



GACD

GLOBAL ALLIANCE FOR CHRONIC DISEASES
AN ALLIANCE OF HEALTH RESEARCH FUNDERS

A photograph of a group of women in traditional Indian attire, including sarees and jewelry, dancing joyfully. The image is partially obscured by a large, semi-transparent circular graphic element. The women are smiling and have their arms raised, some holding hands. The background is a bright, outdoor setting.

ANNUAL REPORT 2016/17

GLOBAL ALLIANCE FOR CHRONIC DISEASES

GACD Who we are



Alain Beaudet, MD, PhD
Chair, GACD Board



Celina Gorre
Executive Director, GACD

I am pleased to introduce the GACD annual report for 2016-17 which reflects another exceptional year of growth and innovation. The growth is reflected in the expansion of the GACD Research Network which is now supporting more than 550 researchers from over 45 countries to address some of the most pressing chronic diseases globally – hypertension, diabetes and lung diseases.

The past year also saw the GACD launch its fourth and largest research programme to date focused on the growing global burden of mental health disorders. This programme is also the first to feature a common portal for applications, a single application deadline, and an expanded joint peer review.

GACD membership continued to expand with the joining of Japan and Brazil in 2016 (see page 23). Innovation in the GACD is being driven by the Research Network, through their collaborative efforts in furthering implementation science, standardising data, and publishing guidelines to inform the global management of NCDs.

The GACD has also taken critical steps to ensuring research evidence is applied for improved performance and sustainability of health care systems through an innovative new partnership with the World Bank. Together this growth and innovation will lead to tangible improvements in health as well as the social and economic wellbeing of nations around the world. It has been a true pleasure and honour to chair the GACD Board and I wish the Board and the Secretariat continued success as the GACD continues its journey and efforts to turn the tide on the crisis of chronic diseases.

As I look back on the past year, I can truly say that 2016 was GACD's best year yet. We have continued to enlarge our community of funders and researchers and collaborated in new and impactful ways to extend our reach while remaining small and nimble. In the process, we have demonstrated how the GACD is much more than the sum of its parts.

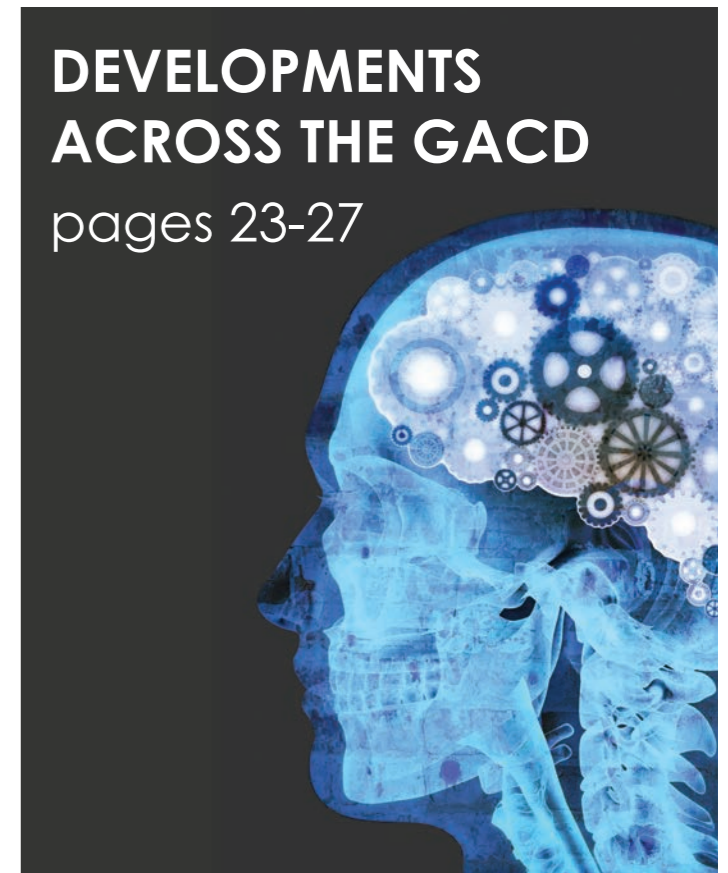
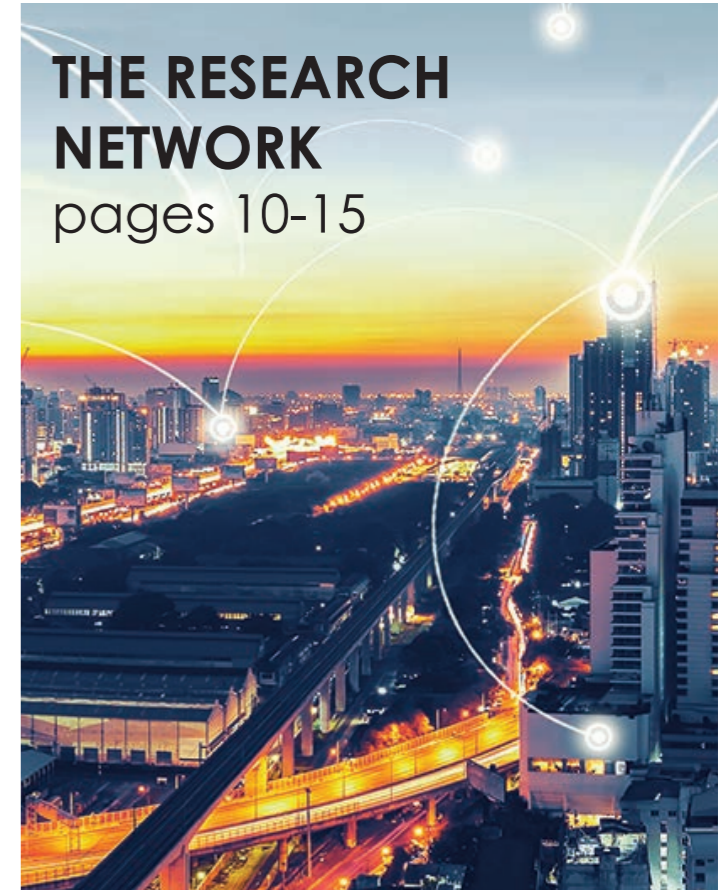
I am also very pleased that in November 2016 we signed a memorandum of understanding with the World Bank, to work together on research for development, supporting the implementation and scale up of evidence-based health interventions across low- and middle-income countries with which they work.

This year, after five fantastic years at UCL, the GACD can look forward to yet more change, with a move to the Wellcome Trust for the International Secretariat. I would like to thank in particular Professor Dame Anne Johnson and Professor Ibrahim Abubakar for their unwavering support of this maturing organisation.

We will also be welcoming our new Chair of the Board, Prof Glenda Gray, with the retirement of Dr Alain Beaudet (see page 26), who has been instrumental in the successful engagement with the World Bank and numerous new members. I'd like to thank Alain, who has been there from the very start of the organisation, for his tremendous leadership, commitment to the GACD and focus on results.

We are excited for what this year has in store and we welcome your interest and participation across the many activities of the GACD. In particular, I look forward to meeting the newest investigators with the launch of the GACD Mental Health Programme and welcoming the Research Network in Buenos Aires in October 2017.

GACD Contents

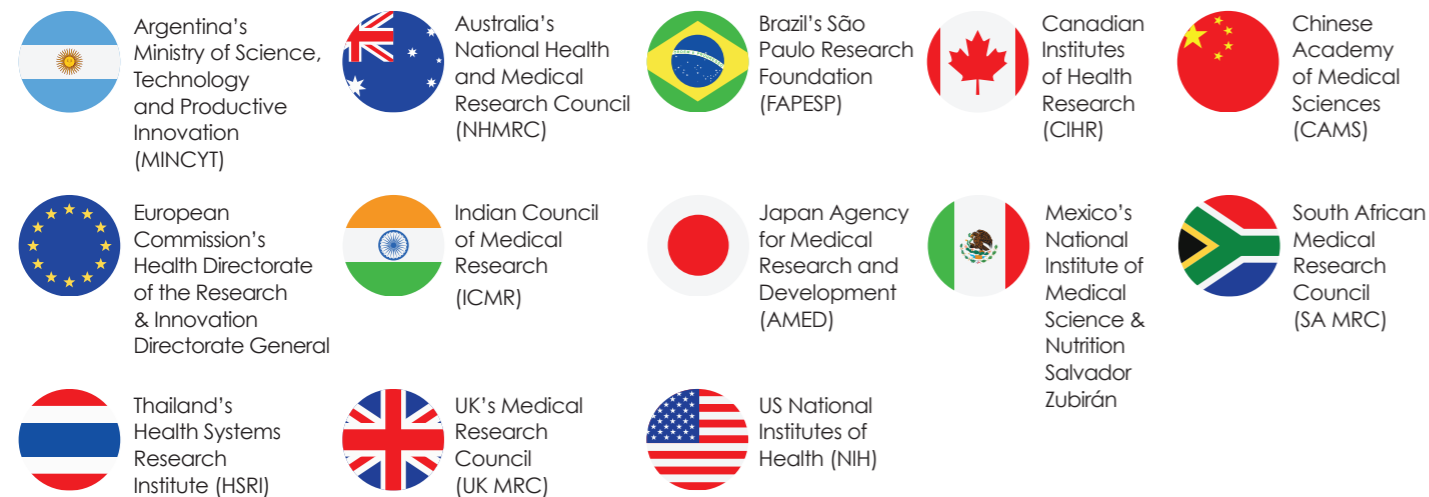


GACD What we do

The Global Alliance for Chronic Diseases (GACD) is a collection of the world's largest public research funding agencies. We fund joint programmes into lifestyle related or chronic diseases – which to date has included hypertension, diabetes and lung diseases.



The GACD Research Network and Management Committee at the 2016 Annual Scientific Meeting in Sydney



The alliance coordinates and supports research activities that address the prevention and treatment of NCDs or chronic non-communicable diseases, on a global scale. These NCDs account for 60% of deaths globally. Our multi-country, multi-disciplinary research focuses in particular on the needs of communities in low- and middle-income countries (LMICs), where 80% of deaths from chronic diseases occur. We also focus on research with vulnerable populations of more developed countries.

The GACD is the first collaboration of major research funding agencies to specifically address chronic non-communicable diseases. The alliance is now formed of 13 of the world's largest funders of medical research.

GACD Implementation science

Implementation science examines what works, for whom and under what circumstances, and how interventions can be adapted and scaled up in ways that are accessible and equitable.

Why does the GACD focus on implementation science?

Implementation science is trying to address the significant knowledge gap between interventions that research has shown to be effective, and their delivery to communities and translation into practice, particularly in low- and middle-income countries. Implementation research is needed to account for the complexities of the systems in which interventions are implemented, since other approaches often fail to address these. Implementation research plays a particular role in supporting decision makers in the scale-up of interventions and their integration into health systems at the regional or national level. By funding implementation research, GACD supports evidence-based policymaking that can build robust programmes to improve public health.

Which factors can affect implementation?

When interventions are proven to be effective, implementation research therefore can build on a solid understanding of what can work (efficacy) and what does work (effectiveness). There are several characteristics that influence whether interventions can be implemented. Cost, relative to other similar interventions, its complexity and adaptability is one.

Another is the extent to which different stakeholder groups are actively engaged in the intervention. While implementation relies on health care workers, policymakers and patients who adopt, carry out or benefit from interventions, researchers also need to identify the knowledge gaps and find answers to the challenges facing these groups.

Implementation science studies commonly focus on whether findings can be generalised across different settings and individuals. This can be achieved by examining context, which can account for a number of barriers and facilitators that determine the success of implementing an intervention. Implementation also commonly requires the study of behaviour change among individuals or organisations and therefore a deeper understanding of the social, economic, institutional or cultural factors that shape this behaviour.

The Global Alliance for Chronic Diseases puts implementation science at the core of each of its joint calls for applications and expects funded research projects to address implementation challenges in their particular settings.



GACD Overview

GACD programmes put research into action

US\$174 million
To date, the GACD has invested a total of US\$174 million in NCD research in 45 countries on 6 continents around the globe.

US\$70 million
Our current research call is committed to spending up to US\$70 million into global mental health research.

Funding alliances
By joining forces in a funding alliance, the members of the GACD are able to create efficiencies and invest substantial resources in global NCD research.

Shared learning
GACD researchers benefit from shared learning across the alliance.

Specialist researchers
Our researchers are specialists in global implementation science.

GACD growth

The GACD, which started operating in **2009** with **6** founding alliance members has grown in **2017** to **13** members

Our members represent the **world's largest public health funding agencies.**

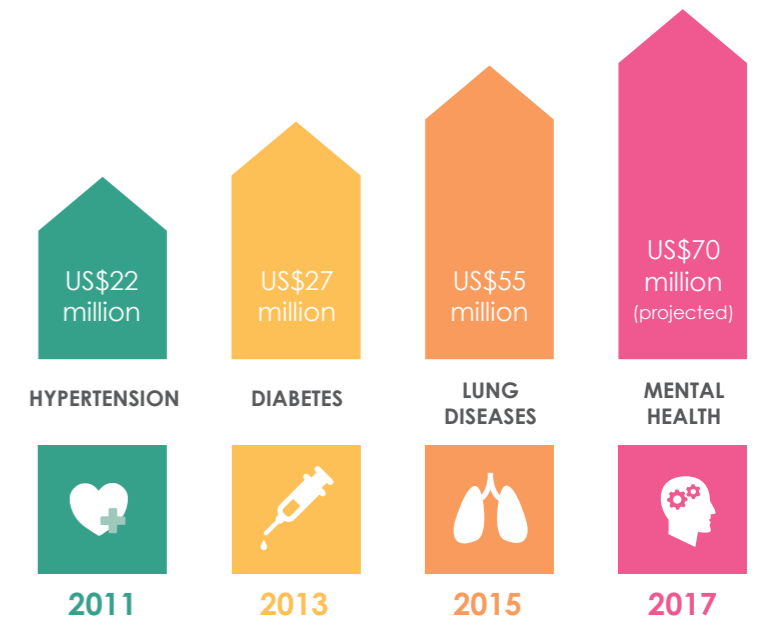
Our investments into global NCD research

The first coordinated research programme into hypertension was launched in 2012, with a funding amount of US\$22 million.

Our Diabetes Programme, launched in 2013, invested US\$27 million into joint research programmes.

The Lung Diseases Programme, launched in 2016, is investing US\$55 million into allied programmes.

The GACD mental health call launched in 2017 and has committed to invest up to US\$70 million.



Why invest in global health research?

Investments in global health research can bring substantial health and economic benefits of research to populations around the world. On balance, the benefits of the right health investments far exceed the costs. The results can have the potential to save millions of lives and years lost to disability, and often also millions of dollars.

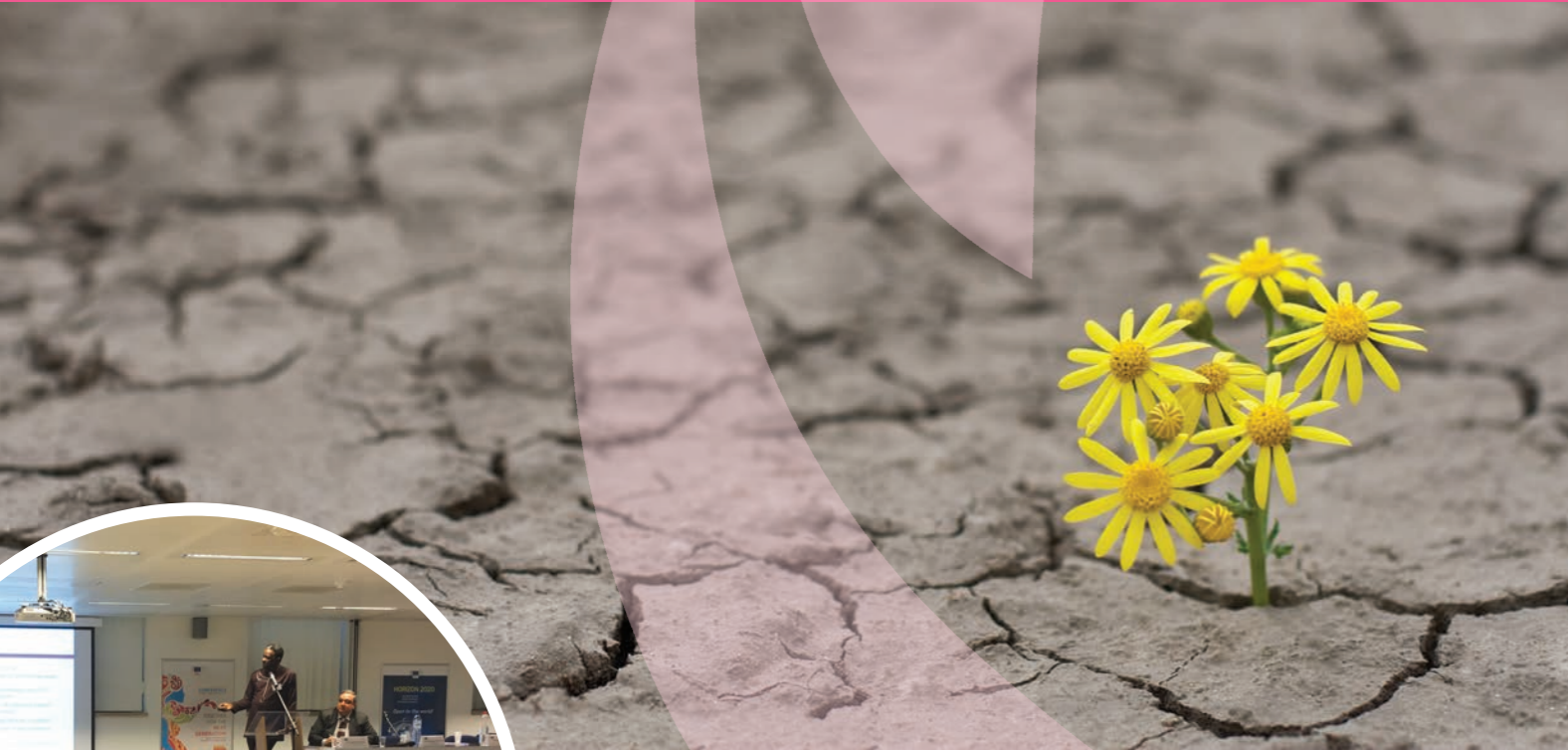
There is clear evidence that investing in health improvements can have a significant positive impact on countries' economies, including by making populations more productive. Helping to improve health systems of developing countries through targeted research therefore is an important contribution to international development. Specifically, funding of implementation research can leverage investments to a maximum degree by generating significant impact on health by improving policy and practice. At the same time, investments in global health research also produce direct benefits to the countries that are investing. They strengthen and support the domestic research community and spur scientific innovation, often as a result of the international research collaborations that are an integral part of this area of research.

“Exciting opportunities for joint publications, data sharing and more.”

Dr Gillian Gould via Twitter

GACD Making an impact

GACD members aim to jointly address the burden of NCDs, by funding research that contributes to the evidence underpinning sound policy and practice.



GACD calls represent US\$182 million of joint investment

One of the GACD's objectives is for participating funding agencies to share good practices and develop and improve joint processes, to achieve the best possible peer review and grantmaking, which supports high-quality research. To this end, over the past few years, the GACD has been providing opportunities for funders to adopt new ways of working together and explore different areas of operational and strategic collaboration.

One way this has manifested itself is a stronger focus on how the GACD could support the scaling up of successful interventions and fill the research gap in this area. A successful workshop, hosted by the European Commission in Brussels (May 2016), brought together a high-calibre group of experts, policymakers and practitioners. The aim was to assess the current state of affairs in scale-up research and feed into the strategic direction of the GACD's next round of funding calls with a new focus on scale-up. The GACD has also sought out potential implementation partners for larger scale interventions and signed a memorandum of understanding with the World Bank with the hope of maximising the impact of GACD funded research at scale.

Funding calls

GACD member agencies work together to develop joint calls for applications, addressing specific areas of NCD research within the wider area of implementation science. Each of these attempts to build on the learnings of previous calls, and following the GACD's first two calls on hypertension and type 2 diabetes, the funding agencies were able to announce the successful grantees of the lung diseases call in 2016.

GACD Lung Diseases Programme launch

The Global Alliance for Chronic Diseases announced its successful grantees at a reception hosted by the Canadian Embassy in London on 27 September 2016.

GACD member agencies are funding over...

17 international research projects in more than...

30 countries, representing over...

US\$55 million of international funding into the prevention and management of chronic lung diseases.

The focus of the projects is on implementation research in low- and middle- income countries (LMICs), vulnerable populations in high- income countries (HICs), and Aboriginal communities. The research looks to address chronic lung diseases as related to environmental exposures, including indoor and outdoor air pollution and/or smoking, as a major risk factor.

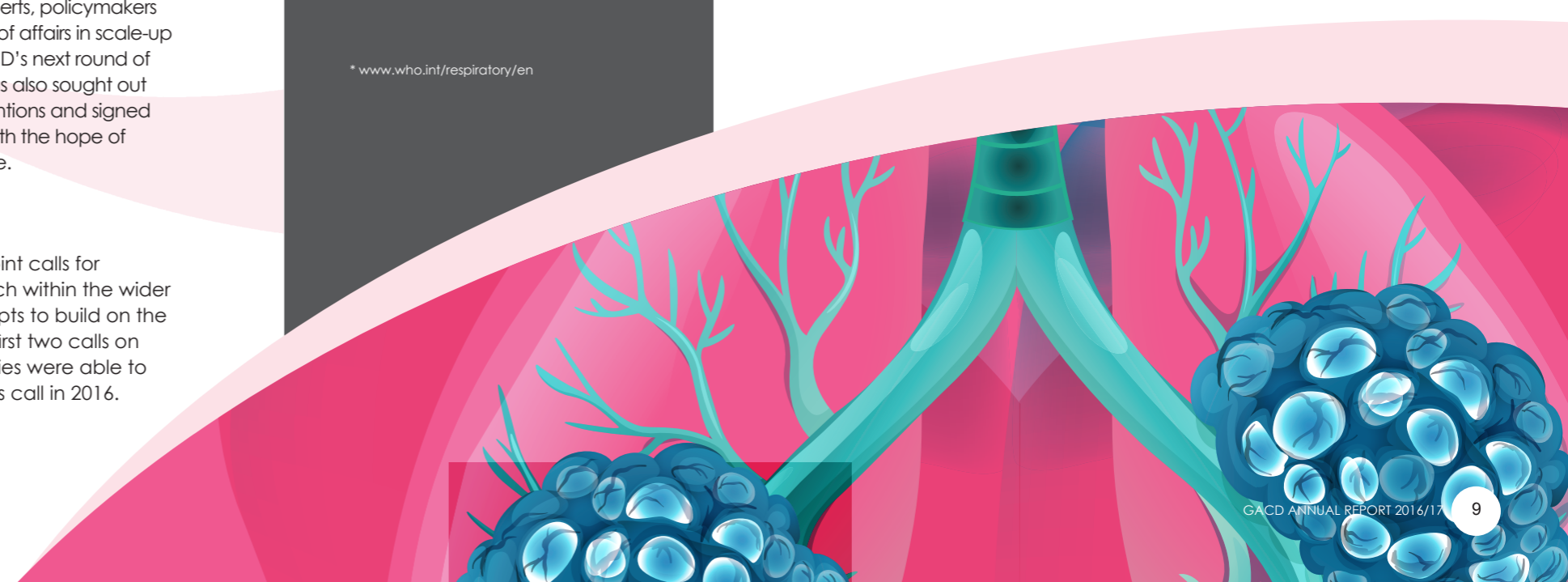
More than 3 million people die each year from chronic obstructive pulmonary disease (COPD) alone, with 90% of these deaths occurring in low- and middle-income countries.*

* www.who.int/respiratory/en



The GACD also launched a call on mental health in late 2016 (see pages 24-25), which seeks implementation research proposals on child, adolescent and adult age onset mental disorders. This call represents a significant step forward in the evolution of the GACD as it is the first time the majority of the funders are using a common application submission portal, which streamlines the application process and increases efficiency. Many funding agencies will also continue to participate in the common GACD peer review, which sees one joint panel of experts evaluate proposals from across different funders. Both of these are successful outcomes of the GACD funding agency collaboration on funding processes and grantmaking.

On the part of the GACD funded research teams and the outcomes of their projects, the Hypertension Programme is winding down and gearing up to publish results and assess the impact of the studied interventions on the health of the populations. At the same time, the positive effects of GACD funding in terms of building new connections and developing new research ideas are already clear to see every year at the Annual Scientific Meetings of the GACD Research Network (see pages 14-15). Interactions with GACD researchers from PhD students to senior principal investigators have also provided invaluable opportunities for the funding agencies to see the impact of their funding first hand. The plethora of publications, both from individual research projects and joint papers that were developed collaboratively across different teams, speak volumes of the important contribution GACD funded research is making to the field of NCDs and implementation science.



GACD Research Network update

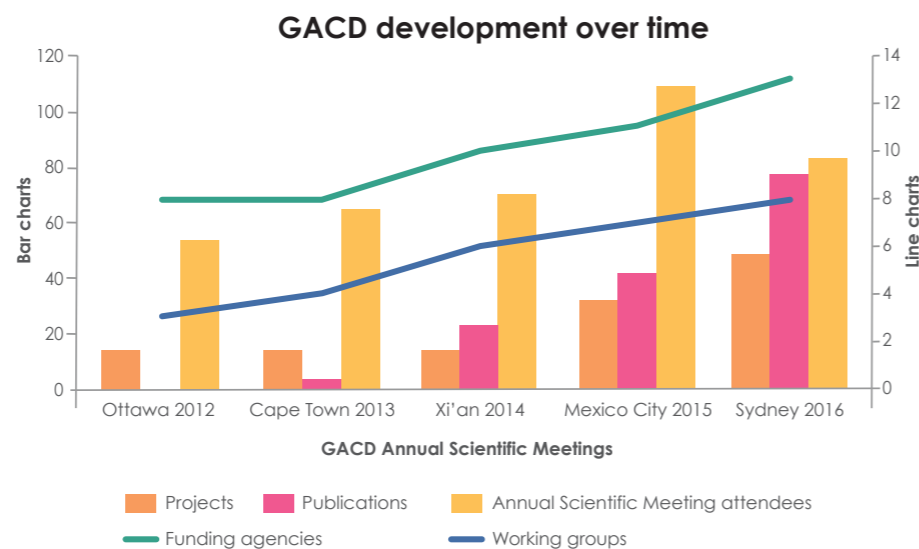
The GACD Research Network continues to mature as an international network of researchers, implementers and advocates at the cutting edge of implementation research in global health. This maturation is reflected in the growth of the Research Network, working groups and publications.



Following the announcement of the successful applicants to the GACD funding call on the prevention and management of chronic lung diseases in 2016, the GACD Research Network welcomed the integration of over 190 new researchers from 17 new lung diseases projects.

The 2016 Annual Scientific Meeting (ASM) saw researchers from the 3 GACD research programmes – Hypertension, Diabetes and Lung Diseases gather together (see pages 14-15). The ASM is a unique opportunity for GACD researchers to share project updates, challenges and successes in a trusted environment. Members of the Research Network value the hierarchy-free culture maintained at face-to-face meetings such as the ASM and other forums of interaction. This provides a platform for more open and meaningful engagement around sharing of study progress, challenges and the development of collaborative efforts.

The addition of GACD Diabetes and Lung Diseases Research Programmes to the GACD portfolio has highlighted how implementation research often transcends disciplines and disease states. 23 GACD researchers are funded across more than one of the three GACD disease areas, and there have been expressions of interest from within the network for cross-disease calls to be considered for future funding.



Top 4 methods used for engaging governmental policymakers:

- Interviews and surveys of health department officials to inform study development and adaptation
- End-user government agency officials invited to participate on advisory panels
- Policymakers invited to participate in steering committees
- Presentation of regular progress reports

The GACD researcher journey

The norms developed within the Research Network promote, amongst others, participation in collaborative efforts with researchers from other projects, sites and disease areas. Table 1 describes some of the ways that GACD researchers can engage with the Research Network.

Uptake of these collaborative opportunities provided within the Research Network is evidenced in part by the 5 jointly developed articles that have been published to date from members of the inaugural GACD Hypertension Programme. Of the 179 hypertension researchers, 71 have participated as co-authors on one or more of these publications so far, representing 40% of researchers within the Hypertension Research Programme.

Table 1. Levels of GACD involvement. Any member of the Research Network is able to participate across various GACD platforms, regardless of seniority. This table provides examples of engagement opportunities, which have largely been driven by GACD researchers.

| STARTER | ADVANCED | EXPERT |
|--|---|--|
| <ol style="list-style-type: none"> 1 Sharing protocols and data for joint projects & publications 2 Contributing to the development of the GACD Data Dictionaries 3 Attending Annual Scientific Meetings 4 Participating in Research Network calls | <ol style="list-style-type: none"> 1 Intellectual contribution to joint publication texts & other collaborative research outputs 2 Becoming a member of a working group 3 Leading a session or being speaker at an Annual Scientific Meeting | <ol style="list-style-type: none"> 1 Research programme co-chair 2 Working group chair 3 Initiating and driving joint articles & other collaborative research outputs 4 Development of new workstream (e.g. Implementation Science Workshop) |

While there are numerous ways for Research Network members to participate in collaborative efforts, working groups remain a prominent feature. Initially driven by the GACD Management Committee, the emergence of these groups has become more organic and serve as a critical platform for collaboration and knowledge sharing. The input of researchers from multiple disease areas to the research programmes has added an important layer of complexity and depth to the efforts of working groups. Table 2 illustrates the development of working groups within the Research Network over time.

Table 2. GACD working group development over time.

Notes: HT - Hypertension, DM - Diabetes, LD - Lung Diseases

| 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|--|
| <ol style="list-style-type: none"> 1 Data Standardisation (HT) 2 Barriers to Hypertension Control 3 RCTs | <ol style="list-style-type: none"> 1 Data Standardisation (HT) 2 Barriers to Hypertension Control 3 RCTs 4 Joint Publications | <ol style="list-style-type: none"> 1 Data Standardisation (HT) 2 Barriers to Hypertension Control 3 Joint Publications 4 Task-shifting 5 Process Evaluation 6 How-to Series | <ol style="list-style-type: none"> 1 Data Standardisation (DM) 2 Barriers to Hypertension Control 3 Joint Publications 4 Task-shifting 5 Process Evaluation 6 How-to Series 7 Concepts & Context | <ol style="list-style-type: none"> 1 Data Standardisation (DM) 2 Data Standardisation (LD) 3 Joint Publications Committee 4 Task-shifting/How-to Series 5 Process Evaluation 6 COUNCIL 7 Concepts & Context 8 HT Innovations |

Context and scale-up

Strategies to enhance engagements with study contexts and moving interventions to scale raise a number of questions regarding the role of the researcher. One such question is does the role of the researcher extend beyond generating evidence? I.e. to what extent should researchers engage in the marketing of evidence to opinion leaders and policymakers?

In response to these challenges, members of the GACD Research Network have worked to engage policymakers and other stakeholders at various stages of their projects and have spearheaded a number of initiatives that seek to contribute to bridging the gap between evidence and policy.

COUNCIL is a special joint project that has taken a practical approach to this challenge. A systematic review published by the group revealed the relative scarcity of hypertension guidelines in LMICs. Their second publication showcased an implementation cycle for developing, contextualising, communicating and evaluating cardiovascular disease recommendations for low- and middle-income countries.

A key factor in the success of moving interventions to scale is the ability of an intervention's effects to remain large enough to be impactful across different contexts. In line with this, the Concepts and Context Working Group is in the process of collecting data from GACD projects with the aim of describing how

context is characterised and accounted for, as well as to describe how theoretical or conceptual models are utilised and evaluated in GACD funded projects.

GACD projects actively engage with policymakers and stakeholders at various levels. Interactions with these policymakers took a number of forms, including surveying regional representatives during study development and adaptation, inviting policymakers to participate on steering committees and including end-user government agency representatives to participate as members of advisory panels related to the studies.

GACD Working groups, special joint projects and committees

GACD working groups and special joint projects have been a pivotal mechanism in facilitating ongoing collaborations across sites, diseases, contexts and geographic locations. They reflect some of the shared interests of researchers within the GACD Research Network.

Data Standardisation

Diabetes Chair: Meena Daivadanam
Lung Diseases Chair: Jointly facilitated

Aim: To develop a set of consensus measures to include in the GACD Data Dictionary. The dictionary is intended to serve as a resource on which researchers can draw in order to enhance opportunities for cross site and combined analysis, to identify potential synergies between groups to promote and expand collaborative opportunities. A manuscript describing the process and the recommendations for future use and implementation will also be developed from each research programme.

Progress (diabetes): Data collection to be completed April 2017, analysis and write up to follow.

Progress (lung diseases): Initial set of domains and variables to be agreed upon by April 2017. This will be followed by selection of minimal and optimal variables through a Delphi panel.

Process Evaluation

Chair: Felix Limbani

Aim: To produce a set of guidelines, structures and practices for process evaluation, as well as aspects to consider during protocol development, implementation, and analysis.

Progress: The group developed a set of guidelines, structures and practices in 2015 and are in the data collection phase for an output that describes the process evaluation approaches used by GACD projects. Preliminary analysis to be conducted in May 2017.

“
Innovative approaches...
led to a 26%
reduction in
participants’
salt intake in
less than 4
months
”

Vedanthan et al.,
2017/He et al., 2015

Council (CONtrol UNique to CVDs in LMICs)

Chair: Mayowa Owolabi

Aim: To develop guidelines for individual and system level control of cardiovascular diseases in developing countries. In the absence of specialised research, evidence and guidelines from LMICs, individual health personnel often apply available guidelines from HICs without consideration for local conditions.

Progress: Published two articles in 2016: a systematic review to identify gaps in hypertension guidelines in LMICs and a proposed implementation cycle for developing, disseminating and evaluating cardiovascular disease recommendations for LMICs.

Concepts and Context

Chair: Meena Daivadanam

Aim: To describe methods used to characterise and account for context incorporated in studies at various levels. The group also aims to identify common methodological and analytical themes across selected projects and case studies for a manuscript on the topic.

Progress: Data collection to be completed April 2017, analysis and write-up to follow.

Hypertension Innovations

Chair: Rajesh Vedanathan

Aim: To summarise the experiences and review the rationale of GACD hypertension interventions in low- and middle-income countries.

Progress: Published an article in early 2017 describing the innovative approaches to hypertension control employed by GACD hypertension projects.

Task Shifting/Sharing

Chairs: Rohina Joshi & Karen Yeates

Aim: To describe the experiences and lessons learned from projects with a task-shifting component: the transfer of tasks to non-physician health workers with the aim of improving the functioning of clinics.

Progress: Abstract presented at 2016 World Congress of Cardiology & Cardiovascular Health, manuscript in final stages of development.

Joint Publications Committee

Chairs: Brian Oldenburg & Mayowa Owolabi

Aim: This committee has evolved from a working group that originally aimed to develop guidelines and terms of references for publishing joint articles. It has since progressed as a body that serves to improve the value-add of GACD research outputs by:

- Identifying opportunities for dissemination of outputs
- Identifying commonalities in research outputs to further synergise dissemination
- Advise on the hypertension end of programme report

Progress: Formally constituted in September 2016, the group has developed a template for reporting GACD dissemination outputs and plans to host a training session on moving evidence to policy.

“

Average daily salt excretion at baseline varied from 7g in Samoa, 11g in Fiji, 9.5g in Andhra Pradesh, India, and 8.6g in Delhi/Haryana, India, to 12.6g in Shanxi, China

HTN Innovations paper, 2017

”

Joint publications and their leads:

The Journal of Clinical Hypertension
- The Global Alliance for Chronic Diseases Supports 15 Major Studies in Hypertension Prevention and Control in Low- and Middle-Income Countries



Sheldon Tobe

Cardiology Clinics - Innovative Approaches to Hypertension Control in Low- and Middle-Income Countries

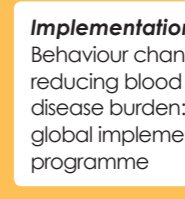


Rajesh Vedanathan



Michaela Riddell

Globalization and Health
- Developing consensus measures for global programs: lessons from the Global Alliance for Chronic Diseases Hypertension research program



David Peiris

Implementation Science - Behaviour change strategies for reducing blood pressure-related disease burden: findings from a global implementation research programme

Hypertension and BMJ Global Health - Gaps in Hypertension Guidelines in Low- and Middle-Income Versus High-Income Countries: A Systematic Review



Mayowa Owolabi

Hypertension and BMJ Global Health - Controlling cardiovascular diseases in Low- and Middle-Income countries by placing proof in pragmatism



GACD Annual Scientific Meeting Sydney

The GACD's 5th Annual Scientific Meeting (ASM) was held in Sydney, Australia in October 2016. Hosted by Australia's National Health and Medical Research Council (NHMRC), the meeting brought together more than 80 researchers from the GACD Research Network plus funding agency representatives, which provided a vibrant setting in which to share knowledge, experiences and insights from a variety of contexts and perspectives.



For the first time, three research programmes were represented at the ASM, following the announcement of the Lung Diseases Research Programme awardees in 2016. Adaptations to this year's format included the presentation of project overviews from the Diabetes and Lung Diseases Research Programme projects, as well as Hypertension Programme teams that had reached or were nearing study closeout.

Preliminary results from the Hypertension Research Programme suggest that the interventions were generally feasible and well accepted by health care providers, patients and their families, where relevant. Policymakers at national and local levels were reported to broadly have given their support to the studies. Challenges included a lack of clarity of the roles of regulatory bodies, unpredictable responses from industry representatives in the face of dynamic

political landscapes, and complexities in understanding the impacts of consumer behaviour on commercially available products linked to interventions. These challenges present an opportunity for the GACD to develop capacity-building platforms, toolkits and other resources to better equip implementation researchers, regulatory bodies and policymakers in these settings.

In the same way as the 2015 ASM, projects were divided into streams on the second day according to general intervention design: mHealth, behaviour change and systems change. Within these streams, discussions focussed on how projects had addressed and accounted for context, as well as their plans to take the respective interventions to scale – with a focus on integration into policy and practice.

A number of key themes and questions arose from discussions during the ASM:

- Partnerships with the private sector and collaborations with health systems and operations experts were identified as an important step in moving interventions to scale.
- Study design should cater as much as possible to the practicalities of the study setting in order to improve true fidelity of design.
- Does the role of the researcher extend beyond generating evidence? I.e. to what extent should researchers engage in the marketing of evidence to opinion leaders and policymakers?

In response to these and other questions, the GACD is actively working to engage implementation partners post-study, including the World Bank and the World Health Organisation. In addition, an opportunity for the GACD community to strategise further together will be scheduled during the 2017 ASM.



Panel: addressing context and moving to scale

A panel discussion on addressing context and moving interventions to scale was held on the final day of the ASM. The panel included GACD Management Committee member Josh Rosenthal from NIH Fogarty International Center, as well as GACD Research Network members Anushka Patel and Elsa Cornejo Vucovich. The session generated lively discussion, with reflections on a range of issues, including the possibilities of social enterprise as a route to scale-up of interventions in implementation research. The session highlighted the value of being able to reflexively engage with funders on, amongst others, the scale-up of interventions. A central message that ran through this discussion was that scale-up is not something that can be seen in the short-term.

The inclusion of policies or regulatory instruments into interventions is pivotal to future scale-up and integration into policy and practice. However, the inclusion of these into complex interventions was recognised by some researchers as a factor that could delay the implementation of the projects. In the face of this and other, similar challenges, lessons for future researchers include:

- Earlier, ongoing engagement with stakeholders, regulatory bodies and policymakers may allow for smoother transition to scale-up.
- Operations and health systems experts should be included as part of research teams to improve efforts of moving to scale, policy and practice.

Site visit

Each year, ASM attendees are invited to attend a site visit to a local health facility. This year, 25 attendees had the opportunity to visit Tharawal Aboriginal Corporation – an organisation that seeks to address issues of Aboriginal Australian health through community based approaches. The visit began with a 'Welcome to Country' from one of the tribal elders – an acknowledgement of the traditional custodians of the land that aims to promote awareness of and respect for Indigenous Australian culture. This was followed by a tour of the clinic facilities that are tailored to suit the contextual factors unique to Australian Aboriginal health care. In addition to the comprehensive clinical care programme, the facility delivers a number of social and emotional wellbeing programmes.

Poster competition

The 2nd GACD ASM poster competition attracted 15 strong entries. Congratulations to the prize winners for 2017.

- Evon Okidi was awarded first place for her poster on methods for handling missing data among HIV-infected persons in Kenya.
- Samantha Sabo took second place with a poster detailing the work of the Meta Salud trial to reduce cardiovascular risk in a Mexican diabetic population.
- Natalie Leon won the People's Choice Award for her poster on developing and pre-testing a set of SMS text messages for diabetes adherence support in Sub-Saharan Africa.



Implementation Science Workshop

The 3rd annual GACD Implementation Science Workshop (ISW) took place as a pre-ASM event, 2 days prior to the start of the meeting. 48 participants took part in the workshop, with a roughly even split between first-time attendees and those who had participated in previous years.

Facilitated once again by Prof Brian Oldenburg, this capacity building event has evolved from an early career researcher workshop, to a much more dynamic discussion around implementation science issues and the advancement of the field, amongst researchers from various levels of experience. Using their own research projects as cases, participants were able to reflect on and incorporate input from peers, practitioners and ISW faculty to improve their approach to specific research questions.

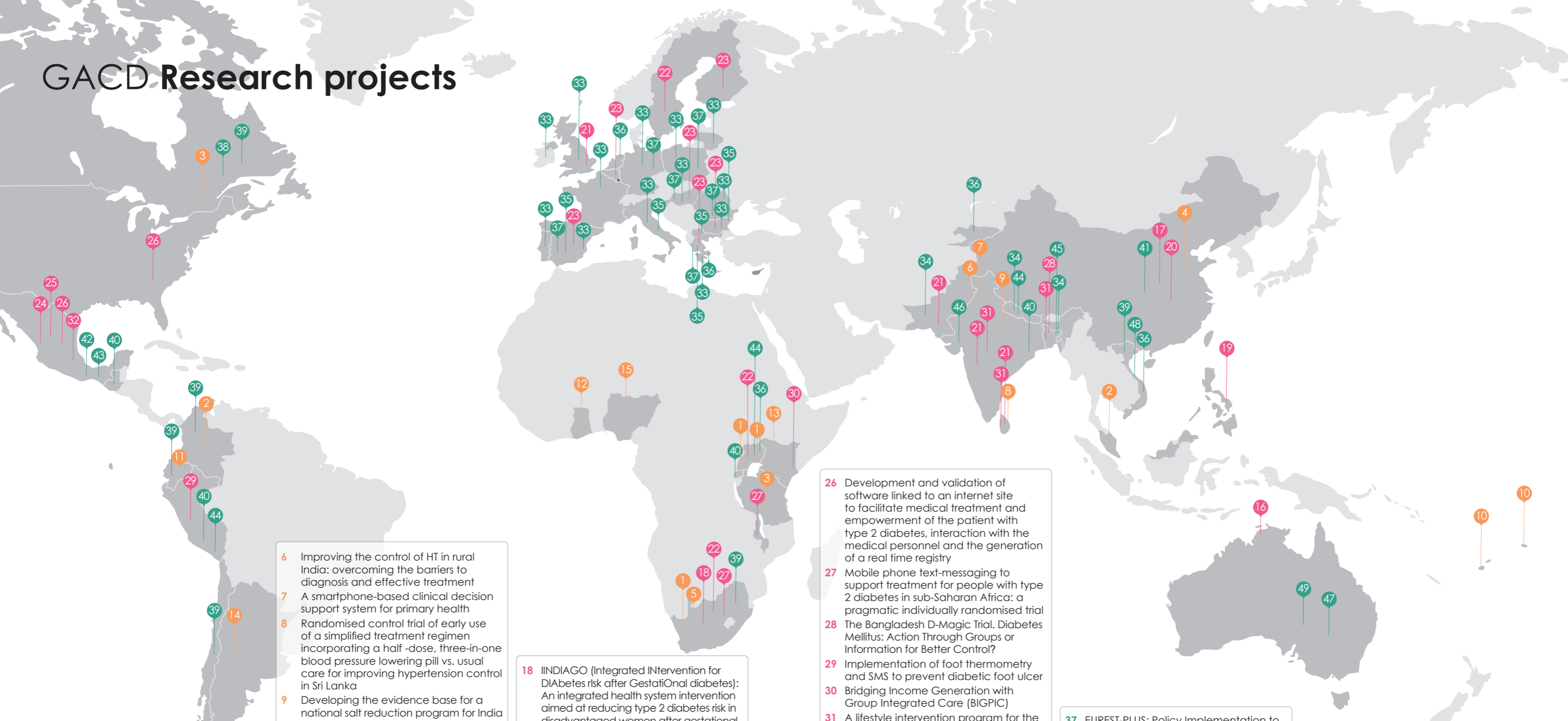
This year saw the inclusion of a roundtable discussion with senior decision makers from policy, practice and research organisations, including GACD Management Committee members and Australian policymaker Prof Louisa Jorm.



2017 Annual Scientific Meeting – Buenos Aires, Argentina

We are delighted to announce that the 2017 GACD Annual Scientific Meeting will be held in Buenos Aires, Argentina, 2-6 October 2017. This year's meeting will be hosted by Argentina's Ministry of Science, Technology and Productive Innovation (MINCyT).

GACD Research projects



A. HYPERTENSION PROGRAMME

- 1 Utilizing HIV/AIDS infrastructure as a gateway to chronic care of hypertension in Africa
- 2 HOPE-4: Developing an innovative strategy for hypertension detection, treatment and control in two middle income countries.
- 3 DREAM-GLOBAL: Diagnosing hypertension - Engaging Action and Management in Getting Lower Bp in Aboriginal and LMIC
- 4 School-EduSalt: A school-based education program to reduce salt intake in children and their families
- 5 Treating hypertension in rural South Africa: A clinic-based lay health worker trial to enhance community-based outreach services for integrated chronic care

- 6 Improving the control of HT in rural India: overcoming the barriers to diagnosis and effective treatment
- 7 A smartphone-based clinical decision support system for primary health
- 8 Randomised control trial of early use of a simplified treatment regimen incorporating a half -dose, three-in-one blood pressure lowering pill vs. usual care for improving hypertension control in Sri Lanka
- 9 Developing the evidence base for a national salt reduction program for India
- 10 Cost-effectiveness of salt reduction interventions in Pacific Islands
- 11 Launching a salt substitute to reduce blood pressure at the population level in Peru
- 12 Task shifting and blood pressure control in Ghana - a cluster-randomized trial
- 13 LARK: Optimizing linkage and retention to hypertension care in rural Kenya
- 14 A comprehensive approach to hypertension control in Argentina
- 15 Tailored Hospital-based Risk Reduction to Impede Vascular Events after Stroke (THRIVES)

B. DIABETES PROGRAMME

- 16 Improving the Management of Diabetes in Pregnancy in Remote Australia
- 17 Systematic Medical Assessment, Referral and Treatment for Diabetes care in China using Lay Family Health Promoters - SMART Diabetes

- 18 IINDIAGO (Integrated Intervention for DIabetes risk after GestatiOnal diabetes): An integrated health system intervention aimed at reducing type 2 diabetes risk in disadvantaged women after gestational diabetes in South Africa
- 19 Community Health Assessment Program in the Philippines (CHAPP)
- 20 Effects of information technology-based tools on long-term self-management of diabetic and non-diabetic patients with coronary heart disease
- 21 iHEALTH-T2D - Family-based intervention to improve healthy lifestyle and prevent Type 2 Diabetes amongst South Asians with central obesity and prediabetes
- 22 SMART2D - A people-centred approach through self-management and reciprocal learning for the prevention and management of type 2 diabetes
- 23 Feel4Diabetes: Promoting healthy lifestyle in families across Europe
- 24 Evaluation of a pilot project to prevent diabetes in the workplace using information technology
- 25 Development of an interactive social network for metabolic control of diabetic patients

- 26 Development and validation of software linked to an internet site to facilitate medical treatment and empowerment of the patient with type 2 diabetes, interaction with the medical personnel and the generation of a real time registry
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- 31 A lifestyle intervention program for the prevention of type 2 diabetes mellitus among South Asian women with gestational diabetes mellitus
- 32 Tools and Practices to Reduce CVD and Complications in the Diabetic Population in Mexico

C. LUNG DISEASES PROGRAMME

- 33 TackSHS: Tackling second-hand tobacco smoke and e-cigarette emissions: exposure assessment, novel interventions, impact on lung diseases and economic burden in diverse European populations
- 34 Tobacco cessation within TB programmes: A 'real world' solution for countries with dual burden of disease
- 35 Smoke Free Brain: Multidisciplinary tools for improving the efficacy of public prevention measures against smoking
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- 37 EUREST-PLUS: Policy Implementation to Reduce Lung Diseases
- 38 RETRAC2: Research on Commercial Tobacco Reduction in Aboriginal Communities
- 39 Examining the impact of tobacco pricing and packaging strategies on tobacco use and equity in middle-income countries
- 40 Household Air Pollution and Health: A Multi-Country Liquefied Petroleum Gas (LPG) cook stove Intervention Trial
- 41 Lung function of Chinese adults and the predictive value of peak flow rate to long-term incidence and prognosis of lung diseases
- 42 Genomic analysis of drug-resistant tuberculosis in sputum sample
- 43 Search and validation of biomarkers for tuberculosis in Mexican patients with diabetes mellitus
- 44 Case Finding and Effectiveness of a COPD Action Plan in Low and Middle Income Countries

- 45 Muslim Communities Learning about Second-hand Smoke (MCLASS II): An effectiveness-implementation hybrid study
- 46 Preventing smoking uptake among adolescents: A primary prevention initiative for chronic lung disease in India
- 47 'Indigenous Counselling and Nicotine (ICAN) QUIT in Pregnancy' - a cluster randomised trial to implement culturally competent evidence-based smoking cessation for pregnant Aboriginal and Torres Strait Islander smokers
- 48 An integrated health-sector strategy to combat COPD and asthma in Vietnam: A pragmatic stepped intervention cluster randomized trial
- 49 Implementing evidence into practice to improve chronic lung disease management in Indigenous Australians: the "Breathe Easy, Walk Easy-Lungs for Life" (BE WELL) project

GACD Project descriptions

Funding agencies

AMED – Japan Agency for Medical Research and Development
 CAMS – Chinese Academy of Medical Sciences
 CIHR – Canadian Institutes of Health Research
 Conacyt – National Council of Science and Technology, Mexico
 CSN – Canadian Stroke Network
 EC – European Commission
 FAPESP – São Paulo Research Foundation
 FIC – Fogarty International Center (NIH)
 GCC – Grand Challenges Canada
 ICMR – Indian Council of Medical Research
 IDRC – International Development Research Centre, Canada
 INER – The National Institute of Respiratory Diseases, Mexico
 INMEGEN – National Institute for Genomic Medicine, Mexico
 MINCYT – Argentina's Ministry of Science, Technology & Productive Innovation
 NCI – National Cancer Institute
 NICHD – National Institute of Child Health and Human Development
 NIEHS – National Institute of Environmental Health Sciences
 NHLBI – National Heart, Lung, and Blood Institute (NIH)
 NHMRC – National Health and Medical Research Council, Australia
 NIH – National Institutes of Health, US
 NINDS – National Institute of Neurological Disorders and Stroke (NIH)
 SAMRC – South African Medical Research Council
 UK MRC – Medical Research Council, UK

A. HYPERTENSION PROGRAMME

- 1 HT01: Utilizing HIV/AIDS infrastructure as a gateway to chronic care of hypertension in Africa**

Uganda, Rwanda and South Africa
Funded by: CIHR, CSN, GCC, IDRC
Aim: To evaluate the effectiveness of active-case finding and to investigate the presence of cardiovascular disease risk factors in patients attending antiretroviral treatment services.

- 2 HT02: HOPE-4: Developing an innovative strategy for hypertension detection, treatment and control in two middle income countries.**

Colombia and Malaysia
Funded by: CIHR, GCC, CSN, IDRC
Aim: To evaluate whether the cardiovascular disease risk detection, treatment, and control programme can substantially improve hypertension control and overall Framingham Risk Score at 1 year.

- 3 HT03: DREAM-GLOBAL: Diagnosing hypertension - Engaging Action and Management in Getting Lower Bp in Aboriginal and LMIC**

Canada and Tanzania
Funded by: CIHR, GCC, IDRC
Aim: To assess the effect of SMS messages on BP control in aboriginal people in Canada and rural Tanzania with hypertension.

- 4 HT04: School-EduSalt: A school-based education program to reduce salt intake in children and their families**

China
Funded by: UK MRC
Aim: To determine whether an education program targeted at primary school children could lower salt intake in children and their families.



- 5 HT05: Treating hypertension in rural South Africa: A clinic-based lay health worker trial to enhance community-based outreach services for integrated chronic care**

South Africa
Funded by: UK MRC
Aim: To reduce population levels of uncontrolled hypertension, especially in those individuals at greatest risk, by supporting and strengthening the management of hypertension in primary care clinics.

- 6 HT06: Improving the control of HT in rural India: overcoming the barriers to diagnosis and effective treatment**

India
Funded by: NHMRC
Aim: To identify and explore potentially different barriers and knowledge gaps in the diagnosis, treatment and management of hypertension in both urban and rural regions of India.

- 7 HT07: A smartphone-based clinical decision support system for primary health**

India
Funded by: NHMRC
Aim: To test whether an electronic clinical decision support system will assist non-physician health workers and doctors in making evidence-based management decisions to lower their patients' CVD risks.



- 8 HT08: Randomised control trial of early use of a simplified treatment regimen incorporating a half -dose, three-in-one blood pressure lowering pill vs. usual care for improving hypertension control in Sri Lanka**

Sri Lanka
Funded by: NHMRC
Aim: To investigate effectiveness, cost-effectiveness, and acceptability of Triple pill therapy (Triple BP lowering therapy) compared to usual care for early management of high BP in Sri Lanka.

- 9 HT09: Developing the evidence base for a national salt reduction program for India**

India
Funded by: NHMRC
Aim: The overall goal of this 3-year project is to develop the evidence base required to formulate a national salt reduction program for India.



- 10 HT10: Cost-effectiveness of salt reduction interventions in Pacific Islands**

Fiji & Samoa
Funded by: NHMRC
Aim: To evaluate the impact and cost-effectiveness of multi-faceted intervention strategies to reduce salt in the Pacific Islands.

- 11 HT11: Launching a salt substitute to reduce blood pressure at the population level in Peru**

Peru
Funded by: NIH/NHLBI
Aim: To implement and assess the impact of an intervention using a salt substitute on blood pressure at the population level using a stepped wedge trial design.



- 12 HT12: Task shifting and blood pressure control in Ghana - a cluster-randomized trial**

Ghana
Funded by: NIH/NHLBI
Aim: To evaluate the comparative effectiveness of the implementation of the WHO Package targeted at CV risk assessment versus provision of health insurance coverage, on blood pressure reduction.



- 13 HT13: LARK: Optimizing linkage and retention to hypertension care in rural Kenya**

Kenya
Funded by: NIH/NHLBI
Aim: To utilize a multi-disciplinary implementation research approach to address the challenge of linking and retaining hypertensive individuals to a hypertension management program.



- 14 HT14: A comprehensive approach to hypertension control in Argentina**

Argentina
Funded by: NIH/NHLBI
Aim: To test whether a comprehensive intervention program within a national public primary healthcare system will improve hypertension control among uninsured hypertensive patients and their families in Argentina.

- 15 HT15: Tailored Hospital-based Risk Reduction to Impede Vascular Events after Stroke (THRIVES)**

Nigeria
Funded by: NIH/NINDS
Aim: To determine whether a culturally-sensitive multipronged post-discharge intervention can significantly reduce blood pressure, enhance achievement of guideline recommended targets for risk factor control, and lower recurrent vascular events in Nigeria.

B. DIABETES PROGRAMME

- 16 DM01: Improving the Management of Diabetes in Pregnancy in Remote Australia**

Australia
Funded by: NHMRC
Aim: To improve systems of care and services for women with diabetes in pregnancy in remote Australia.



- 17 DM02: Systematic Medical Assessment, Referral and Treatment for Diabetes care in China using Lay Family Health Promoters - SMART Diabetes**

China
Funded by: CAMS, NHMRC
Aim: To develop the SMARTHealth Diabetes system and determine its clinical impact for people with type 2 diabetes.

- 18 DM03: IINDIAGO (Integrated Intervention for DIabetes risk after GestatiOnal diabetes): An integrated health system intervention aimed at reducing type 2 diabetes risk in disadvantaged women after gestational diabetes in South Africa**

South Africa
Funded by: CIHR, IDRC, SAMRC
Aim: To develop and evaluate a novel health system intervention to reduce the subsequent risk of developing T2D among women with recent gestational diabetes.

- 19 DM04: Community Health Assessment Program in the Philippines (CHAPP)**

Philippines
Funded by: CIHR, IDRC
Aim: To adapt the elements of the expanded Cardiovascular Health Awareness Program (CHAP) intervention model to low- and middle-income countries (LMICs) and evaluate its effectiveness in preventing diabetes and its complications.



- 20 DM05: Effects of information technology-based tools on long-term self-management of diabetic and non-diabetic patients with coronary heart disease**

China
Funded by: CAMS
Aim: To evaluate the effectiveness of information technology-based tools on improvement of long-term adherence to secondary prevention and risk factors control among patients with established coronary artery disease, including those with diabetes.



- 21 DM06: IHEALTH-T2D - Family-based intervention to improve healthy lifestyle and prevent Type 2 Diabetes amongst South Asians with central obesity and prediabetes**

India, Pakistan, Sri Lanka & United Kingdom
Funded by: EC
Aim: To determine whether a family-based lifestyle modification delivered by community health workers vs usual care is clinically and cost-effective for prevention and risk reduction of T2D.

- 22 DM07: SMART2D - A people-centred approach through self-management and reciprocal learning for the prevention and management of type 2 diabetes**

South Africa, Sweden, Uganda
Funded by: EC
Aim: To strengthen capacity for T2DM care through proven strategies like task-shifting to non-physician health care providers and community health workers, and expanding care networks through community-based peer support groups.



- 23 DM08: Feel4Diabetes: Promoting healthy lifestyle in families across Europe**

Belgium, Bulgaria, Finland, Greece, Hungary & Spain
Funded by: EC
Aim: To develop, implement and evaluate an evidence-based and potentially cost-effective and scalable intervention program to prevent type 2 diabetes among families from vulnerable groups across Europe.



- 24 DM09: Evaluation of a pilot project to prevent diabetes in the workplace using information technology**

Mexico
Funded by: Conacyt
Aim: To evaluate on a pilot basis the performance of a work based e-intervention to prevent diabetes using information technology as means to deliver the intervention.

- 25 DM10: Development of an interactive social network for metabolic control of diabetic patients**

Mexico
Funded by: Conacyt
Aim: The development of an interactive social network, and use of the internet to try to change behaviours and attitudes of risk in affected Type 2 diabetes community.

26 DM11: Development and validation of software linked to an internet site to facilitate medical treatment and empowerment of the patient with type 2 diabetes, interaction with the medical personnel and the generation of a real time registry

Mexico and United States

Funded by: Conacyt

Aim: To create, validate and export the use of a technological tool that contributes to empowerment in patients with diabetes, the provision of care according to quality standards, and generate real-time information required to measure the effectiveness of interventions.



CENTRO DE ATENCIÓN INTEGRAL DEL PACIENTE CON DIABETES

27 DM12: Mobile phone text-messaging to support treatment for people with type 2 diabetes in sub-Saharan Africa: a pragmatic individually randomised trial

South Africa & Malawi

Funded by: SAMRC, UK MRC

Aim: To test the effectiveness of sending short message service (SMS) texts in improving health outcomes and supporting medication adherence in patients with type 2 diabetes in the context of implementing a low-cost, mobile-health communication infrastructure in an operational setting.



28 DM13: The Bangladesh D-Magic Trial. Diabetes Mellitus: Action Through Groups or Information for Better Control?

Bangladesh

Funded by: UK MRC

Aim: To evaluate the impact of a) a participatory community mobilisation intervention and b) an mHealth health promotion and awareness intervention on the prevalence of intermediate hyperglycaemia and diabetes in rural Bangladesh.

29 DM14: Implementation of foot thermometry and SMS to prevent diabetic foot ulcer



Peru

Funded by: NIH/FIC

Aim: To compare the incidence of diabetic foot ulcer during the study between the arm that receives thermometry alone and the arm that receives thermometry + messages (SMS and voice message).

30 DM15: Bridging Income Generation with Group Integrated Care (BIGPIC)

Kenya

Funded by: NIH/ NHLBI

Aim: To identify the contextual factors, facilitators, and barriers that may impact integration of group medical visits and microfinance for CVD risk reduction, using a combination of qualitative research methods: 1) baraza (traditional community gathering) form of inquiry; and 2) focus group discussions among individuals with diabetes or at increased risk for diabetes, microfinance group members, and rural health workers.



31 DM16: A lifestyle intervention program for the prevention of type 2 diabetes mellitus among South Asian women with gestational diabetes mellitus

Bangladesh, India & Sri Lanka

Funded by: ICMR, NHMRC

Aim: To determine whether a resource- and culturally-appropriate lifestyle intervention program in South Asian countries, provided to women with gestational diabetes after delivery, will reduce the incidence of type 2 diabetes, in a manner that is affordable, acceptable and scalable.



32 DM17: Tools and Practices to Reduce CVD and Complications in the Diabetic Population in Mexico

Mexico

Funded by: NIH/ NHLBI

Aim: To assess the effectiveness of an adapted evidence-based community health worker intervention, Meta Salud Diabetes, a 13-week intervention aimed at reducing behavioural and clinical risk for cardiovascular disease among adults with diabetes.



C. LUNG DISEASES PROGRAMME

33 LD01: The TackSHS Project. Tackling second-hand tobacco smoke and e-cigarette emissions: exposure assessment, novel interventions, impact on lung diseases and economic burden in diverse European populations

Bulgaria, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Poland, Portugal, Romania, Spain, and the United Kingdom

Funded by: EC

Aim: To elucidate the comprehensive impact that second-hand smoking (SHS) and e-cigarettes emissions have on the respiratory health of the European population and how health impacts vary according to socio-economic parameters with particular emphasis on specific vulnerable groups.



34 LD02: Tobacco cessation within TB programmes: A 'real world' solution for countries with dual burden of disease

UK, Pakistan, Nepal, and Bangladesh

Funded by: EC



Aim: To reduce the burden of tobacco-related lung diseases in developing countries by including tobacco cessation policy measures in tuberculosis programmes. Sustainability and cost-effectiveness of the programmes will be evaluated.

35 LD03: Smoke Free Brain: Multidisciplinary tools for improving the efficacy of public prevention measures against smoking

Bulgaria, Greece, Italy, Serbia, Spain

Funded by: EC

Aim: Prevention of lung diseases caused by tobacco while at the same time developing new treatments analysing their contextual adaptability to the local and global health care system.



36 LD04: FreshAir: Free Respiratory Evaluation and Smoke-exposure reduction by primary Health Care Integrated Groups

The Netherlands, Uganda, Kyrgyz Republic, Vietnam and Greece

Funded by: EC

Aim: To prevent, diagnose and treat lung diseases in LMICs and other low-resource settings. It adopts and tests innovation and evidence-based practice in the prevention, diagnosis and treatment of lung disease in low-resource settings with high levels of tobacco consumption and exposure to Household Air Pollution.



37 LD05: EUREST-PLUS: Policy Implementation to Reduce Lung Diseases

Germany, Greece, Hungary, Poland, Romania, Spain

Funded by: EC

Aim: To monitor and evaluate the impact of the European Commission's Tobacco Products Directive within the context of Framework Convention on Tobacco Control ratification at a European level, including issues of tobacco product ingredients, additives, reporting, packaging, labelling, illicit trade, cross border sales, and e-cigarettes.



38 LD06: RETRAC2: Research on Commercial Tobacco Reduction in Aboriginal Communities

Canada

Funded by: CIHR

Aim: To contribute to knowledge about commercial tobacco control interventions that aim to prevent chronic lung diseases in Aboriginal communities in Canada.

39 LD07: Examining the impact of tobacco pricing and packaging strategies on tobacco use and equity in middle-income countries

Canada, Chile, Colombia, Ecuador, South Africa, Vietnam

Funded by: CIHR, IDRC, SAMRC

Aim: To study the impact of tobacco prices on smoking onset, smoking cessation, and tobacco consumption in the targeted countries.

40 LD08: Household Air Pollution and Health: A Multi-Country Liquefied Petroleum Gas (LPG) Cook stove Intervention Trial

India, Guatemala, Peru, Rwanda

Funded by: NIH Common Fund, NHLBI, NIEHS, NICHD, and NCI,

with support from the Bill & Melinda Gates Foundation



Aim: We propose to conduct a randomized controlled trial of liquid petroleum gas (LPG) stove and fuel distribution in 3,200 households in four diverse LMICs to deliver rigorous evidence regarding potential health benefits across the lifespan.



41 LD09: Lung function of Chinese adults and the predictive value of peak flow rate to long-term incidence and prognosis of lung diseases

China

Funded by: CAMS

Aim: To describe the status of lung functions and evaluate the risk for COPD, information about lung diseases and related symptoms were collected by the standard questionnaire in this study.

42 LD10: Genomic analysis of drug-resistant tuberculosis in sputum sample

Mexico

Funded by: CONACYT

Aim: To identify genomic variants in mycobacterium tuberculosis associated with drug resistance in sputum by using targeted DNA sequencing.

43 LD11: Search and validation of biomarkers for tuberculosis in Mexican patients with diabetes mellitus

Mexico

Funded by: CONACYT

Aim: To develop a diagnostic method to detect asymptomatic tuberculosis in Mexican patients with diabetes mellitus.

44 LD12: Case Finding and Effectiveness of a COPD Action Plan in Low and Middle Income Countries

Peru, Nepal and Uganda

Funded by: UK MRC

Aim: To modify and assess the usefulness of a currently utilised COPD case finding questionnaire and COPD Action Plans to allow for simple, low-cost models of care which can be generalised across LMICs.



45 LD13: Muslim Communities Learning about Second-hand Smoke (MCLASS II): An effectiveness-implementation hybrid study

Bangladesh

Funded by: UK MRC

Aim: Our overall aim is to reduce the burden of disease due to SHS in LMICs by discovering innovative community-based approaches to behaviour change.

46 LD14: Preventing smoking uptake among adolescents: A primary prevention initiative for chronic lung disease in India

India

Funded by: UK MRC

Aim: To identify and understand environmental factors that increase the risk of adolescents starting to smoke tobacco, with the aim of informing interventions that can reduce the number of new tobacco smokers and ultimately prevent chronic lung disease in the future.

47 LD15: 'Indigenous Counselling and Nicotine (ICAN) QUIT in Pregnancy' - a cluster randomised trial to implement culturally competent evidence-based smoking cessation for pregnant Aboriginal and Torres Strait Islander smokers

Australia

Funded by: NHMRC

Aim: To assess the effectiveness of a multi-component intervention, ICAN QUIT in Pregnancy, uniquely designed to increase smoking cessation rates among expectant Indigenous mothers and improve the respiratory health outcomes of their babies.

48 LD16: An integrated health-sector strategy to combat COPD and asthma in Vietnam: A pragmatic stepped intervention cluster randomized trial

Vietnam

Funded by: NHMRC

Aim: A pragmatic stepped cluster randomised controlled trial to evaluate the effectiveness of (a) health-system based smoking cessation, and (b) targeted low-dose inhaled corticosteroid therapy to prevent exacerbations of chronic obstructive lung disease.

49 LD17: Implementing evidence into practice to improve chronic lung disease management in Indigenous Australians: the "Breathe Easy, Walk Easy-Lungs for Life" (BE WELL) project

Australia

Funded by: NHMRC

Aim: To adapt a primary health care-focused programme for use by Indigenous health services. The implementation of BE WELL aims to build the capacity of the Indigenous health workforce to provide appropriate, evidence-based care for Indigenous Australians with COPD in their communities.

GACD Spotlight on: Kirsten Bobrow

Kirsten is a post-doctoral researcher with the Chronic Diseases Initiative for Africa, and is completing her registrar training in public health at the University of Cape Town. Her career has taken her across the globe, completing her undergraduate medical training at the University of Cape Town and her MSc in Global Health and DPhil in Epidemiology with the Cancer Epidemiology Unit at the University of Oxford. She is currently working on research into how mobile phones can improve management and outcomes in people with chronic diseases in low resource settings. Kirsten works in the Western Cape Department of Health.



Tell us a little more about the project you are working on.

Our project is a randomised clinical trial at three sites in sub-Saharan Africa: Cape Town and Johannesburg in South Africa and Lilongwe in Malawi. We are aiming to provide information about the overall benefits and harms of sending carefully developed messages via SMS text messaging to tell people about the benefits of their diabetes treatment and provide patients with reminders and encouragement to take it regularly. We will follow people for 12 months and measure important risk factors for the development of complications in diabetes, including blood glucose control and blood pressure control so we can then estimate potential health benefits, and the costs of doing this, whilst considering cost-effectiveness.



How has being part of GACD helped your research?

As an individual researcher, I have really benefitted from meeting and working with other GACD researchers in various working groups. Our research has benefitted from the supported working groups, where we've been able to share ideas on the development of standardised data collection tools, share intervention ideas and swap testing methodologies that have worked for others in similar low resource settings.

What is the most rewarding aspect of your work?

Having the time and space to think about big global health challenges and the opportunity to work locally to test ideas and explore solutions.

What tips do you have for early career researchers trying to establish international collaborations?

Make contact with the people and teams who you would like to work with in terms of skills as well as content area. Be patient, it can take time to find a project that is a good fit and that gets funded.

Apart from the project, what are your other passions in life?

I live in Cape Town, which is beautiful and full of opportunity for outdoor adventure. I enjoy running, hiking and swimming on the mountain and ocean. I have a small dog and we spend our free time exploring the peninsula.

What motivated you to follow this global health career path?

As a young graduate student I went to a lecture by Sir Richard Peto on global health. And to paraphrase him, he said he wasn't concerned with hundreds of people or even thousands of people, he was interested in improving outcomes for *millions* of people. I was really struck by this idea especially having come from a clinical setting where strategy and thinking are largely about individual patients. It also helped me realise that I wanted to be an epidemiologist.

GACD New members

The Global Alliance for Chronic Diseases welcomes Japan's Agency for Medical Research and Development (AMED), and Brazil's São Paulo Research Foundation (FAPESP) as its newest members. The agencies become GACD's 12th and 13th member agencies respectively, joining public health research funders from around the world.

“

We are excited by this opportunity to collaborate with key international funders. The GACD will provide a distinctive platform for fostering collaborative research to facilitate scientific collaboration between researchers in São Paulo, Brazil with a unique cohort of international non-communicable disease researchers.

”

Prof Carlos Henrique de Brito Cruz,
Scientific Director,
FAPESP, Brazil



“

By joining the GACD, Japanese researchers will be given valuable opportunities to collaborate with other international experts and to further advance the area of implementation science. Japan through AMED has a long tradition of outstanding research and we are hoping that our involvement with the GACD will lead to positive health outcomes in the area of non-communicable diseases.

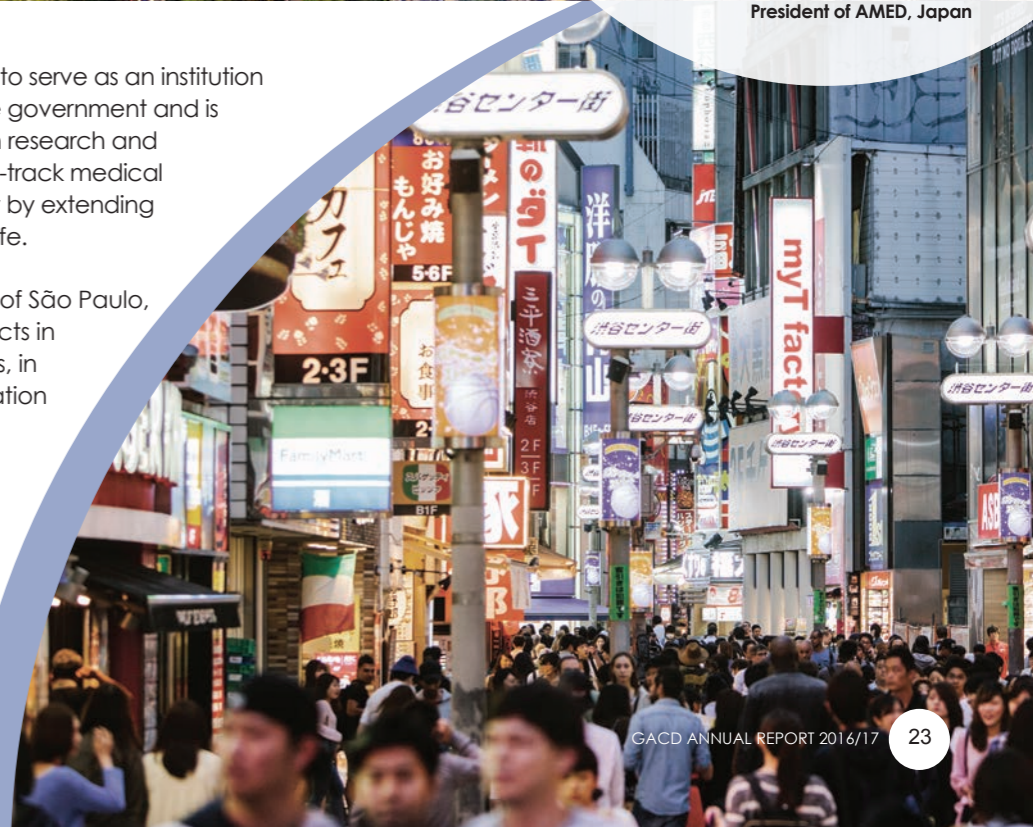
”

Dr Makoto Suematsu,
President of AMED, Japan

AMED was established just two years ago, to serve as an institution consolidating medical research across the government and is dedicated to improving medicine through research and development in Japan. Their goal is to fast-track medical R&D that directly benefits people, not only by extending lifespans, but also by improving quality of life.

FAPESP is a public foundation in the state of São Paulo, with the mission to support research projects in higher education and research institutions, in all fields of knowledge. This new collaboration with one of Latin America's key research funders will further strengthen the GACD Research Network in the region.

With three active research programmes on hypertension, diabetes and lung diseases underway and a further call on mental health now launched, Japan and Brazil join the GACD at an exciting time of expansion.

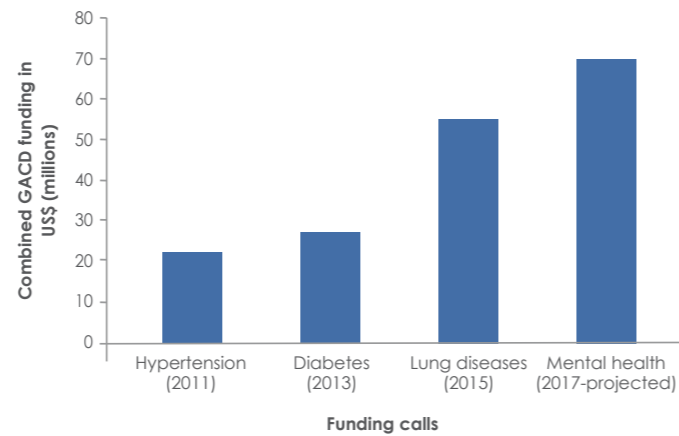


GACD Mental health

The Global Alliance for Chronic Diseases (GACD) has opened its fourth call for proposals – funding research into mental health. The call is ambitious in scale and size and will be supported by the majority of GACD member funding agencies. For the first time, many of them will be accepting applications through a common submissions portal. This is intended to make the application experience more consistent and straightforward for researchers. All funded research projects will be selected through a rigorous peer review process, with most funding agencies using a jointly selected panel of independent experts.

The joint call will fund interventions in low- and middle-income countries (LMIC) and/or vulnerable populations in high-income countries (HIC), which will look to improve the management of mental disorders including, but not limited to, depression, dementia, schizophrenia, bipolar disorders and alcohol and drug-use disorders. Proposals will focus on implementation science research by building on interventions with proven effectiveness, equitable and affordable ways. The GACD funding agencies aim to harmonise the research and outcomes assessment of GACD projects in order to maximise the potential for learning across the network and the impact of the initiative as a whole, and research teams are encouraged to work together to agree on common indicators.

Growth in GACD call funding



EARLY 2018
Projects announced

SEPTEMBER 2017
Joint peer review

APRIL 2017
Application deadline

DECEMBER 2016
Mental health call open

APRIL 2016
GACD's intention to fund mental health research announced

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The mental health call is the GACD's largest investment to date. Through funding this unique research programme, the GACD will be offering a truly unique and global contribution to implementation science research, thus improving mental health worldwide.

”

Dr Karim Berkouk, Research & Innovation Directorate General, European Commission and Chair of the GACD Management Committee

Why mental health?

Mental disorders represent an ever-increasing burden to all ages of the population. For example:

Depression affects **350 million** people in all communities across the world and represents the leading cause of **disability worldwide**, making it a major contributor to the overall global burden of disease.^[1]

People with **bipolar mood disorders** have high mortality rates ranging from **35% higher** to twice as high as the general population.^[3]

Mortality rates among people with **schizophrenia** is **2 to 2.5 times higher** than the general population.^[3]

Dementia affects **47.5 million** people worldwide, with a projected **rise to 75.6 million by 2030** which is attributable to the rising numbers of people with dementia living in low- and middle-income countries.^[2]

Comorbidities

Mental disorders can be experienced in isolation or as comorbidities with other NCDs. It has been found that the presence of mental disorders increases the chance that an individual will also suffer from other chronic illnesses, as they are often less likely to seek help for other symptoms.^[4]

GACD Research Network

Successful applicants for the GACD mental health call will join the GACD Research Network.

The GACD aims to coordinate research on chronic diseases at a global level in order to enhance knowledge exchange across individual projects, and to better understand the impact of socio-economic, cultural, geopolitical and policy factors on the effectiveness and scalability of interventions, so as to appropriately adapt health interventions to different geographical, economic and cultural settings. Research under GACD involves regular exchange of research findings and information across participating projects by means of cross-project working groups and GACD Annual Scientific Meetings (see pages 10-11)

[1] WHO Fact sheet nr 369, 2012

[2] WHO Fact sheet nr 362, 2015

[3] http://www.who.int/mental_health/management/info_sheet.pdf

[4] <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001443>

GACD Leadership



As Dr Alain Beaudet prepares for his retirement and the end of his term as Chair of the GACD Board, what achievements is he most proud of and what are his hopes for the future?



Professor Glenda Gray, President & CEO of South Africa's Medical Research Council, succeeds Alain Beaudet as GACD Chair (April 2017). Here she reflects on what she would like to see in place by the end of her term leading the alliance.

One of the first things I said I would do is to increase the outreach to the number of countries participating in the GACD with a focus to include more low- and middle-income countries in an attempt to obtain representation from all major regions of the world. We now have Mexico, Argentina, Brazil and Thailand on board, so I'm really proud of that. We've also made huge progress in fostering joint peer review, having joint deadlines, a joint GACD portal and a single date for submission of applications.

The research that we have funded and the networks that we have created are a huge success of the GACD and thanks in no small part to the staff of the Secretariat. This contribution to the evolution of implementation science, which is a very young area of health research, is a great achievement of the GACD.

What we've been able to achieve through the memorandum of understanding with the World Bank is a milestone, and we can start having true impact by embedding research in country-wide (or at least province-wide) health.

In a few years time, the area I hope GACD will be delivering on is the training aspect. In low- and middle-income countries there's so much to be achieved in terms of training and changing into a culture of evidence based practice and research-based evidence.

I'm excited about implementation science and the ability to scale-up NCD interventions that will have impact at a country level.

I would like to see that the interventions we would have funded under my chairmanship were effective, and we are starting to understand how to scale them up. In a lot of the work we are doing in implementation science, we are demonstrating their feasibility - and we need to go from feasibility to scale-up. It's only when we move interventions to scale that we have great impact.

It would be nice for us to start demonstrating our impact on NCDs and our understanding of what it takes to scale up interventions, and how we influence policy at a country level. I would like to see this final translation, that we release the evidence, we demonstrate that implementation can work and we take it to scale. I hope to see countries take up interventions based on evidence produced by the GACD Research Network.

GACD Thank you UCL

Interview with Professor Dame Anne Johnson, Professor of Infectious Disease Epidemiology at University College London (UCL), Wellcome Trust Governor and GACD Board observer.



Professor Dame Anne Johnson has been an adviser and observer to the GACD Board since the inception of the GACD International Secretariat, in 2012 to the present day. Here she remarks upon the special relationship that GACD has built with UCL over its 5 years at the university before the GACD Secretariat moves to its new location at the Wellcome Trust.

What has been special about the UCL – GACD relationship?

The special contribution from UCL in our global health work has been the opportunity to bring a multidisciplinary university to global problems. Clearly, the root causes of many global chronic diseases lie well beyond the narrow confines of biomedicine. They involve the obesity epidemic, issues around food, nutrition practices, as well as the problems of under and over nutrition. Where we felt we could add value was to bring the UCL community to the GACD by fostering the right environment with our international links as a place for the GACD Secretariat to be born and thrive. My view is that it has thrived.

What personal observations have you made as to how the GACD has developed?

The GACD started with 6 international funding agencies involved, most of them in the northern hemisphere and it's changed the focus of its ambitions. Now it has 13 members in 6 continents. We've moved from perhaps having a more

disease focused biomedical approach to one that embraces a broader set of disciplines and questions. So our latest call, which focuses on mental health, is again taking that broad perspective going into an area which has been chronically underfunded across the globe and one in which there are still very varied views across the globe. So it's also quite ambitious to do that.

I have also seen that the Board has developed an ambition to think about implementation at scale. I think that's really exciting. So we are moving away from individual interventions to how can we work not just as empirical discovery scientists, but look at how we implement findings and engage communities and governments to try and make those changes at scale.

The GACD Secretariat is about to change host institutions and move into a new environment at the Wellcome Trust. How do you see GACD developing there?

The GACD has always been independent of UCL and the important thing is to say it will remain independent of the Wellcome Trust. What excites me is that it's moving to the next phase. It has an increasingly important role working across a whole range of science, as well as in public engagement. It's been a great privilege to be associated with the development and growth of the GACD since its birth. I think it's grown to be a very happy teenager and I am sure that GACD will continue to mature and have a long and healthy life.

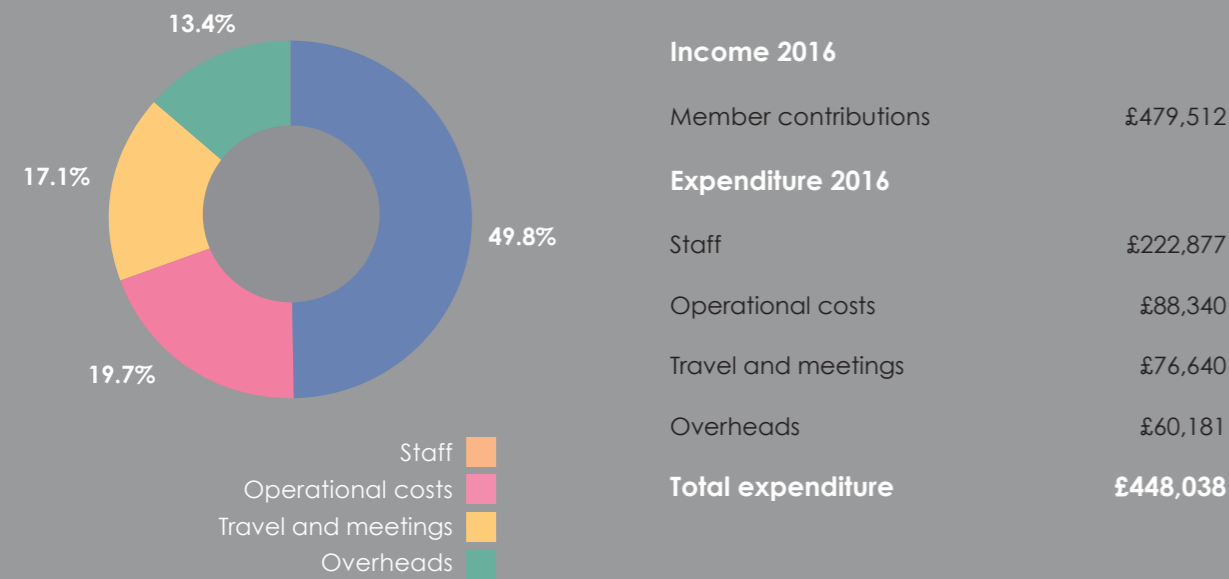


GACD Financials

The GACD Secretariat is supported financially through annual membership fees by the alliance members. The tiers of annual contributions to support the Secretariat are based on the World Bank categorisation of countries by income. Based on Gross National Income per capita, every country is classified as low-income, middle-income (subdivided into lower-middle and upper-middle), or high-income.

Currently based at the UCL Institute for Global Health, the Secretariat operates within the remits of UCL's financial policies and procedures. Almost half of the Secretariat budget is spent on staff costs, with the remainder covering operational costs, meeting and travel costs as well as overheads.

GACD Secretariat expenditure 2016



| Income 2016 | |
|--------------------------|-----------------|
| Member contributions | £479,512 |
| Expenditure 2016 | |
| Staff | £222,877 |
| Operational costs | £88,340 |
| Travel and meetings | £76,640 |
| Overheads | £60,181 |
| Total expenditure | £448,038 |



CELINA GORRE
Executive Director



DOROTHEA KANTHACK-CHAN
Senior Programme Officer



FAYE BASSETT
Executive Coordinator



GARY PARKER
Research Coordinator



ROSIE BARTLETT
Communications Manager

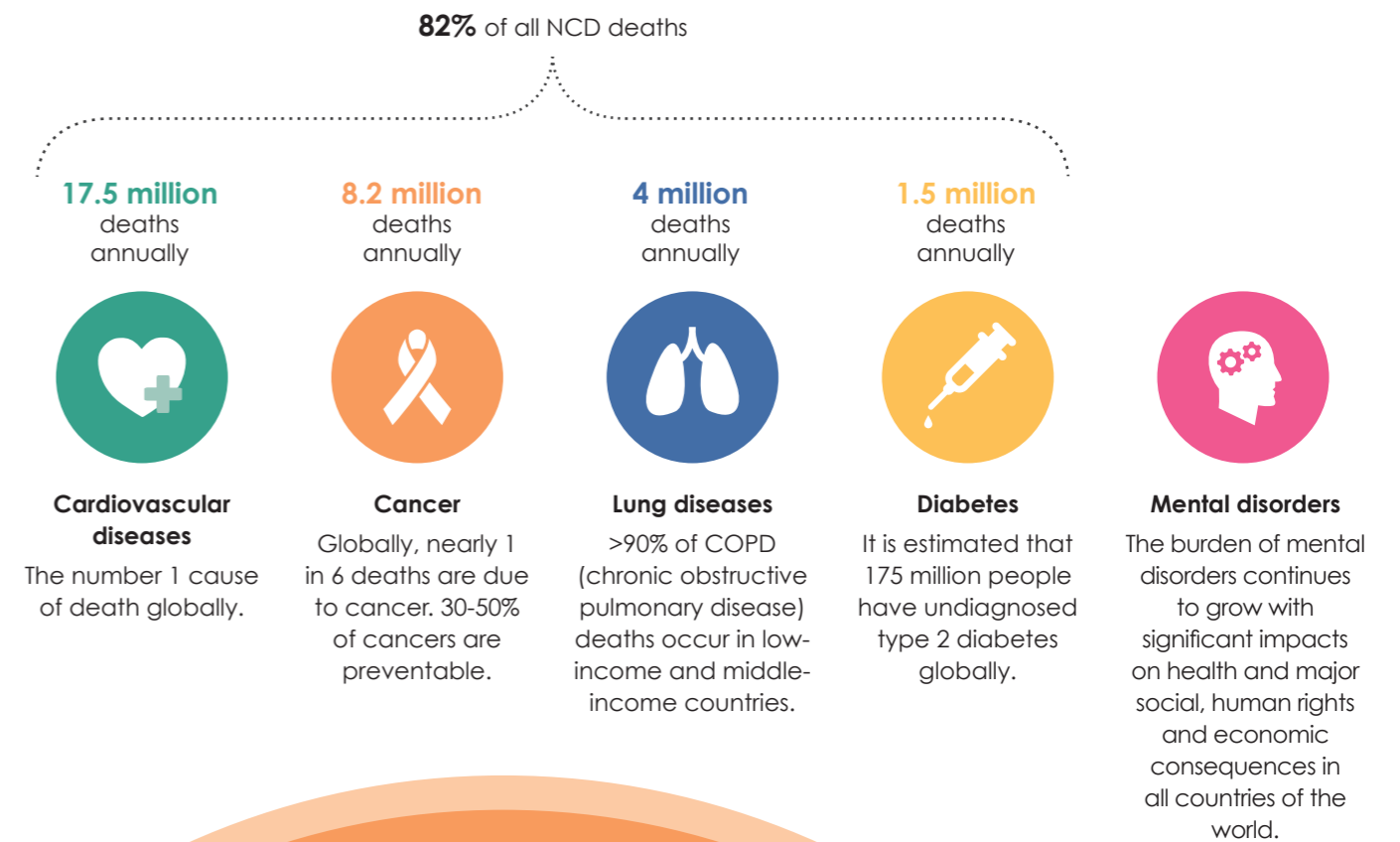
GACD Facts and figures

Non-communicable diseases (NCDs) kill 38 million people each year. This disproportionately affects low- and middle-income countries where almost 3/4 of these deaths (28 million) occur.

Everyone is vulnerable to the main risk factors that contribute to NCDs, whether from unhealthy diets, physical inactivity, exposure to tobacco smoke or the effects of the harmful use of alcohol.

Cardiovascular diseases account for most NCD deaths (17.5 million people annually), followed by cancers (8.2 million), respiratory diseases (4 million), and diabetes (1.5 million). These 4 groups of diseases alone account for 82% of all NCD deaths. Premature deaths also occur among people with severe mental disorders, with a 10-25 year reduction in life expectancy. The vast majority of these deaths occur as a result of comorbidities with chronic physical medical conditions (such as those listed below). Suicide is another important cause of death.

In response to this global NCD burden, the GACD research areas are:



How does GACD address the problem?

The GACD has so far established research programmes on hypertension, diabetes, and lung diseases involving more than **550 researchers** from more than **45 countries**. In 2017, a **Mental Health Programme** will be launched. Collectively, GACD members are spending more than **US\$180 million** on research in low- and middle-income countries and with vulnerable populations in high-income countries. GACD funded research aims to contribute to the area of implementation science and address the significant knowledge gap between interventions that research has shown to be effective, and their delivery to communities and translation into practice.

GACD People

GACD BOARD

The Board has the ultimate authority over the alliance's vision, values and overall governance framework, and develops and implements GACD policies. Current GACD Board members are:

- **Dr Alain Beaudet**, Canadian Institutes of Health Research, Canada (Chair)
- **Professor Glenda Gray**, Medical Research Council, South Africa (Chair Elect)
- **Professor Xuetao Cao**, Chinese Academy of Medical Sciences, China (Past Chair)
- **Professor Carlos Henrique de Brito Cruz**, São Paulo Research Foundation, Brazil
- **Dr Ruxandra Draghia-Akli**, Health Directorate at the Research & Innovation DG of the European Commission
- **Dr Roger Glass**, National Institutes of Health, United States
- **Mariano Jordan**, Ministry of Science, Technology and Productive Innovation, Argentina
- **Professor Anne Kelso**, National Health and Medical Research Council, Australia
- **Dr Mark Palmer**, Medical Research Council, United Kingdom
- **Dr Guillermo Ruiz-Palacios**, National Institutes of Health, Mexico
- **Dr Makoto Suematsu**, Japan Agency for Medical Research and Development, Japan
- **Dr Peerapol Sutiwisesak**, Health Systems Research Institute, Thailand
- **Dr Soumya Swaminathan**, Indian Council of Medical Research, India
- **Professor Dame Anne Johnson**, University College London (host institution representative)
- **Professor Ibrahim Abubakar**, University College London (host institution representative)

In addition, the World Health Organization (WHO) has observer status on the GACD Board.

GACD MANAGEMENT COMMITTEE

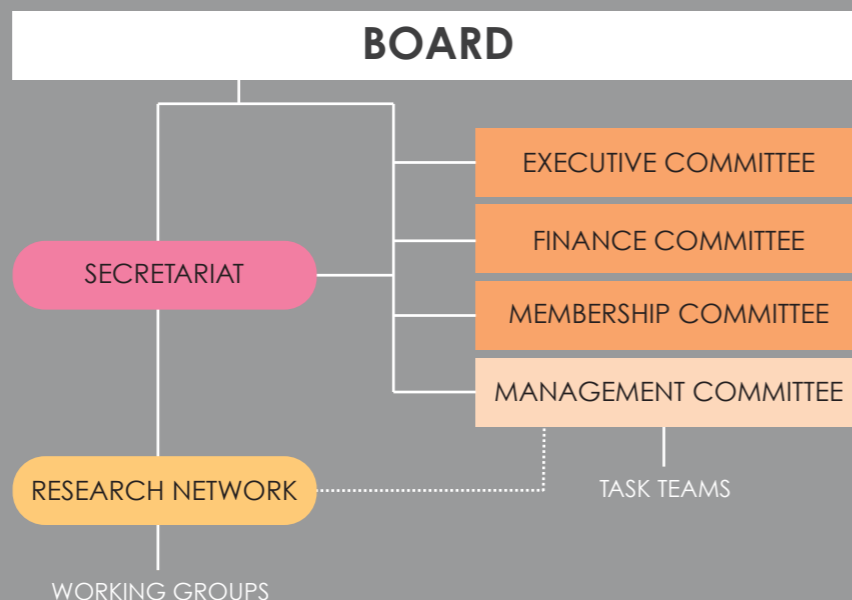
The Management Committee is responsible for the oversight, management and coordination of the portfolio of research awards made under the umbrella of the alliance. Current Management Committee members are:

- **Dr Karim Berkouk**, Health Directorate at the Research & Innovation DG of the European Commission (Chair)
- **Dr Johan Louw**, Medical Research Council, South Africa (Deputy Chair)
- **Dr Reiko Akizuki**, Japan Agency for Medical Research and Development, Japan
- **Margarita Irene Calleja y Quevedo**, National Council for Science and Technology and **Dr Carlos Aguilar Salinas**, National Institute of Medical Science and Nutrition Salvador Zubirán, Mexico
- **Dr Fernando Cendes**, São Paulo Research Foundation, Brazil
- **Dr Rupinder Dhaliwal**, Indian Council of Medical Research, India
- **Dr Daniel Gomez**, and **Monica Silenzi**, Ministry of Science, Technology and Productive Innovation, Argentina
- **Dr Steven Hoffman**, Canadian Institutes of Health Research, Canada
- **Professor Lixin Jiang**, Chinese Academy of Medical Sciences, China
- **Alex Harris**, Medical Research Council, United Kingdom
- **Dr Joshua Rosenthal**, National Institutes of Health, United States
- **Dr Tony Willis**, National Health and Medical Research Council, Australia

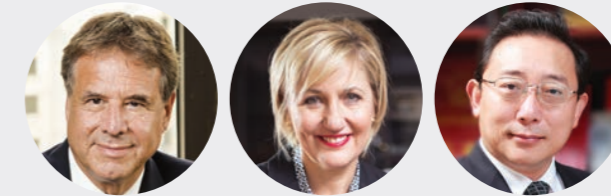
GACD INTERNATIONAL SECRETARIAT

The Secretariat serves as the administrative hub for the GACD member agencies and funded research teams, and represents the alliance externally. Current staff members are:

- **Celina Gorre**, Executive Director
- **Dorothea Kanthack-Chan**, Senior Programme Officer
- **Gary Parker**, Research Coordinator
- **Faye Bassett**, Executive Coordinator
- **Rosie Bartlett**, Communications Manager



GACD Board



Dr Alain Beaudet

Professor Glenda Gray

Professor Xuetao Cao



Professor Carlos Henrique de Brito Cruz

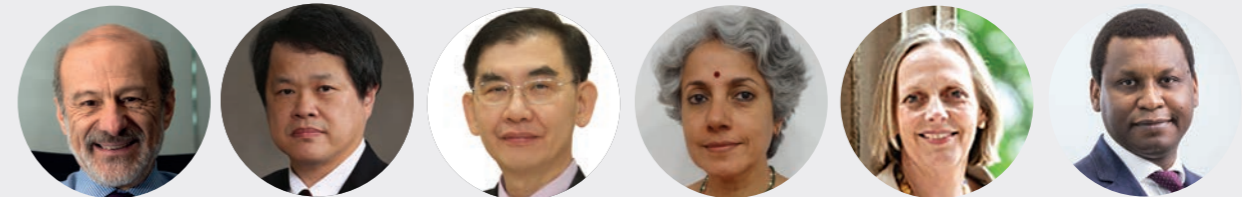
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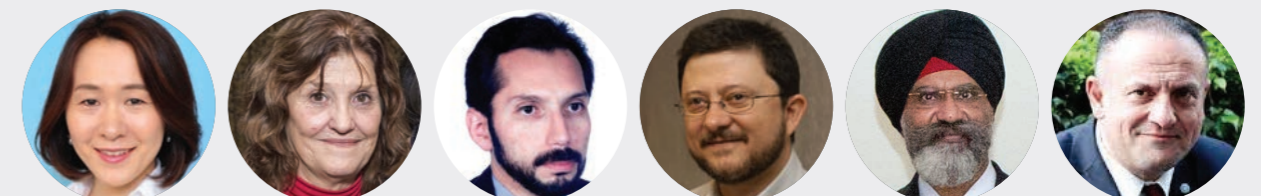
Professor Ibrahim Abubakar

GACD Management Committee



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