Diabetes Institute. The latter contains considerable detail and provides guidance for executing the strategic plan.

We heard our members tell us that they want the Alberta Diabetes Institute to play a more active and facilitative role in their research, while the faculty and University of Alberta have stressed the need for collaboration and diversity, social and cultural sensitivity and sustainability.

The objectives of our strategic plan are associated with five key areas:

1. Research Co-ordination
2. Sustainability 
3. Developing Research Strengths 
4. Communications 
5. Excellence

To reach our objectives we will

- improve the ability of the Alberta Diabetes Institute to help its members identify opportunities and connect with the partners and resources needed to pursue and develop their research.
- account the unique challenges that face researchers pursuing innovative technologies versus those aiming to implement changes to lifestyle and healthcare practices.
- increase our research capacity in key technologies such as regenerative medicine, immunotherapy for Type 1 diabetes and invest in an integrated healthcare delivery research platform that will be unique and far reaching for Type 2 diabetes.
- efforts to partner with industry and other research institutes will be more aggressive as we look to grow investment in our research.
- communications will play an important role in upcoming years with the development of messaging that connects with our stakeholders and the development of internal communications that enable our members to collaborate more effectively. Community engagement will also be important for building relationships between patients, clinicians and researchers.

In short, this plan is about enabling our members to achieve excellence in diabetes research and giving our trainees the best possible experience during their time at the Alberta Diabetes Institute.

Thank you for taking the time to read the Five Year Strategic Plan, and we welcome any feedback you may have.

Dr Peter Light
Director, Alberta Diabetes Institute
Dr Charles A Allard Chair in Diabetes Research

Dr Vince Rogers
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Vincent Rogers
In 2016, the University of Alberta published its strategic plan, entitled For the Public Good. The plan outlined the values and goals to be reflected in every endeavour at the university. In step with this was the Faculty of Medicine & Dentistry’s own strategic planning, now being implemented. While the plans are built around different pillars, there are common, overarching themes that are highly relevant to the Alberta Diabetes Institute.

Partnerships and diversity
Both plans call for more international and multidisciplinary collaboration, with a need to identify and listen to stakeholders. Engagement with communities within and outside campus is also encouraged, with the goal of creating reciprocal, beneficial rewards.

Trainees and researchers should be allowed to experience diversity and cross-thinking from both academic and cultural perspectives.

Innovation and sustainability
Sustainability should be built in through forward-thinking leadership, strong and formal stakeholder engagement, consideration of social and economic factors and by linking clinicians with basic scientists.

Both plans strive to continue pushing the frontiers of current thinking, engaging disruptors and fostering technology incubation.

Excellence
Any program should strive to attract and retain the best, build and showcase areas of distinction and foster professional development.

The Faculty of Medicine & Dentistry’s plan specifically calls for programs that focus on innovative research through the development of precision/preventive approaches to healthcare.

Strategic planning
The Alberta Diabetes Institute initiated work on its own strategic plan in 2016, beginning with business planning that served as a comparison of where we are with where we want to be.

Our process included consultation with our stakeholders to learn where the Institute could better serve, in terms of supporting researchers and developing innovation.

The resulting strategic plan is the set of objectives and actions needed to overcome the gaps identified, with the themes of both the faculty’s and university’s strategic plans reflected throughout.
The Alberta Diabetes Institute is made up of an enviable collection of scientists and trainees from virtually every field relevant to diabetes, from basic discovery science to health outcomes research. While the multidisciplinary makeup of ADI presents unique prospects for collaborative research in diabetes, the reality is that it can be difficult for our scientists to be aware of these opportunities.

An enormous investment has been made by the university, the province and federal government to establish supporting infrastructure for enabling knowledge mobilization, but navigating through these resources can be a challenge.

Managing and co-ordinating the immensely diverse research activities at ADI and translating these towards practical application is a daunting task for our members.

At the 2016 ADI Members Retreat, investigators clearly expressed a desire for ADI to play a more prominent role in identifying opportunities, building teams and supporting knowledge mobilization.

To assist in this the institute will direct more of its resources towards overseeing ADI’s research portfolio and bringing researchers together where possible to pursue collaborative opportunities. We will also help with knowledge mobilization pathways and the steps towards the advancement of innovation.

However we recognize that this support must serve two very different pathways at ADI—technology development and health practices—each of which has unique challenges.

For technology development, ADI will help direct members through preclinical and regulatory hurdles. For health practices, facilitation will be in the form of a support structure for integrating research at the healthcare delivery level, crucial for meaningful impact.

**ADI will direct more of its resources towards research co-ordination and knowledge mobilization support for both technology development and innovative health practices.**

In the future ADI will play a more prominent role:

- Tracking the progress and outcomes of research led by members.
- Working closely with TEC Edmonton to assess and protect intellectual property, managing technology development platforms through the university incubator and helping navigate through regulatory testing requirements.
- Developing partnerships with other research institutes both nationally and internationally and pursuing collaborative research initiatives that can help accelerate knowledge mobilization by combining expertise.
- Playing an active role in identifying larger, team-oriented research opportunities and working with the Faculty of Medicine & Dentistry’s director of major grants to pursue those opportunities.
- Establishing a physical base of operations for an integrated healthcare delivery research team. Researchers from multiple disciplines will be brought together to work on pragmatic healthcare delivery research in conjunction with Alberta’s Primary Care Networks to develop improved healthcare practices for Type 2 diabetes patients.
Sustainability is reflected by numerous things, but none as important as the ability of members to access research funding and the financial stability of the institute itself.

In terms of general ADI operations, shrinking operational grants are a reality and make it necessary to identify improved efficiencies where possible.

In regards to diabetes research funding, the vast majority of this is derived by members themselves through PI-initiated grants and donors, both of which are increasingly difficult to secure. Members have asked the institute to play a greater role in leveraging funding opportunities where possible.

Moving forward, the ADI will do a number of things to improve general finances as well as help leverage funds for its members.

- In the short term, ADI will reduce its operating expenses through attrition, and will share more administrative duties with other departments and faculties.
- In the future, the institute will transfer more indirect costs associated with external research agreements and team grants towards supporting general operations.
- Staff will begin networking regularly with industry to assess market pull for intellectual property developed by its members and turn these into investment opportunities through formal research agreements.
- ADI will regularly engage with the Strategic Clinical Networks, gaining end-user perspective and identifying clinically driven health challenges that translate into highly relevant research opportunities that attract investment for our basic and clinical research scientists.
- ADI staff will pursue formal partnerships with international research institutes that open the door to new research funding opportunities.
Our members conduct research in a multitude of different fields, all of which are important for generating new information about preventing and treating diabetes.

ADI is well poised to make significant contributions in several of these areas through additional investment and capacity-building.

**Several areas will be targeted for growth in order to stay on the leading edge of innovation in Type 1 diabetes and to make a greater impact in Type 2 diabetes.**

- Research by our principal investigators has shown increasing promise for cell-based immuno-therapy for achieving (i) transplant tolerance, (ii) early intervention in new onset Type 1 diabetes and the potential for the reversal of autoimmunity and (iii) the restoration of beta cell mass with novel and clinically existing antidiabetic drugs.

  The ADI will help recruit a new PI with expertise in immunology and raise investment towards directed research with the goal of achieving clinical trial application within the next five years. Underutilized core space exists on the fifth floor of ADI that could be used as investigator wet lab space.

- The ADI also wants to build capacity in novel cell and stem-cell based therapies for overcoming Type 1 diabetes (T1D).

  Recruitment of an investigator for this initiative would be done in conjunction with a department in the FoMD with the intent that the investigator has their research and office space in ADI. Vacant wet lab space exists on the fifth floor of ADI close to animal procedure, flow cytometry and cryopreservation supporting infrastructure for this initiative; ADI would support setting up and equipping this lab.

- Partnership with Alberta Cell Therapy Manufacturing (ACTM) will be key in these areas of cellular therapy in order to move innovations towards clinical application. ADI will be working closely with ACTM on team grant applications for the above initiatives.

- Metabolomics is an area that holds promise for delivering predictive and personalized diagnosis for the onset of both T1D and T2D diabetes, allowing early intervention and prevention. Collaborative research with the Metabolomics Innovation Centre will be developed for this initiative and funding sought.

- As mentioned, ADI intends to establish a new platform for integrated healthcare delivery research with the aim of improving knowledge mobilization for good health practices. The ASCEND (Alberta Strategy for Care Excellence in Diabetes) team will draw on the expertise of nutrition, physical activity, gestational, obesity, Indigenous health and mental health researchers to improve the delivery of precision healthcare to diabetes patients. Physical space for this team could be located in dry lab space on the second floor of ADI.
The ADI has improved its communications efforts during the past two years, establishing active social media platforms and hosting events on and off campus that have raised awareness about the institute. Communications planning will now focus on increasing this external profile even more and improving our stewardship with donors. An internal communications plan will be executed that will make it simpler for our members and trainees to access resources available to them and connect on opportunities and team-building initiatives:

- ADI will commit about 20 per cent of its non-salary operating budget over the next three years to accomplish several objectives related to external communications. One of these is updating/increasing visual identity in the Li Ka Shing building, including signage in the main foyer and major traffic routes, and updating wall photos. The current website will be upgraded to the newest university platform and will include updates to member profiles that are currently the most heavily visited sites on the ADI site. Funds will also be used to attend at least one major diabetes event a year for the purpose of profiling the ADI.

- A toolbox of key and simplified messaging will be developed for different stakeholders in order to communicate effectively and consistently on new achievements and investment/partnership opportunities.

- ADI will look for opportunities to increase community engagement by hosting educational public forums that bring together researchers, clinicians and patients to:
  1. increase the profile of ADI,
  2. increase awareness about the opportunities for patients to participate in clinical trial and healthcare delivery research at ADI, and
  3. connect patients with the Foundation for donating.

  This relationship-building would have reciprocal benefits for everyone involved; industry sponsorship would be sought to host the events.

- Internal communications will be bolstered by developing an online database and information sharing platform that reduces the need for emails regarding events, opportunities and general information sharing. It will also serve as a means of connecting members to form team initiatives. ADI’s communications associate will lead and coordinate all internal communications in order to avoid redundancy.

- New or existing staff will be trained to provide contingency for ongoing communications duties such as website and social media updates in order to ensure continuity.

- A stewardship standard operating procedure will be developed in conjunction with the university and Faculty of Medicine & Dentistry that clearly defines the roles and responsibilities related to receiving and acknowledging any level of donation directed towards diabetes research at the university.
Excellence means doing all the above things right: having the mechanisms in place for mobilizing knowledge, pursuing a sustainable program, pursuing cutting-edge research and effectively telling our story. It means striking a balance between discovery science and translational research, both of which are essential for the innovation pipeline. And it means seizing opportunities when they present themselves for taking the next steps forward in the prevention and treatment of diabetes.

Finally, and perhaps most importantly, excellence means our members and trainees have the best possible experience in a highly diverse, innovative and interactive environment. For trainees this should include international professional development and exposure to all types of research areas that gives them a broader knowledge base. For our members, they should be enabled in the best possible way by ADI in their pursuit of excellence in diabetes research.

- The ADI is already in the process of identifying a list of team initiatives that outline research and development challenges for which ADI is ideally poised, to overcome important, unmet needs for the prevention and treatment of all forms of diabetes. This will be used for leveraging significant investment and donor funds towards directed research when these opportunities arise.

- ADI’s commitment to funding highly exploratory pilot research will continue, in particular novel projects specifically involving collaborations between clinicians and basic scientists.

- In the future a number of Research In Progress (RIP) seminars will be hosted that are more informational and less project-specific. This includes summary talks about the focus and research objectives of different groups, as well as seminars aimed at highlighting industry-driven and clinically relevant opportunities for basic scientists. Formal weekly meetings will bring diabetes researchers and clinicians together.
The ADI will develop a plan for biobanking in conjunction with its Clinical Research Unit in order to store samples that can be used in the future to identify biomarkers of disease and help direct research initiatives aimed at identifying risk and predicting disease. ADI’s existing cryogenic facility is ideal for this purpose and has unused capacity.

ADI will follow up its 2016 Members Retreat with regular biennial retreats to ensure all members have the opportunity to provide feedback to the ADI for ongoing implementation of its strategic plan.

An International Scientific Advisory Committee will be formed that can provide oversight regarding ADI’s decision making and planning, ensuring the ADI positions itself strategically on the global stage to fulfill its vision of being recognized for excellence in diabetes research and development. This committee will be consulted annually and will consist of a panel of accomplished, international diabetes researchers.

We want to increase engagement we have with our trainees and staff in the actions and planning of ADI. Beginning in 2018, ADI trainees will be invited to organize into an association, representatives of which can participate in meetings of the Research Co-ordinating Committee so that ideas and opportunities can be communicated more directly. Trainees will also be given the opportunity to take up more of the planning of ADI’s annual Research Day.

Trainee professional development opportunities will be increased through various initiatives, including:

(i) a diabetes training program for new graduate students and post-doctoral fellows that provides basic information about areas of research, state of the science and unmet needs;

(ii) an overview of translational research that provides new ADI trainees with an overview of knowledge mobilization pathways;

(iii) formal research partnerships between ADI and other institutes that include international student exchange and the opportunity for trainees to spend part of their time at another research center and

(iv) an annual competition that challenges trainees to form multidisciplinary teams and develop novel research ideas.