

# WORLD GUIDE TO BRIDGES 2015



International  
Diabetes  
Federation



**INTERNATIONAL DIABETES FEDERATION**  
PROMOTING DIABETES CARE,  
PREVENTION AND A CURE WORLDWIDE

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FOREWORD BY

**Sir Michael Hirst**

**President, International Diabetes Federation  
2013-2015**



For decades, IDF has been calling for action at the national and international level to tackle the global epidemic represented by diabetes, a disease that impacts on the lives of hundreds of million people worldwide.

Unfortunately, each new edition of the Diabetes Atlas brings alarming information on the prevalence of diabetes and its rapid growth in every country and community. The pandemic is not any more a potential threat, it is a reality. And projections for the future constitute a dramatic call to societies and their governments globally and locally: 642 million people living with the disease by 2040, and half as many again who will be living with undiagnosed diabetes — unknowingly at risk from its disabling, life-threatening complications, which include kidney failure, amputations, blindness and cardiovascular diseases. Moreover, the figures for people at high risk of the disease forewarn of an outright socioeconomic catastrophe: 318 million people with impaired glucose tolerance (IGT) worldwide, 75% of whom live in low- and middle- income countries.

Furthermore, the geographical distribution of the condition has evolved following recent trends of rapid urbanisation, decrease of physical activities and changes in diet. Today, among the 415 million people known to have diabetes, 80% live in low or middle-income countries impacting the human and economic development of these countries.

However, we must not forget our achievements. There is now overwhelming evidence that without effective prevention and management programmes, the

human and economic burden of diabetes will continue to increase worldwide. IDF, with the help and support of its members and partners, is engaged in action to tackle diabetes from the local to the global level, from programme at community level to worldwide awareness and advocacy campaigns. Through World Diabetes Day, IDF is uniting the global diabetes community to produce a powerful voice for diabetes awareness and advocacy; With Life for a Child, IDF is providing access to essential diabetes medicines for over 17,000 children and youth with diabetes in 46 countries; Our guidelines and programmes are helping to improve the lives of people with diabetes worldwide.

BRIDGES (Bringing Research In Diabetes to Global Environments and Systems) is one of IDF's flagship programmes. Spanning over ten years, we are proud of the achievements reached by the 41 projects supported in 36 countries and are convinced that that their findings will benefit primary and secondary prevention interventions worldwide. To quote Albert Einstein, the only source of knowledge is experience.

As BRIDGES has come to an end in its current format, I would like to take this opportunity to thank Lilly Diabetes for providing IDF with the financial support for this outstanding programme. I would also like to thank all the volunteers who have been actively involved within BRIDGES committees in managing the programme and supporting the selected projects through workshops and mentoring. Finally I would like to congratulate the teams involved in the selected projects that, through their hard work, expertise and dedication are helping to shape a better world for people with diabetes and the many at risk.



# INTRODUCTION BY

## Linda Siminerio

### Chair, BRIDGES Executive Committee

This new edition of the World Guide is prepared to help investigators and community leaders from around the world learn about the experiences from the very teams who led diabetes prevention and treatment projects supported by BRIDGES.

To get first hand insights, the BRIDGES organizers, asked the teams to provide some feedback on the following:

- **The three main numbers from their project** (e.g: number of people screened, number of sessions delivered...)
- **The three main achievements of their project**
- **The three main challenges they faced** and how they overcame them
- **The three main lessons they learned from their project** which could be useful for other investigators

We then selected the answers from 16 of them trying to cover the wide spectrum of experiences, type of interventions and geographical areas of the 41 projects in 36 countries which have received support from BRIDGES.

This year's publication, which is the final one dedicated to the current format of BRIDGES, is also presenting, in a more visual format than before, the various activities linked to BRIDGES. Since 2007, we have revised, fine-tuned and re-shaped BRIDGES activities to reflect the imperfections and complexity of real life, ensure the replication of good practices while keeping firmly in mind the mission of the International Diabetes Federation (IDF) *to promote diabetes care, prevention and a cure worldwide.*

Through D-START, we are supporting the implementation of a successful intervention dedicated to primary

prevention in Pakistan and Vietnam. With BRIDGES Research Net, we have started to replicate successful interventions originally supported by BRIDGES into other locations in the world. This strategy should play a leading role within IDF in the years to come.

On a personal level, I have been involved with BRIDGES since its inception in 2007, first as Chair of BRIDGES Review Committee and, since 2009, as Chair of BRIDGES Executive Committee. I would like to take this opportunity to thank Lilly Diabetes which has provided the financial support to BRIDGES and has always welcomed with a positive attitude our ideas to improve the programme. I would also like to thank all the international experts who have served BRIDGES Executive Committee and/or BRIDGES Review Committee in the last seven years. Their involvement and dedication have been of great benefit to the programme and to the teams around the world implementing the interventions.

Last but not least, I would like to express my gratitude to all the personnel and participants who have been involved in the 41 projects supported by IDF BRIDGES. As an investigator myself, I recognize the difficulties and challenges they have faced and are facing to implement an intervention in real life settings, the dedication and enthusiasm needed to overcome them.

We hope that you will enjoy and share the publication, learn from the examples we are providing and be able to use the experiences we are bringing to you when implementing an intervention in your community.



# BRIDGES MESSAGE BY Enrique Conterno President, Lilly Diabetes



## **OUR GLOBAL CHALLENGE: BEATING DIABETES**

***To our friends and partners in the global fight against diabetes:***

More than 400 million people around the world have diabetes. Do you know that only two countries — China and India — have larger populations than the number of people living with this disease?

Over the next two decades, the number of people with diabetes is expected to jump to nearly 600 million. Slowing the prevalence of this disease continues to be one of the great healthcare challenges of our generation. Equally urgent is appropriate management of the disease and its many complications, such as cardiovascular disease, blindness and kidney failure.

Fortunately, there is reason for some optimism. For example, last year *The New England Journal of Medicine* reported substantial drops in the risk of several diabetes-related complications in the U.S. between 1990 and 2010, including a 68 percent drop in heart attacks, a 50 percent reduction in strokes and lower extremity amputations and a 30 percent drop in end-stage kidney failures.

There are many reasons for these improvements, including enhanced medical interventions, better education and support for people with diabetes, and newer (and better) medicines and technologies. And while we can embrace this progress, we have much work ahead of us — in developed and developing nations alike. For instance, while the risk for individual patients has dropped, the increasing prevalence of diabetes means the number of people with complications globally continues to jump.

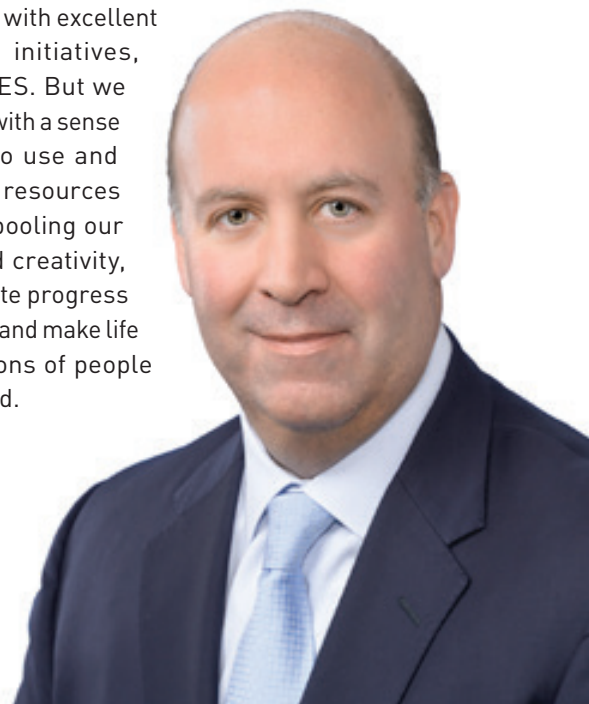
Four out of five people with diabetes live in low- and middle-income countries, where the disease grows faster and affects people at younger ages than in more developed countries. Diabetes will affect about 1 in 10 adults worldwide by 2035. In the U.S. alone, males born in the year 2000 have a 32.8 percent chance of developing diabetes in their lifetime, and females have a 38.5 percent risk.

These figures reinforce what we have known for a long time: diabetes is bigger than each of us, and no single entity can mount an effective response to the disease. Tackling diabetes requires a multifaceted approach that draws upon the resources, creativity and passion of our partners in government, academia, community organizations and the private sector.

Beating diabetes takes all of us working together. Even as we act at the global level, we must recognize that diabetes is a very personal disease. Research and development is an important example: we must ensure that people participating in clinical trials are as diverse as the populations affected by the disease. Notably, the world's increasingly aging population has become an area of focus for Lilly as we investigate new treatments for diabetes.

As a global program, BRIDGES is producing practical results in countries around the world. Through funding of translational research projects, BRIDGES helps to spread lessons learned from clinical research to those who can benefit most: the hundreds of millions of people affected by diabetes. And, by focusing its efforts largely on developing countries, BRIDGES can help many people with diabetes live healthier, more normal lives.

The global diabetes statistics are alarming, but we are making progress — day by day and step by step with excellent resources and initiatives, such as BRIDGES. But we must resolve — with a sense of urgency — to use and replicate these resources effectively. By pooling our capabilities and creativity, we can accelerate progress against diabetes and make life better for millions of people around the world.





Lilly Diabetes is proud to partner with International Diabetes Federation to bring you the BRIDGES programme, in an effort to provide innovative healthcare practices that will improve the everyday lives of people living with diabetes.







# ABOUT BRIDGES

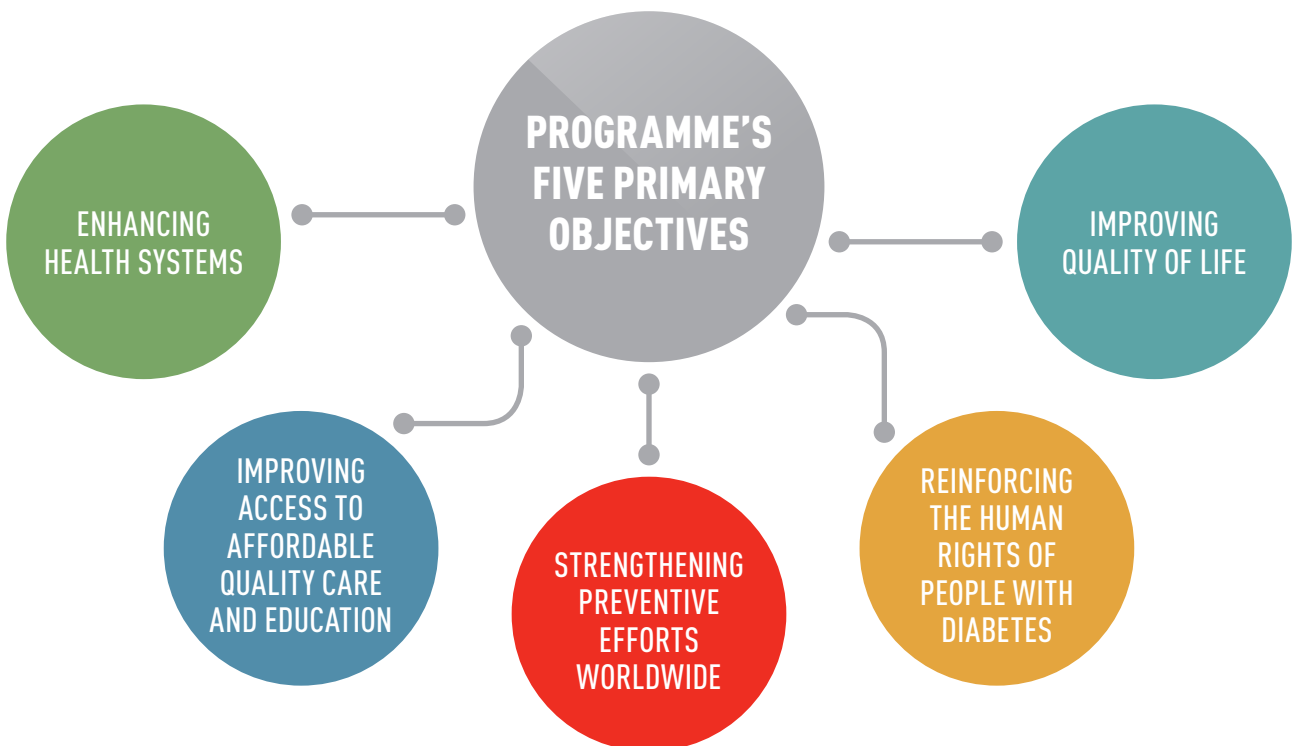


# BRIDGES initial strategies

## TRANSLATING RESEARCH INTO REAL-WORLD COMMUNITIES: THE CHALLENGES



BRIDGES was developed by the International Diabetes Federation to provide strategies and solutions, through an educational grant from Lilly Diabetes, to support **translational research**<sup>1</sup> efforts worldwide. With a budget of USD 10,000,000 over a period of **seven years**, and through calls for applications, BRIDGES has invested in **primary and secondary prevention** of diabetes **worldwide**. We have financially supported and mentored **41 projects in 36 countries**, taking the programme's five primary objectives into account:



<sup>1</sup> Translational research transforms currently available knowledge into useful measures for everyday clinical and public health practices. Translation research aims to assess the implementation of standards of care, understand the barriers to their implementation, and intervene across all levels of health care delivery and public health to improve the quality of care and health outcomes, including quality of life (from Narayan et al. "Diabetes Translation Research: Where Are We and Where Do We Want To Be?" in Ann Intern Med, 2004; 140:958-963).

# Building BRIDGES

## with young investigators: BRIDGES workshops

Following the launch of BRIDGES, it quickly became clear to the BRIDGES Executive Committee that young investigators in low- and middle-income countries would benefit from training in the development of proposals for translational research projects and beyond. Since 2008, with the technical support of Venkat Narayan and his team (Emory University, USA), IDF has developed and implemented **a series of workshops dedicated to grant writing** and covering a broad range of issues including sample size and randomisation; building an efficient team; data analysis; ethical issues; opportunities and challenges in implementing an intervention.

Attendance was free of charge and all participants received financial support from IDF for their travel and accommodation.

In 2013 IDF BRIDGES launched, with the technical support of Elsevier, a new series of educational events — **“how to get published - workshops for researchers”** — targeted at supported projects and IDF members with the aim of helping to improve the dissemination of the findings and best practises from BRIDGES-supported projects.

Attendance was free of charge and all participants received financial support from IDF for their travel and accommodation

 LOCATION	 DATE	 LANGUAGE
Valetta (Malta)	September 2008	English
Hong Kong (China)	September 2008	English
Kathmandu (Nepal)	October 2008	English
Miami (USA)	November 2008	English
La Plata (Argentina)	November 2008	Spanish
Accra (Ghana)	December 2008	English
Lille (France)	March 2010	French
Istanbul (Turkey)	March 2010	Russian
Beijing (China)	November 2010	Chinese

 LOCATION	 DATE	 LANGUAGE
Dubai (UAE)	February 2013	English
Miami (USA)	March 2013	English
Bogota (Colombia)	June 2013	Spanish



The content of the workshops is available online at [www.idf.org/BRIDGES/useful-tools](http://www.idf.org/BRIDGES/useful-tools)

# Building new BRIDGES to prevent diabetes: D-START

Following the first round of funding, a number of obstacles were identified, including limited numbers of experienced researchers in low- and middle-income countries (LMCs), the lack of connections with international expertise, and the necessary early commitment of and support from local health authorities.

The search for effective solutions to these challenges led to the development of D-START (Diabetes - Supporting TrAnslational Research and Twinning) with the support of international figures in diabetes prevention. It was built in four steps:

01

Call for applications targeted at institutions with a track record in implementing interventions dedicated to the primary prevention of diabetes to propose the framework of a primary prevention programme that could be easily implemented in a LMC (selected institution: University of Helsinki).

02

Selected intervention was used as the framework for the call for applications targeted at institutions in LMCs where access to international funding was limited. Applicants were asked to adapt the proposed methodology to their local sociocultural needs and characteristics and clearly demonstrate the involvement of local health authorities in running the project (selected institutions: National Institute of Diabetes and Metabolic Disorders, Hanoi, Vietnam; The Aga Khan University Hospital, Karachi, Pakistan).

03

Three-day training, prior to the start of the two interventions, of the selected institutions in the IDF Executive Office in Brussels with representatives of the University of Helsinki and international experts in diabetes prevention (Peter Bennett, Qing Qiao, Jaakko Tuomilehto, Linda Siminerio, Ayesha Motala and Juan Jose Gagliardino).

04

Implementation of the intervention in the two countries selected (Pakistan and Vietnam) with strong, continuous mentoring and support from IDF and the University of Helsinki.



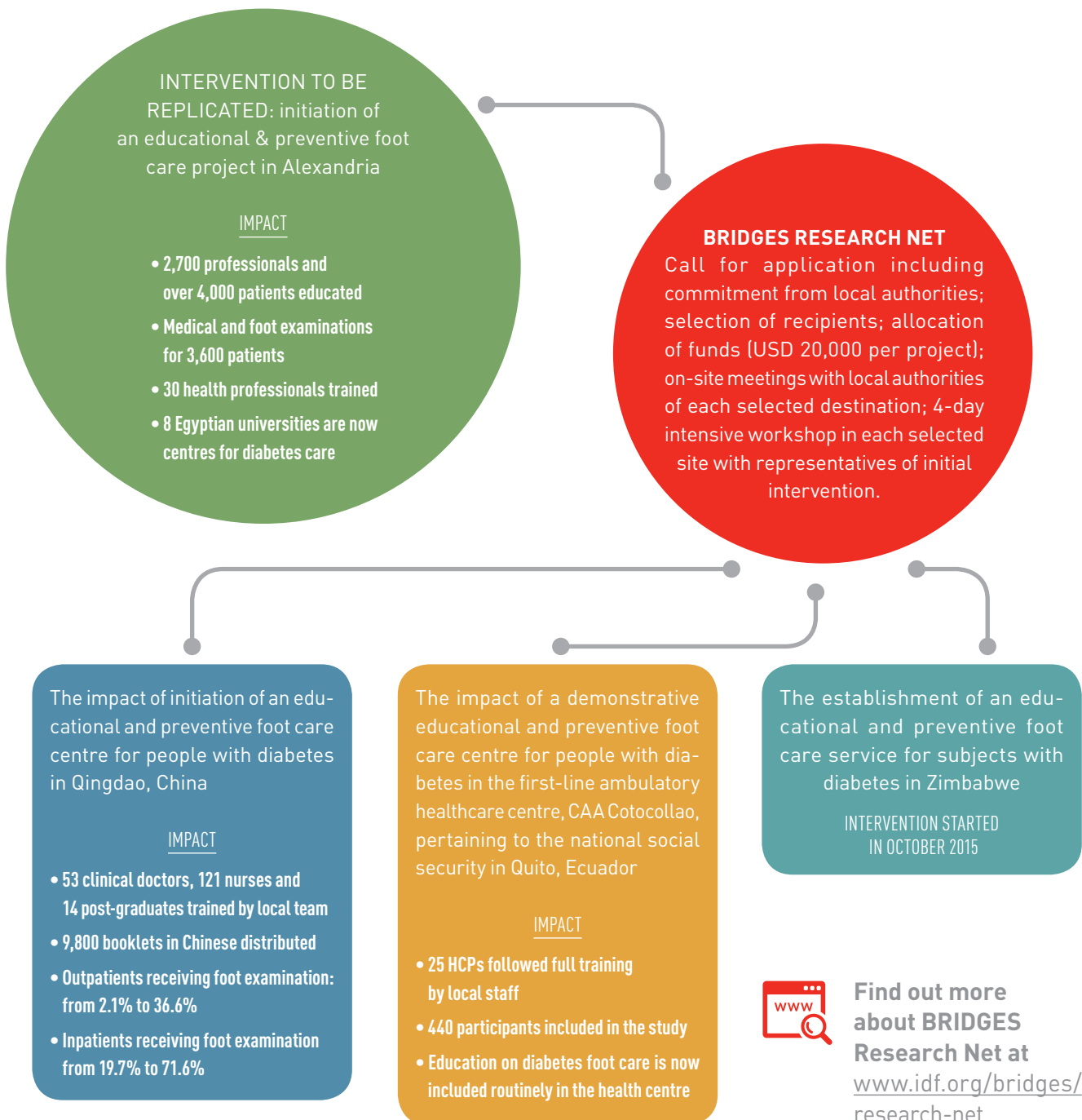
Find out more about D-START at [www.idf.org/bridges/d-start](http://www.idf.org/bridges/d-start)

# Building BRIDGES between communities worldwide:

## BRIDGES Research Net

The aim of BRIDGES Research Net (BRN) is to share successful strategies that have improved the life of people with diabetes in one country and replicate them around the

world with strong support from local health authorities. In 2013, BRN was launched, replicating a successful project to improve diabetes foot care.

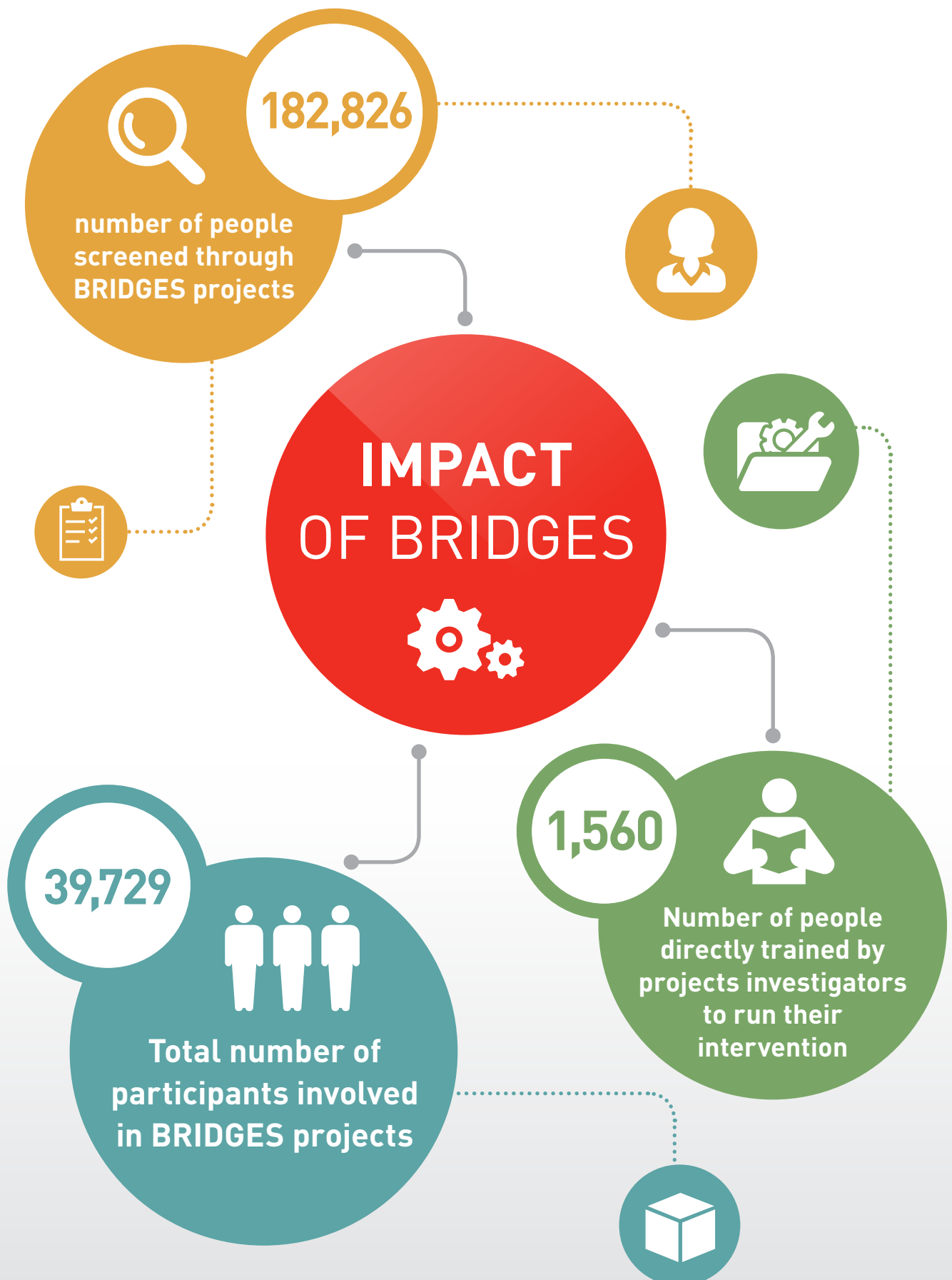


# Building BRIDGES for the diabetes community

## Some key numbers from BRIDGES



# Community:



# Map of BRIDGES projects

41 projects in 36 countries







# Building BRIDGES to share best practice

Since 2008, over 51 articles in peer reviewed journals have been published by projects supported by IDF BRIDGES and presentations made in more than 130 national and international congresses.

## PUBLICATIONS DEDICATED TO THE PREVENTION OF DIABETES

- "Evidence of reduced beta-cell function in Asian Indians with mild dysglycemia. *Diabetes Care*" *Diabetes Care* September 2013
- "A model of translational research for diabetes prevention in low and middle-income countries: The Diabetes Community Lifestyle Improvement Program (D-CLIP) trial" *Prim Care Diabetes* 2012
- "DIABRISK – SL Prevention of cardio-metabolic disease with life style modification in young urban Sri Lankan's – study protocol for a randomized controlled trial", *Trials* 2011
- "Screening for people with glucose metabolism disorders within the framework of the DEMOJUAN project (DEMONstration area for primary prevention of type 2 diabetes, JUAN Mina and Barranquilla, Colombia" *Diabetes Metabolism Research and Reviews*, Sept 2013
- "Investigating characteristics and prevalence of metabolic syndrom using different criteria among pre-diabetes in Ninh Binh". *Journal of Military Pharmaco-Medicine*. Volume 39, 2014
- "Behavioral and psychosocial correlates of adiposity and healthy lifestyle in Asian Indians". *Prim Care Diabetes*. 2015.
- "Recruitment Challenges in a Diabetes Prevention Trial in a Low- and Middle-Income Setting" *Diabetes Res Clin Pract*. 2015
- "Exercise patterns and behaviour in Asian Indians: data from the baseline survey of the Diabetes Community Lifestyle Improvement Program (D-CLIP)" *Diabetes Res Clin Pract*. 2015
- "Effects of group education sessions on lifestyle modification in diabetes prevention in people with prediabetes in Bac Ninh City" *Journal of Practical Medicine*, September 2015

## PUBLICATIONS DEDICATED TO THE MANAGEMENT OF DIABETES

- "The effectiveness of text messages support for diabetes self-management: protocol of the TEXT4DSM study in the Democratic Republic of Congo, Cambodia and the Phillipines" *BMC Public Health*, May 2013
- "Phase 1 of the community-based Diabetes Self-Management Education (DSME) program in Suan Juan Batangas, Philippines" *Diabetes Research and Clinical Practice*, 2010
- "Effectiveness of a group diabetes education programme in underserved communities in South Africa: pragmatic cluster randomized control trial" *BMC Family Practice* 2012
- "The ability of health promoters to deliver group diabetes education in South African primary care" *African Journal of Primary Health Care and Family Medicine*
- "Views of patients on a group diabetes education programme using motivational interviewing in South African primary care: a qualitative study." *S Afr Fam Pract* 2013
- "Effectiveness of a group diabetes education programme in underserved communities in South Africa: Pragmatic cluster randomized control trial" *Diabetic Medicine* 2014
- "Contents, participant and outcomes of three diabetes care programmes in three low and middle income countries" *Primary Care Diabetes* (2014)
- "Prevalence of anxiety and depression among diabetic African patients in Guinea: Association with HbA1c levels", *Diabetes Metab*. 2014
- "Poor glycemic control in type 2 diabetes in the South of the Sahara: the issue of limited access to an HbA1c test" *DRCP* 2014,
- "Study of the effect of altitude on the measurement of glycated hemoglobin using the In2it point-of-care testing". *Cardiovascular Journal of Africa*, Volume 26, N°1, January/February 2015

## PUBLICATIONS DEDICATED TO PEER EDUCATION

- “The development of a pilot training program for peer leaders in diabetes: Process and content”. *Diabetes Educator*”
- “Training peers to provide ongoing diabetes self-management support (DSMS): Results from a pilot study”. *Patient Education and Counseling*;
- “Home visit: an educational health strategy for self-care diabetes” *Acta Paulista de Enfermagem*, vol.27, no.1 Sao Paulo Jan/Feb 2014
- “Comparative effectiveness of peer leaders and community health workers in diabetes self-management support: Results of a randomized control trial” *Diabetes Care* 2014
- “Cost-effectiveness of a diabetes group education program delivered by health promoters with a guiding style in underserved communities in Cape Town, South Africa” *Patient Educ Couns* (2015)
- “Effectiveness of a peer support programme versus usual care in disease management of diabetes mellitus type 2 regarding improvement of metabolic control – a cluster-randomised controlled trial” *Journal of Diabetes Research*, September 2015

## PUBLICATIONS DEDICATED TO THE PROTECTION OF WOMEN’S HEALTH

- “Anxiety and depression in PCOS: A comprehensive investigation” (*Fertil Steril* 2010)
- “Polycystic Ovary Syndrome (PCOS) a biopsychosocial understanding in young women to improve knowledge and treatment options” (*Journal of Psychosomatic Obstetrics & Gynecology*, March 2010)
- “Is having PCOS a predictor of poor psychological function including anxiety and depression?” *Human reproduction*, March 2011
- “Measuring physical activity in pregnancy” *International Journal of Behavioural Nutrition and Physical Activity*, March 2011
- “Understanding health behaviours in a cohort of pregnant women at risk of gestational diabetes mellitus: an observational study” *BJOG* 2012

- “Taking up the challenge of non-communicable diseases in the Commonwealth: 17 good-practice case studies” a publication of the Commonwealth Secretariat commissioned C3 Collaborating for Health
- “Optimising healthy gestational weight gain in women at high risk of gestational diabetes: A randomised controlled trial”. *Obesity*, 2012
- “Physical activity and mental health in women with Polycystic Ovary Syndrome”, *BMC Women’s Health*, March 2014
- “Women’s experiences of polycystic ovary syndrome diagnosis”, *Family Practice* June 2014
- “How effective is self-weighting in the setting of a lifestyle intervention to reduce gestational weight gain and postpartum weight retention?” *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2014
- “Health-related behaviors in women with lifestyle related diseases” *Behav Med* 2012
- “Assessing self-efficacy and Self-help Methods in Women with and without Polycystic Ovary Syndrome” *Behav Med* 39
- “A randomised translational trial of lifestyle intervention using a 3-tier shared care approach on pregnancy outcomes in Chinese women with gestational diabetes mellitus but without diabetes” *Journal of translational medicine*, 2014, 12.290
- “Risk stratification in early pregnancy for women at increased risk of gestational diabetes” *Diabetes Research and Clinical Practice*, January 2015, 107(1), 61-68
- “Limiting postpartum weight retention through early antenatal intervention: the HeLP-her randomised controlled trial” *IJBNPA*, 11(1), 134-134
- “ABO blood groups and gestational diabetes mellitus: a prospective population based study in Tianjin, China” *Diabetes Metab Res Rev* 2015
- “Pregnancy outcomes of Chinese women with gestational diabetes mellitus defined by the IADPSG’s but not by the 1999 WHO’s criteria” *Clinical Endocrinology* May 2015

## PUBLICATIONS DEDICATED TO THE EPIDEMIOLOGY OF DIABETES

- “Study of the Health-Related Quality of Life (HRQL) and Some Socio-demographic Factors associated with the Development of Diabetic Foot Ulcers (DFU) in Type 2 Diabetic Patients in Egypt” J. Egypt. Soc. Endocr., Diab. & Metab. 2009
- “Foot Ulceration and Lower Extremity Amputations Among Diabetic Patients in Alexandria, Egypt: Prevalence, Predictors and Quality of Medical Care”. J. Egypt. Soc. Endocr., Diab. & Metab. 2010
- “High prevalence of cardio-metabolic risk factors in a young urban Sri-Lankan population”, PLoS ONE 2012
- “Hypertension in Adults of Himalayan Mountain Villages: Prevalence, Awareness, and Control”, Global Heart 2014
- “Obesity trends in Himalayan mountain villages between 1995 and 2013: role in diabetes?” Obesity Facts 2014
- “Prevalence of diabetic foot disorders and related risk factors among Egyptian subjects with diabetes” Primary Care Diabetes February 2015
- “Blood pressure in children: Role in diabetes?” Pediatrics 2015
- “Prevalence of Gestational Diabetes Mellitus and Its Risk Factors in Chinese pregnant women: A Prospective Population-Based Study in Tianjin, China” PLoS ONE March 2015,
- “Distinct HbA1c trajectories in a type 2 diabetes cohort”, Acta Diabetologica, April 2015
- “Real-world evidence of suboptimal blood pressure control in patients with type 2 diabetes”, Journal of Hypertension, 2015
- “Detecting prediabetes and diabetes: Agreement between fasting plasma glucose and oral glucose tolerance test in Thai adults” Journal of Diabetes Research, Volume 2015
- “Social construction about diabetes and prediabetes in persons that attend a healthcare center in Maracaibo-Venezuela” Revista Internacional de Salud, Bienestar y Sociedad 1(2):59-70

## PRESENTATIONS AT NATIONAL AND INTERNATIONAL CONGRESSES

**2008:** 1<sup>st</sup> Diabetes in Asia Study Group; International Congress of Endocrinology (ICE); PCOS Alliance workshop; Southern Health.

**2009:** Endocrine Society Australia annual meeting; Federation of the International Obstetrics and Gynecology Conference; Fertility Society of Australia, Perth; World Diabetes Congress; National Chronic Disease meeting; Research Society for the Study of Diabetes in India; Southern Health.

**2010:** Philippines Society of Endocrinology and Metabolism; TED conferences; Australasian Society for Behavioural Health and Medicine Conference; 14<sup>th</sup> International Congress of Endocrinology; POSSA conference; 2<sup>nd</sup> Diabetes in Asia Study Group; Emory Medical Grand Rounds; 6<sup>th</sup> World Congress on Diabetes Prevention and its complications; Clinton Global Initiative; 71<sup>th</sup> Scientific Sessions of the ADA; Global Telehealth Australia; Latin American Summit on Diabetes; 11<sup>th</sup> International Congress of behavioral medicine; The PCOS Alliance Workshop; Diabetes Conference in Mexico City; Consortium of University of Global Health; Emory Global Health Seminar; Australian and New Zealand Obesity Society annual scientific meeting; 27<sup>th</sup> Annual Convention of Diabetes Philippines and 6<sup>th</sup> Course on Diabetes and Vascular Disease; Research Society for the Study of diabetes in India; International Latin American Association of Diabetes; Congrès de la Société Francophone Africaine de Diabétologie; DFID World Bank workshop; Australasian Menopause Society; Australian Society for Medical Research.

**2011:** 6<sup>èmes</sup> Journée Internationales d’Endocrinologie de Cotonou; Congrès annuel de la Société Francophone du Diabète; The Society of Behavioral Medicine 32<sup>nd</sup> Annual meeting and scientific sessions; 48<sup>th</sup> Annual Convention of the Psychological Association of the Philippines (PAP), Iloilo City, Philippines; “Forum Medizin 21”, a congress for General Practice and Family Medicine in Salzburg; ÖDG Congress (Austrian Diabetes Association); World Diabetes Congress, Dubai (UAE), December; Australian Diabetes in Pregnancy Society; Endocrine Society Australia.

**2012:** Diabetes, A World-Wide Challenge; European Congress of Obesity; Endo 2012; 72<sup>nd</sup> scientific sessions of the American Diabetes Association; Australian Society for Psychosocial Obstetrics and Gynaecology; 1<sup>st</sup> Scientific Sessions of the African Diabetes Congress; 8<sup>th</sup> Annual Conference of RSSDI Delhi Chapter Meeting; EASD 2012, Berlin (Germany); Australian and New Zealand Obesity Society annual Scientific meeting, Auckland (New Zealand); 2<sup>nd</sup> Global symposium on health systems research, Beijing (China); 7<sup>th</sup> World Congress for the prevention of diabetes and its complications; Research Society for the Study of Diabetes in India, Chennai (India); West African Health Organization (WAHO); 30<sup>th</sup> Brazilian Congress of Endocrinology & Metabolism; EbM Congress of the German Network for Evidence-based Medicine; Latin America Course on Prevention of type 2 diabetes.

**2013:** Christian Medical Dental Association Continuing Education conference; 7<sup>th</sup> International DIP Symposium; Diabetes UK Annual Professional Conference, Manchester (UK); Congress of the french speaking society of diabetes; 8<sup>th</sup> semi-annual Global Health Centers of Excellence Steering Committee Meeting; International Association for the Study of Obesity; 19<sup>th</sup> Congreso Venezolano de Medicina Interna, Caracas (Venezuela), May 2013; 73<sup>rd</sup> Scientific Sessions of the ADA; 4<sup>th</sup> Congresso Brasileiro de ciencias sociais e humanas em saude; 16<sup>th</sup> South African National Family Practitioners Conference; Australian Diabetes in Pregnancy Society annual Scientific meeting; Continuing Medical Education Courses on Diabetes Peer Support; 2<sup>nd</sup> Annual Asia-pacific conference of diabetes education; 49<sup>th</sup> EASD; 47 Kongress für Allgemeinmedizin un Familienmedizin; Joint Uniting Streams – NVTG Symposium; 2<sup>nd</sup> Congresso online de gestao, educacao e promocao a saude; 2<sup>nd</sup> Congresso Brasileiro de Politica, Planejamento e Gestao em Saude; Society for the Study of Diabetes in India; 21<sup>st</sup> Annual Scientific Meeting of the Indian Society of Hypertension; World Diabetes Congress; 7<sup>th</sup> Colombian Diabetes Congress.

**2014:** 2<sup>nd</sup> African Diabetes Congress; Christian Medical Dental Association Continuing Education conference; EbM Congress of the German Network for evidence-based medicine; Philippines Society of Endocrinology, Plenary lecture; National Heart, Lung and Blood Institute meeting; World Heart Federation/World Congress of Cardiology; 21<sup>st</sup> European Congress on Obesity; 5<sup>th</sup> Annual Global Health Conference; 74<sup>rd</sup> Scientific Sessions of the ADA; Symposium International de Libreville sur le Diabète en Afrique; 17<sup>th</sup> South African National Family Practitioners Conference; Australian Diabetes in Pregnancy Society/Society of Obstetric Medicine of Australia and New Zealand Annual Scientific meeting; Annual Convention of the American Association for Clinical Endocrinology, Philippine chapter; 2<sup>nd</sup> Annual International Diabetes Self-management Education meeting; Thailand Non Communicable Disease Forum; EASD 2014; 9<sup>th</sup> Congresso Brasileiro de Epidemiologia,; "The diabetic epidemic: new education tools"; 2<sup>nd</sup> regional Council of South East Asia Region; 8<sup>th</sup> Thailand Congress of Nutrition; Association of Third World Studies Annual meetings; 17<sup>th</sup> Canadian Diabetes Association/Canadian Society of Endocrinology and Metabolism Annual meeting; 3<sup>rd</sup> Global symposium on health systems research; Chinese Diabetes Society, 18<sup>th</sup> Scientific Meeting; 10<sup>th</sup> IDF WPR congress, Singapore.

**2015:** World Congress on Public Health; The University of Ottawa Dietetic symposium, Ottawa; 7<sup>th</sup> International Conference on Health Issues and Arab Communities; Arab Diabetes Prevention Summit; 4<sup>th</sup> WONCA Africa Regional Conference; 12<sup>th</sup> China Nutrition Science Congress; Public Health Nutrition Symposium; Joint Conference in Medical Sciences 2015; 76<sup>th</sup> Scientific Sessions of the ADA; Thailand Non Communicable Disease Forum; Basic training course for thai diabetes educators; 49. Kongress für Allgemeinmedizin und Familienmedizin; Chinese Forum on Diabetic Foot and Related Disease; North American Primary Care Research Group 2015 annual meeting; 1<sup>st</sup> International Conference of Primary Care and Public Health; 3<sup>rd</sup> International Congress of Person-Centered Medicine; Association of Third World Studies Annual meetings; World Diabetes Congress



More information is available at:  
[www.idf.org/bridges/publications](http://www.idf.org/bridges/publications)





# EXAMPLE OF GOOD PRACTICES





# Pathway to health: a lifestyle intervention to prevent diabetes

## INSTITUTIONS INVOLVED

Shanxi Evergreen Service (China),  
Department of Health and Kinesiology,  
University of Texas (USA)

## INVESTIGATORS

Mark Strand (markstrand3@gmail.com),  
Zenong Yin, Meizi He, Henry Lynn,  
Judith Lee Perry

## LOCATION

Yuci District, Jinzhong Prefecture,  
Shanxi Province, People's Republic  
of China

## BRIDGES GRANT FUNDING

USD 65,000

## DATES

July 2012 to December 2014

## KEY CHALLENGES AND SOLUTIONS IMPLEMENTED

### • Recruitment was difficult.

**SOLUTION:** Recruitment was improved when participants and the research team recruited others by word of mouth. This shows the utility of China's collective society. Women were inclined to join an activity in which someone they knew and trusted was already participating, but reluctant to join an activity as a lone individual.

### • Quality control in community-based translational research

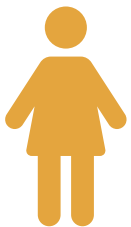
**SOLUTION:** The team was comprised of individuals who already had years of experience in education and project management. Therefore, it is unclear whether a less experienced group of trainers could deliver the programme with the same efficacy as achieved in this study. It is also the case that translational research frequently relies on clinical laboratory equipment. This introduces the concern about accuracy and reliability, so validation of lab results needs to be demonstrated using external equipment.

### • Attendance started high, but declined over time

**SOLUTION:** The team found that when a morning and afternoon session was offered at the same location, attendance rates were as high as 85%. Attendance was improved by other methods, such as sending text message reminders each week, calling if they did not come to class, offering two sessions at the same location, and offering opportunities to make up a missed session.

## KEY TRANSFERABLE LESSONS

- The intervention group grasped more basic knowledge than the comparison group as evidenced by the post-test scores, but this did not result in the intervention group reducing their HbA<sub>1c</sub> by a significantly greater amount than the comparison group. It appears that **content was less important than process**, and the essential components were a group goal and social support.
- **Having skilled teachers and facilitators** of small group discussions is essential to the success of the project. Some professionals tend to answer all the questions with lectures rather than letting the attendees discuss and solve their own problems using the knowledge presented in the classes. Training and practice in leading small groups, specifically how to ask good questions to guide attendees to work together to solve their own individual problems, is essential for all team members.
- When conducting translational research, cultural translation of the curriculum is more important than linguistic translation. It is necessary to **understand the participants' diet, customs and habits** before starting to adjust the original programme to fit the participants.



# 184

WOMEN BETWEEN  
THE AGES OF 35  
AND 65 ENROLLED



# 139

EDUCATION  
SESSIONS HELD



# 24.3%

OF PARTICIPANTS  
MET THE PROGRAMME  
GOAL OF A WEIGHT  
LOSS OF AT LEAST 5%



# A translational randomised trial of a culturally specific lifestyle intervention for diabetes prevention in India



## INSTITUTIONS INVOLVED

Rollins School of Public Health, Emory University (USA), Madras Diabetes Research Foundation (India)

## INVESTIGATORS

Venkat Narayan, V. Mohan, Ranjani Harish, Mary Beth Weber (mbweber@emory.edu)

## LOCATION

Chennai, India

## BRIDGES GRANT FUNDING

USD 398,674

## DATES

January 2008 to December 2011

## KEY ACHIEVEMENTS

- Diabetes was prevented or delayed in over a third of the intervention participants.
- This study is the first to test the effectiveness of expert recommendations for diabetes prevention, namely lifestyle change education followed by metformin when lifestyle alone is not sufficient to reduce risk and apply diabetes prevention efforts to individuals across the pre-diabetes spectrum.
- The intervention demonstrated that diabetes prevention programmes could translate to a community-based programme in a low- and middle-income country, like India, where the need for diabetes prevention is greatest.

## KEY CHALLENGES FACED AND SOLUTIONS IMPLEMENTED

- **Women were more reluctant to join the study than men because of the difficulty in travelling to the study centre and feelings that participation would be too difficult due to responsibilities in the home.**

*SOLUTION:* The team offered free transportation to the centre and conducted study testing at the women's homes, and the team also worked with other family members to provide peer support and encouragement for participation.

- **Keeping participants engaged was difficult.**

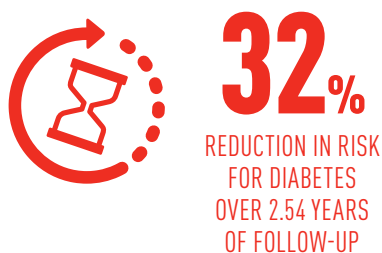
*SOLUTION:* The team maintained contact with participants through phone calls, emails and a study listserv; these efforts paid off, resulting in a very low loss to follow-up.

- **Conducting research with an international study team can be difficult – each country has its own work culture, traditions, and expectations.**

*SOLUTION:* Open communication, face-to-face interaction, and frequent team calls were vital to the success of the project and our collaboration.

## KEY TRANSFERABLE LESSONS

- When working with investigators in multiple countries, **truly strive for collaboration**. This will result in better, more open relationships and a more successful, culturally appropriate project. It also lays the groundwork for future projects.
- **Include both quantitative and qualitative assessments** of translational research projects to better understand the effectiveness, cost-effectiveness, and acceptability of the intervention. This information is vital for further dissemination of proven programmes.
- Maintain **frequent communication with study participants** to keep losses to follow-up low and interest high.



# “Diabrisk-SL”; Evaluation of Risk Factors in the development of Type 2 Diabetes and Cardiovascular disease in a Young Urban Population in Sri Lanka

## INSTITUTIONS INVOLVED

Diabetes Association of Sri Lanka,  
King’s College London (UK)

## INVESTIGATORS

Mahen Wijesuriya (amrit@slt.lk),  
Giancarlo Viberti (giancarlo.viberti@kcl.ac.uk)

## LOCATION

Colombo, Sri Lanka

## BRIDGES GRANT FUNDING

USD 399,670

## DATES

January 2008 to June 2011: Funded by  
BRIDGES and DASL

July 2011 to April 2013: Funded by DASL

## KEY ACHIEVEMENTS

- A chapter on diabetes has been incorporated into the health and physical education text books of all national school children in grade 7 by the Ministry of Education in close collaboration with the Principal Investigator.
- The team initiated a wellness programme, i.e. a wellness clinic and wellness activities (yoga and Zumba), at the National Diabetes Centre (DASL) as a translational activity.
- The project has raised awareness about the need for primary prevention through the identification of risk factors and lifestyle modification (LSM), and is continuing to translate the outcome of Diabrisk-SL to the general public through a regular diabetes screening programme.

## KEY CHALLENGES FACED AND SOLUTIONS IMPLEMENTED

- **Participant drop-out rate during the period of the study for various reasons, irrespective of repeated overtures to attend**  
*SOLUTION:* Increased communication through telephone conversations per participant per appointment (5-10 times), text messages and telegrams (to people who could not be contacted by phone).
- **Being normal young people, the participants did not realise the gravity of the illness or the value of risk assessment and long-term LSM as means of protecting their health.**  
*SOLUTION:* Travel reimbursement and provision of a healthy snack and other promotional items (caps, bags, t-shirts, calendars, etc.) as incentives for participants.
- **Academic interests and work schedules in places of employment that prevented some people from attending**  
*SOLUTION:* Carried out the biochemical and physical assessments and LSM advice at the respective workplaces, schools and universities to improve attendance.



# 23,296

HEALTHY, YOUNG, URBAN SUBJECTS (5-40 YEARS) SCREENED FOR 2 OR MORE RISK FACTORS (INCREASED BMI, INCREASED WAIST CIRCUMFERENCE, FIRST-DEGREE FAMILY HISTORY OF T2DM, AND PHYSICAL INACTIVITY)



# 4682

SUBJECTS RANDOMISED (3685 WERE ELIGIBLE FOR ANALYSIS)



# 26%

RELATIVE RISK REDUCTION IN NEW ONSET T2DM AND 18% IGT WAS ACHIEVED WITH ONE ON ONE INTENSIVE LIFESTYLE MODIFICATION OVER 4 YEARS.

## KEY TRANSFERABLE LESSONS

- A study of this nature of young, normal subjects is time consuming, difficult and given to failure unless followed up very closely. **Persistent attention is necessary** and occasional interviews with parents should be conducted to ensure success.
- **One-on-one interviews are recommended** as they allow for a personalised and private interview, which is especially important when talking about mental issues (stress) and those related to schools, peers and parents.
- Early development of pre-diabetes, especially between the ages of 10 and 20, has been carefully noted. It is a cause for great concern and needs **corrective strategies**.

# A community-based diabetes prevention programme in Thai population

## INSTITUTIONS INVOLVED

School of Nursing, Walailak University; Faculty of Medicine, Ramathibodi Hospital, Mahidol University; Department of Medical Services, Ministry of Public Health; The Knowledge Management Institute (Thailand)

## INVESTIGATORS

Valla Tantayotai (tvalla@wu.ac.th, vallatan@yahoo.com), Wichai Aekplakorn, Somkiat Potisat, Thawat Matte

## LOCATION

This project took place in four geographical regions of Thailand: the central (Nakhon Nayok and Samut Sakhon provinces); the north (Phitsanulok and Phrae provinces); the northeast (Nakhon Ratchasima and Nakhon Phanom provinces); the south (Nakhon Si Thammarat and Trang provinces)

## BRIDGES GRANT FUNDING

USD 65,000

## DATES

August 2012 to January 2015



**11,449**  
PEOPLE SCREENED  
WITH 75G OGTT



**1,926**  
PARTICIPANTS  
INCLUDED IN THE STUDY



**13**  
AFTER ONE YEAR  
OF INTERVENTION,  
FOR EVERY 13  
PARTICIPANTS, ONE  
CASE OF DIABETES  
WOULD BE PREVENTED.

## KEY ACHIEVEMENTS

- The intervention program received the positive feedback from the participants that the group-based activities were informative and practical. They were engaged in hands-on experience from which they have learned that lifestyle change begins from a simple action.
- The incidence of diabetes at Month 6 of the Control Group (CG) was significantly higher than that of Intervention Group (IG) (14.70% vs. 9.18%,  $P < 0.001$ ) with a relative risk of 0.62 (95%CI 0.48, 0.81). At Month 12 incidence of diabetes in the CG increased to 17.67% compared to 9.91% in the IG ( $P < 0.001$ ) with a relative risk of 0.56 (95%CI 0.42, 0.75).
- At Month 6, the proportion of individuals reverting to normoglycemia was significantly higher in the IG than in the CG (39.11% vs. 28.26%,  $P < 0.001$ ) and the corresponding percentage was also higher at Month 12 with 44.67% and 34.48%, respectively.

## KEY CHALLENGES AND SOLUTIONS IMPLEMENTED

- **Researchers are people on the job, so they are also loaded with their many routine tasks. Most of research activities had to be completed outside office hours.**  
*SOLUTION:* Providing information on the project status to get support from administrators in terms of time, personnel and money is highly significant.
- **The project took place in eight provinces at different start periods.**  
*SOLUTION:* An attentive, caring and supportive coordinator who can manage the project following the timetable set is needed.
- **To follow up on the participants every six months is not an easy task.**  
*SOLUTION:* The activities organized for them should be designed to enhance group attachment, self-awareness, problem-solving and decision-making skills as well as enjoyment. For some cases that missed the appointment, home visits are necessary.

## KEY TRANSFERABLE LESSONS

- Successful implementation of a lifestyle intervention programme needs **multidisciplinary approach**, collaboration of health care professionals who have different expertise and community involvement.
- **Group-based activities** in which participants learn from their own and other group member experiences are more beneficial than traditional ones in which participants only passively follow health care professionals. Concrete indicators of change are necessary for evaluation of change.
- **Visiting the research sites by the core team** and meeting of all site representatives enable successful follow-up on work.

# Lifestyle intervention among overweight and obese schoolchildren: a pre- post-quasi experimental study with control group in Sousse, Tunisia

## INSTITUTIONS INVOLVED

University Hospital Farhat Hached,  
Sousse (Tunisia)

## INVESTIGATORS

Hassen Ghannem (Hassen.Ghannem@rns.tn), Jihene Maatoug, Imed Harrabi, Slim Slama, Nathalie Farpour-Lambert

## LOCATION

Sousse, Tunisia

## BRIDGES GRANT FUNDING

USD 64,925

## DATES

September 2012 to September 2014

## KEY ACHIEVEMENTS

- The body mass index Z score decreased significantly from pre-intervention to post-intervention and from post-intervention to the follow-up meeting four months after the end of the intervention in the IG.
- Prevalence of metabolic syndrome in the IG decreased from 7.2% to 1.8% among all participants ( $p=0.10$ ). However, it increased from 4% to 7.9% in the control group.
- Blood glucose and insulin levels decreased in the intervention group and increased significantly in the control group. Triglyceride, total cholesterol and LDL cholesterol decreased significantly in the intervention group. In the control group, only LDL cholesterol decreased significantly.

## KEY CHALLENGES AND SOLUTIONS IMPLEMENTED

- **Low participation rate despite the interest of participants in the proposed activities**  
*SOLUTION:* The team contacted children several times and adapted our activities to their schedules.
- **The infrastructure was inadequate for practicing physical activity. The school environment presents a high risk for obesity, where physical activity is minimal, at the expense of school sedentary activities, which last 8 hours a day. Children in Tunisia do not have the time, equipment or support to adopt healthy lifestyles.**  
*SOLUTION:* This type of intervention introduces a new momentum and school life that is not only focused on education, but also on promoting children's health.

## KEY TRANSFERABLE LESSONS

- This project began with efforts to introduce a new culture of health management in schools, and to **increase awareness of the importance of obesity prevention and treatment. A lifestyle intervention in schools is feasible** and could be effective to help health professionals in decreasing obesity and preventing its complications.
- The implication and **collaboration between the Ministry of Health and the Ministry of Education** is needed to sustain obesity prevention and management in schools.
- For better results, **recruit motivated participants only** or evaluate motivation of participants and use motivational interviewing and weight-loss programmes for participants.



**736**  
OVERWEIGHT AND  
OBESE SCHOOL  
CHILDREN SCREENED



**69.7%**  
OF PARTICIPANTS IN  
THE INTERVENTION  
GROUP (IG) SAID THAT  
THEY WANTED TO  
LOSE WEIGHT



**89.6%**  
OF PARTICIPANTS  
IN THE IG SAID THAT  
THEY WILL CONTINUE  
THE PROGRAMME  
BY THEMSELVES

# Programme for the detection and prevention of diabetes in people at high risk in a medium-size city in Vietnam

## INSTITUTIONS INVOLVED

National hospital of endocrinology (Vietnam)

## INVESTIGATORS

Le Quang Toan (letoannoitiet@yahoo.com)

## LOCATION

Bac Ninh City, Vietnam

## BRIDGES GRANT FUNDING

USD 60,980

## DATES

July 2008 to June 2010

## KEY ACHIEVEMENTS

- Weight loss equal to 5% or above the initial weight was achieved in 18.2% and 20.6% of the participants after three and six months, respectively. Such weight loss was achieved in 22.7% and 25.7% of the overweight or obese participants at baseline after three and six months, respectively.
- The percentage of participants reaching 150 or more minutes of moderate intensity physical activity per week increased from 78.5% at the baseline to 86.8% and 88.7% after three and six months, respectively.
- A total of 72 group education sessions were given to participants by the study staff in collaboration with the local city ward health station workers. The participants were divided into 8 groups of 15 to 17 people. Each group received 9 weekly consecutive group education sessions.

## KEY CHALLENGES AND SOLUTIONS IMPLEMENTED

- **The initial lack of participation of people at risk of diabetes in screening tests and of people with pre-diabetes in the prevention programme were the first important challenges for the project.**

**SOLUTION:** The team handed out leaflets and broadcast radio messages that convinced people to do screening tests and participate in the programme. The local ward health station workers and non-medical collaborators also convinced and encouraged people to do so.

- **Participants started to lose motivation to join the education sessions.**

**SOLUTION:** In order to reduce the drop-out rate, the team got the enthusiastic assistance from local ward health station staff and non-medical volunteer collaborators who regularly reminded, persuaded and encouraged the participants, in person and/or by telephone, to keep participating in the education programme.

- **How to get participants with pre-diabetes to follow the appropriate diet through group education sessions.**

**SOLUTION:** The team provided the participants with simple ways to assess their nutritional status using a BMI chart, to choose the right foods from lists of food categories, and to make their own meals by adapting sample recipes and food exchange lists.

## KEY TRANSFERABLE LESSONS

- **Local health workers and non-medical collaborators** are an essential part of community-based diabetes intervention programmes. They play an important role in motivating and encouraging people to participate and in keeping the participants in the programmes.
- The group education sessions should be **more interactive** and provide simple instructions on lifestyle modification so that people can understand them and follow them easily.
- **Group education sessions** on lifestyle modification are effective ways to prevent diabetes among people with pre-diabetes in community-based settings.



9,550

ADULTS SCREENED USING A DIABETES RISK QUESTIONNAIRE FILLED OUT BY THE PARTICIPANTS THEMSELVES



2,552

PEOPLE AT RISK OF DIABETES SCREENED BY TWO CONSECUTIVE ORAL GLUCOSE TOLERANCE TESTS WITH CAPILLARY AND THEN PLASMA VENOUS GLUCOSE MEASUREMENT, RESPECTIVELY



55.7%

PARTICIPANTS REVERTED TO NORMAL GLUCOSE AFTER SIX MONTHS

# Mobile phone diabetes self-management support: a multi country analysis of its implementation in existing diabetes self-management education programmes in the Democratic Republic of Congo, Cambodia and the Philippines

## INSTITUTIONS INVOLVED

Institute of Tropical Medicine, Belgium;  
Memisa, Democratic Republic of  
Congo; MoPoTsyo, Cambodia; Veterans  
Memorial Medical Center, Philippines

## INVESTIGATORS

Josefien van Olmen (jvanolmen@itg.be),  
Maurits van Pelt, Jean Clovis Kalobu,  
Grace Marie Ku, Wim Van Damme,  
Kristien Van Acker, Balthazar Villaraza,  
Dominique Dubourg, Guy Kegels

## LOCATION

Kinshasa, Democratic Republic of Congo  
(DRC); Takeo, Banteay Meanchey, Kompong  
Speu and Kompong Thom, Cambodia; Quezon  
City, City of Batac, Pagudpud, Philippines

## BRIDGES GRANT FUNDING

USD 380,265

## DATES

October 2011 to April 2015

## KEY ACHIEVEMENTS

- Through the project, the team succeeded in demonstrating the feasibility of implementing the delivery of text messages for diabetes self-management support for two entire years in a low-income setting.
- Thanks to the project, the pre-existing diabetes self-management education programme was reinforced by enhancing the quality and by linking it with the messages from the text intervention.
- The research capacity in all three countries has been developed. The staff has been exposed to international exchanges, they have learned about research methods, and they have learned to reflect upon the results, including any potential project implications.

## KEY TRANSFERABLE LESSONS

- Implementation of this type of intervention meets constraints at every step in the process, impacting its potential. There are technological barriers, contextual constraints, such as the commercialisation of the mobile phone market and participant barriers. **Key factors for successful implementation** are technological adoption to tailor the intervention in more sophisticated ways, awareness of the telephone market in the context and the possibility for contract renegotiations in a rapidly changing context; awareness of people's telephone behaviour.
- **The spin-off of the intervention was greater than the mere message content.** The phone turned into a more common mode of communication; patients and their care providers reported that they increasingly used the phone to discuss diabetes matters.
- **Accessibility of phone** (and thus receiving text messages) and **problems directly linked to the phones** (credit depleted, dead phones, lost/broken phones, didn't bring their phone with, etc.) can become major issues. It is important to ensure that participants are fully aware of the importance of keeping the phone charged and accessible. Some problems also need to be discussed and renegotiated with the telephone providers.



**958**  
PARTICIPANTS  
COMPLETED FOLLOW-UP



**24**  
AVERAGE NUMBER OF  
EDUCATIONAL TEXT  
MESSAGES SENT OUT  
PER MONTH



**63.6%**  
IMPROVEMENT/  
STABILISATION OF HbA1c  
AFTER 1 YEAR IN THE IG  
IN THE PHILIPPINES

# Promotion of a community-hospital integrated model for diabetes management in Beijing



## INSTITUTIONS INVOLVED

Beijing Tongren Hospital, affiliated to Capital Medical University (China), Beijing Institute of Ophthalmology, Jinsong Community Healthcare Centre, Cuigezhuang Community Healthcare Centre, Xijiekou Community Healthcare Centre, and a total of 15 Community Healthcare Centres in Beijing

## INVESTIGATORS

Mingxia Yuan (yuanmx@vip.126.com), Shen Yuan, Hanjing Fu, Liangxiang Zhu, Gang Wan, Liang Xu, Jiandong Zhang, Yujie Lv, Yuling Li, Jinkui Yang

## LOCATION

Beijing, People's Republic of China

## BRIDGES GRANT FUNDING

USD 65,000

## DATES

July 2012 to July 2014

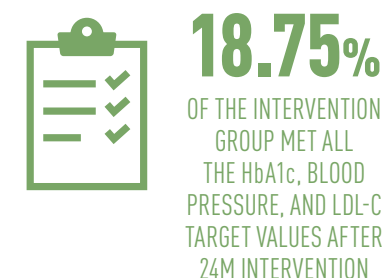
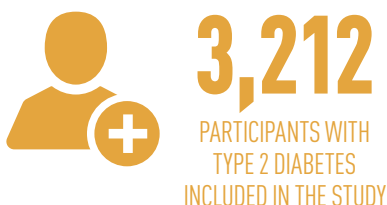
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## KEY ACHIEVEMENTS

- A community-based care system for T2DM in Beijing communities was well developed. The collaborative team was well-established and organised, and consisted of 15 experts from relevant professional fields including endocrinology, cardiology, ophthalmology, general practice, nutrition, epidemiology and medical statistics, and a further 15 endocrinologists from tertiary hospitals, and 120 GPs. The GPs would continue to be supported and guided by ongoing contact with specialists based on the connections established in the project.
- For the primary outcome – the proportion of participants in the intervention group reaching an optimal control of glycaemia, blood pressure and lipids showed significant increase compared to the control group and the baseline, as well as reaching the original project goal, by 24M intervention. Optimal target control of glycaemia, blood pressure and lipids could be expected to significantly reduce the risk of chronic complications and thus improve the quality of life. A large database could be retained for further research.
- The community GPs obviously improved their knowledge and skills with expertise and experience in diabetes management through systematic training, especially on guidelines implementation, which could benefit the participants in everyday clinical practice. The participants benefited from the project with knowledge about diabetes, management skills on diet, exercise, self-monitoring and behavioural changes, and mutual information from peer support groups, which helps them maintain optimal control of their metabolic-risk factors.

## KEY CHALLENGES AND SOLUTIONS IMPLEMENTED

- **Difficulty in keeping the participants in each follow-up visit.**  
*SOLUTION:* The team tried their best to recover the lost participants, including communicating with the participants' children, or finishing the follow-up interview in the clinic near their new house, or even going to their home.
- **Follow up of study process.**  
*SOLUTION:* Researcher's meeting was well scheduled twice a year for study process supervision. At these meetings, the updated follow-up data was reported, as well as the endpoint events summary. The problems encountered were timely discussed and settled, and the requests for the project were emphasised.
- **Ensure the CRF (Case Report Form) integrity and data quality.**  
*SOLUTION:* The supervision team consisted of four trained specialists, who checked the study progress and data records in every community centre at least twice a year. The reports of data quality score and ranking were issued at each researcher's meeting.



# Using community theatre to promote diabetes education and prevention in Fiji



## INSTITUTIONS INVOLVED

University of the South Pacific, Fiji;  
Georgia Southwestern State University,  
USA

## INVESTIGATORS

Philip Szmedra (philip.szmedra@gsw.edu), Anand Chand, Cathy Rozmus, Thomas de Titta

## LOCATION

Labasa, Vanua Levu, and Ba and Suva, VitiLevu, Fiji

## BRIDGES GRANT FUNDING

USD 65,000

## DATES

May 2013 to December 2014

## KEY ACHIEVEMENTS

- To demonstrate that **community theatre can be an effective educational tool** to help improve HbA1c levels in people with diabetes. Pacific cultures are especially sensitive and open to the performing arts, including dance, song, and theatre. Using theatre to transmit diabetes education in a developing nation in which traditional educational methods have proved unsuccessful may be the tool that finally arrests the rampant spread of the disease in the Pacific.
- **Established a permanent amateur acting troupe**, calling themselves Cheenikum-Sukalailai, which is a play on the word for sugar in the Hindi and Fijian languages. Soliciting the necessary funding for the group to continue our foundational work is the next step.
- **Heightened awareness** in the Fiji Ministry of Health to the fact that current methods of diabetes education are failing to arrest the epidemic of diabetes that threatens the health and welfare of the people of Fiji. The team hopes to petition the Ministry of Health to provide financial resources to continue the work they have initiated and to eventually expand the project to other cities and towns in Fiji and in other island states in the Pacific.

## KEY TRANSFERABLE LESSONS

- **Provide a significant financial incentive** for potential participants at the completion of the project, while offering smaller sums during the project to make participation worthwhile.
- House-project funding in one account with one individual or financial office responsible for funding disbursement. The financial audit at project completion becomes exponentially easier if all information regarding project expenditures is in **one central location**.
- **Develop a collaborative relationship with medical staff** at the hospital or clinic in which the project takes place. Rather than imposing on a busy clinic day, the relationships that the team cultivated with the staff at both the Labasa Hospital and the CWMH in Suva made their clinic visits at both facilities events that generated a heightened interest in diabetes education and how it could be improved in Fiji.



# 40.6%

IMPROVEMENT IN AVERAGE HbA1c LEVELS IN THE INTERVENTION GROUP (FROM 13.04 AT THE BASELINE MEASUREMENT IN MAY 2013 TO 7.74 IN APRIL 2015)



# 18

ACTORS INVOLVED IN THE PROJECT



# 60

PARTICIPANTS OVER A PERIOD OF 23 MONTHS



# Effectiveness of a group diabetes education programme using motivational interviewing in underserved communities in South Africa

## INSTITUTIONS INVOLVED

Stellenbosch University; Chronic Diseases Initiative for Africa; Department of Health, Provincial Government of the Western Cape, (all South Africa)

## INVESTIGATORS

Robert Mash (rm@sun.ac.za), Naomi Levitt, Krisela Steyn, Merrick Zwarenstein, Stephen Rollnick

## LOCATION

Cape Town, South Africa

## BRIDGES GRANT FUNDING

USD 65,000

## DATES

April 2010 to March 2012

## KEY ACHIEVEMENTS

- This project developed a structured group diabetes education programme customised for the South African context. In a recent audit of diabetes education in South Africa, this was the only such programme identified in primary care.
- The District Health Services in the Western Cape have started to implement the programme in primary care under the title "Diabetes Lifestyle Education Collaboration and Action (D-LECA)". All healthcare promoters in Cape Town have now been trained.
- This research has led to the concept of group education for non-communicable diseases being included in a policy brief on behavioural change counselling that was sent to the National Department of Health in South Africa.
- 1570 participants in the study (860 patients in the control group and 710 in the intervention group).

## KEY TRANSFERABLE LESSONS

- Do not **underestimate the costs** involved in a pragmatic, clustered, randomised controlled trial. The team had to look for additional funds to complete the study.
- In our context, competent temporary research assistants are difficult to find and often move on if they get a more permanent job offer. **Allow enough time to recruit a stable team of field workers.**
- Recruitment of patients and attendance might have been better if the chronic care staff at the facilities were more engaged with the project. **Allow enough time to develop good relationships with the local healthcare workers** and to ensure that they are well informed and motivated to assist where possible and/or necessary.



USD **1862**

INCREMENTAL COST-EFFECTIVENESS RATIO FOR EACH QUALITY ADJUSTED LIFE YEAR GAINED FOR GROUP DIABETES EDUCATION DELIVERED BY MID-LEVEL HEALTH WORKERS IN SOUTH AFRICA, A MIDDLE-INCOME COUNTRY SETTING



**-4.65** MMHG

REDUCTION IN SYSTOLIC BLOOD PRESSURE 1 YEAR LATER AMONG THOSE THAT RECEIVED THE GROUP DIABETES EDUCATION

# Medical lifestyle centre community healthy eating initiative to improve diabetes outcomes

## INSTITUTIONS INVOLVED

Cook County Health and Hospitals System, Chicago (USA)

## INVESTIGATORS

Leon Fogelfeld  
(lfogelfeld@cookcountyhhs.org)

## LOCATION

Chicago, USA

## BRIDGES GRANT FUNDING

USD 65,000

## DATES

September 2011 to November 2014

## KEY ACHIEVEMENTS

- At six months, there was a statistically significant decline in HbA<sub>1c</sub> in the intervention groups compared to baseline ( $8.6 \pm 1.8$  vs  $9.2 \pm 1.7$ ,  $p=0.018$ ) while the control group did not have a significant decline in A<sub>1c</sub>.
- For those in the intervention who completed three or more sessions, there was a greater decline in A<sub>1c</sub> at six months ( $8.0 \pm 1.7$  vs  $9.2 \pm 1.7$ ,  $p=0.006$ ).
- For those in the intervention who completed three or more sessions, there was a statistically significant difference in those who lost more than 5 lbs compared to baseline than those who did not participate ( $p=0.038$ ).


## KEY CHALLENGES AND SOLUTIONS IMPLEMENTED

- **Recruitment was low and difficult.**  
*SOLUTION:* Inclusion criteria were modified to also include people on insulin therapy and not only those on oral medications.
- **Class attendance was an issue with limited number of participants for each session and participants missing some sessions.**  
*SOLUTION:* The content in classes was frequently reinforced to incorporate content of the missed sessions.
- **The consent process included a food frequency questionnaire that was too lengthy and limited the return of consent forms.**  
*SOLUTION:* The team included shorter dietary assessment screeners such as the Block fruit/vegetable/fiber screener.

## KEY TRANSFERABLE LESSONS

- Simplify and streamline data collected at consent to improve consent rates.
- **Allow make-up classes** to accommodate scheduling issues.
- Focus exclusively on **improved glycemic control**.

 **1339**  
PERSONS SCREENED

 **68**  
PARTICIPANTS WITH  
BMI >30 KG/M<sup>2</sup>  
AND AN HBA<sub>1c</sub> > 7.0%

 **1**  
GROCERY STORE TOUR  
PER INTERVENTION  
GROUP AT THE END OF  
THE INTERVENTION

# Project SEED: support, education and evaluation

## in diabetes

### INSTITUTIONS INVOLVED

University of Pittsburgh and University of Michigan (both USA)

### INVESTIGATORS

Janice Zgibor (edcjan@pitt.edu),  
Gretchen Piatt (piattg@umich.edu)

### LOCATION

Pittsburgh, USA

### BRIDGES GRANT FUNDING

USD 396,651

### DATES

October 2010 to September 2013

### KEY ACHIEVEMENTS

- Marked declines were observed in HbA<sub>1c</sub> in both the intervention and control groups and improvements were sustained over time. These data demonstrate that peer leader diabetes self-management support is as effective as traditional self-management support provided by diabetes educators in helping participants to maintain glycaemic control in the long term. The same pattern was observed for the proportion of participants who self-monitor their blood glucose. Significant improvements were observed across all time points in both groups.
- Differences between the intervention and control group were observed in the psychosocial outcomes (diabetes distress, quality of life, and the patient assessment of chronic illness conditions). In these measures, improvements occurred in both groups, but the intervention group consistently improved over time in these measures and sustained this improvement. This pattern is most likely due to the integration of peer leader support in the intervention group.
- During this project, the team 1) implemented a peer leader “train the trainer” model that can be sustained and transferred to other organisations, 2) engaged peer leaders in group DSME and DSMS with positive feedback from participants (anecdotal), implemented a rigorous research study protocol in the primary care setting, and successfully collaborated with community physicians to implement a peer support model in their practices.

### KEY TRANSFERABLE LESSONS

- One lesson learned was that the team needed to use a **community-based recruitment strategy**, rather than one that relies on the infrastructure of the primary care practice. This is important as US human subject regulations and privacy laws limit investigator access to potential patient records. A multi-pronged approach to recruitment needs to be considered in any future studies.
- An **existing infrastructure** to support DSME in the community, health system, or primary care facilitates the sustainability of DSMS model.
- While funds were limited, the team observed that physicians adopted the approaches used by the nurses and peer leaders, thus **sustaining this higher level of treatment intensification**. Continued attempts to engage local hospital-based diabetes educators to work in primary care practices and provide on-site diabetes education and support are being made and are slowly being implemented by the health system.



**4,907**  
PEOPLE CONTACTED  
TO TAKE PART  
IN THE STUDY



**221**  
INDIVIDUALS OVER  
THE AGE OF 18  
AND WITH DIABETES  
ENROLLED  
IN THE STUDY



**-0.15%**  
SUSTAINED  
REDUCTION IN HbA<sub>1c</sub>  
FOLLOWING PEER  
LEADER DIABETES  
SELF-MANAGEMENT  
SUPPORT (DSMS)  
(P=0.08)



# Family Defeating Diabetes: a Canadian intervention for family-centred diabetes prevention following gestational diabetes in London, Calgary and Victoria

## INSTITUTIONS INVOLVED

Lawson Research Institute, London, Ontario, The University of Calgary, The University of Victoria (all Canada)

## INVESTIGATORS

Ruth McManus (Ruth.McManus@sjhc.london.on.ca), Lois Donovan, David Miller

## LOCATION

London, Calgary and Victoria, Canada

## BRIDGES GRANT FUNDING

USD 385,979

## DATES

July 2011 – March 31 2015

## KEY ACHIEVEMENTS

- It was possible to recruit family members (37%; almost invariably husbands) who were interested in participating in family-based diabetes prevention intervention; 51% of these individuals remained in the programme for 12 months.
- More than 50% of the women who had agreed to participate remained engaged in a postpartum healthy living programme for a full 12 months, even though they were busy mothers. This number included the control group, who only received the prevailing diabetes prevention brochure for postpartum women with GDM.
- Equal numbers of women in the intervention (13/39) and control (9/36) groups achieved a 7% weight loss at 12 months postpartum (p=0.43). Paternal weights were positively correlated with both maternal and offspring weights. Maternal weight loss at 12 months was less likely in women who attended the weekly walking group or accessed the branded Family Defeating Diabetes (FDD) diabetes prevention website, but was more likely with higher income and higher education levels.

## KEY TRANSFERABLE LESSONS

When building a postpartum diabetes prevention programme or a research study for women with recent GDM in middle class societies, please consider the following:

- **Websites** are only a small part of a population diabetes prevention programme and will not inevitably fulfil unmet needs for behavioural modification and community building.
- Participants will not necessarily engage with your websites automatically or even after direct encouragement, despite your own enthusiasm for your product.
- **Beware the rapid evolution of social media** and be prepared to change your messaging platform(s) every 6-12 months when the public's attention turns to the newest trend. Furthermore, when designing the format and size of your electronic messages, keep in mind that few households still have a full-screen computer.

If you are using social media to provide a study message, be aware of two issues:

- Some social media, such as Facebook, require the use of real names so that participation cannot be anonymous, thus voiding these platforms as ethical vectors for information.
- Ensure that you **have a mechanism to document** when/if your social messaging was viewed/opened, thus allowing you to count frequency of actual message receipt, if not penetration.

**Human interaction** with a programme or study coordinator remains important; small favours, such as loyalty cards, have no motivating power for healthy activity promotion.



# 238

PARTICIPANTS IN THE STUDY (178 MATERNAL AND 66 FAMILY MEMBER PARTICIPANTS)



# 107

PARTICIPANTS COMPLETED 12 MONTHS OF THE STUDY (81 MATERNAL AND 34 FAMILY MEMBERS) WITH FOLLOW-UP ONGOING FOR A TOTAL OF 24 MONTHS



# 54%

POTENTIALLY-ELIGIBLE WOMEN WITH GDM DECLINED TO PARTICIPATE

# A randomised translational study to examine the effects of shared care versus usual care in management of gestational diabetes in a three-tier prenatal care network in Tianjin, China



## INSTITUTIONS INVOLVED

Tianjin Women and Children's Health Centre (China), The Chinese University of Hong Kong/Tianjin Medical University (China), Chinese Academy of Sciences (China)/Dalhousie University (Canada), Pennington Biomedical Research Centre, Baton Rouge, Louisiana (USA)

## INVESTIGATORS

Huiguang Tian, Xilin Yang (yxl@hotmail.com), Fuxia Zhang, Gang Hu, Zhijie Yu, Ling Dong, Gongshu Liu, Juliana CN Chan

## LOCATION

Tianjin, China

## BRIDGES GRANT FUNDING

USD 393,812

## DATES

July 2010 to December 2013

## KEY ACHIEVEMENTS

- The project achieved the goal of reducing the rate of macrosomia among women with GDM (11.2%, or 38/339, in the intervention group (IG) versus 17.5%, or 63/361, in the control group (CG); RR: 0.64, 95% CI 0.44-0.93).
- The lifestyle intervention was cost-effective for prevention of macrosomia with a cost-effectiveness ratio for prevention of macrosomia at CNY32,640 (or USD5,265).
- The team has set up a large cohort of pregnant women and their children. With this cohort, they will be able to address many scientific issues related to the prevention of GDM and its health outcomes in the years to come.

## KEY CHALLENGES AND SOLUTIONS IMPLEMENTED

- **Difficulty in on-the-spot randomisation. In the initial stage, fieldworkers often made mistakes and could not strictly follow the randomisation protocol.**  
*SOLUTION:* To overcome the challenge, once the team found this error, all the women on that day (44 subjects in total) were dropped from the study. However, as a courtesy, the team still offered these women the same care.
- **Unexpected difficulty in delivering the intervention protocol during the trial from November 2011 to July 2012 due to the contamination of the intervention in the CG group.**  
*SOLUTION:* Measures have been taken to avoid contamination of the Control group by unintentional intervention.
- **Peer support may be an effective way to improve the intervention and we had included peer support as a component of the group education. However, there were only a few women attending most of the individual group education sessions.**  
*SOLUTION:* Due to these reasons and the inexperience of our intervention team, they had to abandon the peer support intervention.

## KEY TRANSFERABLE LESSONS

- More **intense training in performing the randomisation** is needed before the start of the study.
- In order to carry out the intervention strictly, **it is crucial for educators to master sufficient knowledge and capability** regarding the intervention, especially the willingness and ability to build up a relationship of mutual trust with women with GDM.
- Measures should be taken to **avoid contamination** of the CG group by unintentional intervention. Separate areas at entry or recruitment and different clinic dates for the follow-up visits for the two groups should be arranged. Doctors should be assigned specially to receive the UC group, with the responsibility to not provide interventions that exceed the UC.



19,847

PREGNANT WOMEN SCREENED FOR GDM USING GLUCOSE CHALLENGE TEST (GCT)



948

WOMEN INCLUDED IN THE STUDY



1,175

INDIVIDUALISED DIABETES EDUCATION SESSIONS AND 100 DIABETES GROUP EDUCATION SESSIONS

# Smile Healthy with Your Diabetes: a translational randomised trial of a culturally specific health-coaching intervention for people with diabetes (phase II) (ST12-050)



## INSTITUTIONS INVOLVED

The School of Dentistry, University of Copenhagen, Danish Coaching Institute, Danish Dental Association (Denmark)

## INVESTIGATORS

Ayse Basak Cinar (aci@sund.ku.dk), Niels Christian Christiansen, Lone Schou, Esben Boeskov Ozhayat, Azam Bakhshandeh

## LOCATION

Copenhagen, Denmark

## BRIDGES GRANT FUNDING

USD 51,253

## DATES

October 2012 to March 2014

.....



# 2

COUNTRIES WHERE THE PROJECT TOOK PLACE (FIRST PHASE IN TURKEY (2010-2012), SECOND PHASE IN DENMARK (2012-2014))



# 116

PARTICIPANTS INCLUDED IN THE STUDY IN DENMARK



# 0.36 %

REDUCTION OF HbA1c AMONG PARTICIPANTS IN THE HEALTH COACHING GROUP

## KEY ACHIEVEMENTS

- Health Coaching (HC) compared to Health Education (HE) significantly improved the health and oral health of participants. This was in line with the earlier phase in Turkey; post-intervention, there was a reduction of HbA<sub>1c</sub> in HC groups (TR: 0.8%; DK: 0.4%,  $p < 0.01$ ), but not in the HE groups. HC patients had higher reduction in periodontal treatment need (CPI) than the HE group ( $p < 0.05$ ).
- Tooth-brushing and physical activity shared the same cluster, implying that health enhancing behaviours accumulate together. This implies that there is a need to promote the healthy behaviours holistically through empowerment because these behaviours dramatically improved within the Health Coaching Group, both in Denmark and Turkey, regardless of nationalities and culture.

## KEY CHALLENGES AND SOLUTIONS IMPLEMENTED

- **Collaboration with some physicians/healthcare centres to get the medical records**  
*SOLUTION:* The team tried to overcome the challenge by calling and also sending them enquiry letters at least twice at every stage of the project.
- **Rate of compliance to sessions and filling out questionnaires, in particular among Health Education participants, was low.**  
*SOLUTION:* The team re-called and rescheduled their appointment if they didn't show up at the session. They also provided small incentives to fill out the questionnaires and to attend.
- **Recruitment of the assisting personnel and dental hygienist in terms of the time required for the project and finance**  
*SOLUTION:* The team tried to recruit the undergraduate dental student during the sixth months of the study to assist, and then the PI took over the tasks of the assistant during the last 6 months as there was no funding left to pay any personnel.

## KEY TRANSFERABLE LESSONS

- Instead of recruiting a dental hygienist/nurse, preferably **recruit a full-time PhD student** for the project to assist or to take responsibility for the control group. PhD students are usually more dedicated and feel responsible for the success of the project that they are working for.
- Before initiation of the project, there should be a **protocol signed by each research team member** referring to identification and agreement of every team member's responsibilities, tasks and expectations. The protocol also should include a common mission, vision and values.
- There should be **specific personnel/staff** whose only task is to recruit patients, follow-up and keep in touch with them and with their healthcare centres/physicians as well for collection of medical records.

# Non-visual foot inspection for people with visual impairment



## INSTITUTIONS INVOLVED

Case Western Reserve University, Ohio  
College of Podiatric Medicine, Cleveland  
Sight Center, Diabetes Partnership of  
Cleveland, USA

## INVESTIGATORS

Ann Williams (ann.s.williams@case.edu),  
Bryan Cadwell, Jill Kawalec-Caroll

## LOCATION

Cleveland, Ohio, USA

## BRIDGES GRANT FUNDING

USD 5,000

## DATES

September 2010 to August 2012

## KEY ACHIEVEMENTS

The team developed methods for effective recruitment of visually impaired and blind people, who cannot read standard print recruitment materials. They collaborated with a local blindness rehabilitation centre to produce those materials and distribute them. Local chapters of national blindness consumer groups and a local diabetes association also helped with recruitment. The most successful method was direct recruitment at meetings of local low-vision support groups.

The team made the research processes accessible to visually impaired and blind people. They created and used large print, audio, and Braille versions of all necessary documents and forms, including consent documents, enrolment forms, and data collection forms. They also trained all of the research staff in the common courtesies used when working with visually impaired people, e.g. standard sighted guide techniques to help people find their way from the entrance of a building to a classroom, and use of signature guides for adding signatures to consent documents.

The team held comprehensive DSME classes in formats that were fully accessible to visually impaired and blind people. For example, the DSME instructors described all visual materials, such as foot inspection techniques and the parts of blood glucose meters, in words that included tactile descriptions. Furthermore, all handouts were provided as recordings, with all graphics and pictures from the original print version described in words.

## KEY TRANSFERABLE LESSONS

When working with visually impaired people, **start early to create and pilot your accessible forms and materials**. It does take time to produce good quality large print, audio, and Braille materials.

The **partnership with the local low-vision and blindness agency** was invaluable for recruitment assistance, advice on how to produce truly accessible research documents and class materials, and assistance in finding affordable transportation. Collaboration with local professionals who have expertise in the field of low vision and blindness makes research with visually impaired and blind participants much easier.

**Allotment of adequate time** for any and all meetings with visually impaired and blind participants is essential. Most people with both diabetes and vision loss have few or no opportunities to meet with others like themselves. Even when research activities may not take a lot of time, allowing time for the study participants to socialise can greatly increase their satisfaction, and will ultimately benefit your study through increased retention.



5.45

FOOT CHECKS PER  
WEEK FOR THE  
INTERVENTION GROUP  
(1.74 FOR THE CONTROL  
GROUP)



2.1

TIMES MORE  
REPORTING OF MINOR  
FOOT PROBLEMS TO  
PODIATRISTS FROM  
THE INTERVENTION  
GROUP THAN FROM  
THE CONTROL GROUP



0

EXTRA COST OR TIME  
FOR THE INTERVEN-  
TION COMPARED TO  
TRADITIONAL ONE







# OTHER PROJECTS





# Information on other projects supported by IDF BRIDGES dedicated to prevention

## DEMOJUAN – Demonstration area for primary prevention of type 2 diabetes, JUAN Mina and Soledad, Barranquilla, Colombia

### INSTITUTIONS INVOLVED

Centro de Investigación en Salud, Barranquilla (Colombia), Municipality of Barranquilla, Universidad Libre Seccional Atlántico, Universidad Atlántico, Universidad de San Martín (Colombia)

### INVESTIGATORS

Jaakko Tuomilehto, Astrid Isabel Arrieta Molinares (astridisabel1@gmail.com), Carlos Ricaurte Rojas, Tania Matilde Acosta Vergara, Noël Christopher Barengo

### LOCATION

Barranquilla, Colombia

### BRIDGES GRANT FUNDING

USD 400,000

### DATES

October 2010 to September 2013

## A translational randomized trial of culturally specific and cost-effective life style intervention for the prevention of type 2 diabetes in Pakistan (Pakistan Diabetes Prevention Program PDPP) – (D-START project)

### INSTITUTIONS INVOLVED

Aga Khan University Hospital (Pakistan), University of Helsinki (Finland)

### INVESTIGATORS

Asma Ahmed (asma.ahmed@aku.edu), Jaweed Akhter, Romaina Iqbal, Abdul Jabbar, Shehla Zaidi, Mubasshir Ahmed

### SUPPORTS

Qing Qiao, Ayesha Motala, Jaakko Tuomilehto, Peter Bennett, Juan Jose Gagliardino, Ronan L'Heveder

### LOCATION

Karachi (Pakistan)

### BRIDGES GRANT FUNDING

USD 250,000

### DATES

October 2011 to July 2017

## Peer-led and telehealth interventions for diabetes prevention in Maracaibo, Venezuela

### INSTITUTION INVOLVED

Universidad del Zulia, Maracaibo (Venezuela), University of Miami

### INVESTIGATORS

Gladys Maestre (gladysmaestre@gmail.com), Luis Falque, Victoria Stepenka, Elena Ryder, Juan Casal, Yoleida Rivas, Carmen Paz, Lisset Oropessa, Mark Stoutenberg and Hermes Flórez (hermes.florez@va.gov)

### LOCATION

Maracaibo, Venezuela

### BRIDGES GRANT FUNDING

USD 340,058

### DATES

November 2011 to November 2014

## Lifestyle intervention trial programme to prevent type 2 diabetes in the Northern province of Ninh Binh, Vietnam – (D-START project)

### INSTITUTIONS INVOLVED

National Institute of Diabetes and Metabolic Disorders, Hanoi, Vietnam; University of Helsinki, Finland

### INVESTIGATORS

Ta Van Binh (binhnoitiet@gmail.com), Do Dinh Tung, Vu Bich Nga

### SUPPORT

Qing Qiao, Ayesha Motala, Jaakko Tuomilehto, Peter Bennett, Juan José Gagliardino, Ronan L'Heveder

### LOCATION

Ninh Binh, Vietnam

### BRIDGES GRANT FUNDING

USD 250,000

### DATES

June 2011 to May 2014



More information on these projects is available on our website [www.idf.org/bridges](http://www.idf.org/bridges)

# Information on other projects supported by IDF BRIDGES dedicated to the management of diabetes



## Effectiveness of a peer support programme in disease management regarding improvement of metabolic control, diabetes management self-efficacy, quality of life and risk profile

### INSTITUTIONS INVOLVED

Paracelsus Medical University, Salzburg General Hospital

### INVESTIGATORS

Andreas Soennichsen (andreas.soennichsen@uni-wh.de), Raimund Weitgasser, Henrike Winkler, Sophie Keller, Tim Johansson

### LOCATION

Salzburg, Austria

### BRIDGES GRANT FUNDING

USD 399,869

### DATES

June 2010 to August 2013

## Evaluation of the diabetes education programme for people with type 2 diabetes in primary care, Belo Horizonte, Brazil

### INSTITUTIONS INVOLVED

Escola de Enfermagem da Universidade Federal de Minas Gerais (Brazil), Universidade de São Paulo (Brazil), Escola Nacional de Saúde Pública, Rio De Janeiro (Brazil)

### INVESTIGATORS

Heloisa Torres (heloisa.ufmg@gmail.com), J.G Velásquez Meléndez, R.C Andrade Bodstein, M.A Beinner, A.E Pace

### LOCATION

Belo Horizonte, Brazil

### BRIDGES GRANT FUNDING

USD 65,000

### DATES

May 2011 to December 2013

## Improving access to HbA<sub>1c</sub> measurement in sub-Saharan Africa

### INSTITUTIONS INVOLVED

Health of Population in Transition (Cameroon), Ministry of Health (Guinea), Institute of Health and Society, Newcastle University (UK)

### INVESTIGATORS

Eugene Sobngwi, Cameroon (eugene.sobngwi@newcastle.ac.uk), Naby Balde, Guinea

### LOCATIONS

Six cities in Cameroun, four in Guinea

### BRIDGES GRANT FUNDING

USD 398,258

### DATES

November 2008 to June 2012

## Implementation of a culturally sensitive peer/lay diabetes education programme for adults with type 2 diabetes in six English-speaking Caribbean countries

### INSTITUTIONS INVOLVED

Diabetes Association of Jamaica; University of Technology (Jamaica); Pan-American Health Organization (PAHO); University of West Indies (Mona); Regional Diabetes Associations; Ministries of Health

### INVESTIGATORS

Errol Morrison (errol.morrison@utech.edu.jm); Shelly McFarlane (shelly.mcfarlane02@uwimona.edu.jm); Cliff Riley (criley@utech.edu.jm); Novie Younger (novie.younger@uwimona.edu.jm)

### LOCATIONS

Jamaica, Grenada, Antigua, Belize, St Lucia, Barbados

### BRIDGES GRANT FUNDING

USD 64,606

### DATES

March 2012 to February 2015



More information on these projects is available on our website [www.idf.org/bridges](http://www.idf.org/bridges)

## Improving diabetes care in Cap Haitien, Haiti

### INSTITUTIONS INVOLVED

Justinian University Hospital – Konbit Santé, Cap Haitien (Haiti), Maine Medical Centre (USA)

### INVESTIGATORS

John Devlin (jdevlin@maine.rr.com), Nancy Charles-Larco, Nate Nickerson, Michel Pierre, Philippe Larco

### LOCATION

Cap Haitien, Haiti

### BRIDGES GRANT FUNDING

USD 65,000

### DATES

June 2010 to May 2012

## The Jordan Diabetes Micro-Clinic Project: community ownership and awareness to improve health and wellbeing

### INSTITUTIONS INVOLVED

Microclinic International (USA), Royal Health Awareness Society (Jordan) Ministry of Health (Jordan)

### INVESTIGATOR

Dr. Daniel Zoughbie (danielzoughbie@microclinics.org)

### LOCATION

Amman, Jordan

### BRIDGES GRANT FUNDING

USD 400,000

### DATES

August 2008 to June 2012

## Bridging the knowledge-to-practice gap to control diabetes in a rural population in Pakistan

### INSTITUTION INVOLVED

United Arab Emirates University (UAE)

### INVESTIGATORS

Syed Shah (syeds@uaeu.ac.ae); Asma Ahmed

### LOCATION

Gilgit, Balistan, Pakistan

### BRIDGES GRANT FUNDING

USD 64,400

### DATES

April 2012 – December 2014

## A randomized trial of an intensive education intervention using a network of peer educators to improve glycaemic control of people with type 2 diabetes in Bamako, Mali

### INSTITUTIONS INVOLVED

NGO Santé Diabète (Mali), National Hospital Mali, – service d'endocrinologie et diabétologie (Mali), PAEDI Research Centre (France), Centre Hospitalier Régional, La Réunion (France), Centre Hospitalier Universitaire, Grenoble (France), TRANSNUT, Department of Nutrition Faculty of Medicine, University of Montreal

### INVESTIGATORS

Stéphane Besançon (stephane.besancon@santediabete.org), Sidibé Assa Traoré, Maryvette Balcou-Debussche, Xavier Debussche, Serge Halimi, Hélène Delisle

### LOCATION

Bamako, Mali

### BRIDGES GRANT FUNDING

USD 64,796

### DATES

June 2011 to June 2013

## Effectiveness of a community-based diabetes self-management education programme: a pilot study in San Juan, Batangas, Philippines

### INSTITUTIONS INVOLVED

University of the Philippines, College of Medicine, Philippine General Hospital

### PRINCIPAL INVESTIGATOR

Elizabeth Paz-Pacheco (epacheco@gmail.com)

### LOCATION

San Juan, Batangas, Philippines

### BRIDGES GRANT FUNDING

USD 25,244

### DATES

June 2008 to December 2010



More information on these projects is available on our website [www.idf.org/bridges](http://www.idf.org/bridges)

## Family Stress Reduction and Coping Response Training Among Filipino People with Type 2 Diabetes (Quezon City, Philippines)

### INSTITUTIONS INVOLVED

East Avenue Medical Center, Quezon City (Philippines), Ateneo de Manila University Department of Psychology (Philippines)

### INVESTIGATORS

Maria Teresa Que (tesquemd@gmail.com), Gilda Lopez, Zachele Marie Briones, Mercy Parazo

### LOCATION

Quezon City, Philippines

### BRIDGES GRANT FUNDING

USD 46,667

### DATES

June 2010 - June 2012

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## Feasibility of Developing a Training Program for Peer Leaders in Diabetes (Ypsilanti, Michigan, USA)

### INSTITUTION INVOLVED

Board of Regents of the University of Michigan (USA)

### INVESTIGATOR

Tricia Tang (tricia.tang@vch.ca)

### LOCATION

Ypsilanti, Michigan, USA

### BRIDGES GRANT FUNDING

USD 64,951

### DATES

July 2008 to June 2010

## Tailored intervention for inpatients: transitional diabetes care coordinator versus conventional care

### INSTITUTION INVOLVED

New Jersey Medical School, Rutgers University (formerly University of Medicine and Dentistry of New Jersey) (USA)

### INVESTIGATOR

Melissa Scollan-Koliopoulos (scollame@rutgers.edu)

### LOCATION

Newark, USA

### BRIDGES GRANT FUNDING

USD 65,000

### DATES

September 2008 to January 2011

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## Motivational interviewing to maximize utilization of self-management education for adults with type 2 diabetes

### INSTITUTIONS INVOLVED

Baylor Health Care System Institute for Healthcare Research and Improvement, Dallas, USA

### INVESTIGATOR

Robert Mayberry (rmayberry@msm.edu)

### LOCATION

Dallas, USA

### BRIDGES GRANT FUNDING

USD 65,000

### DATES

June 2008 to July 2011



More information on these projects is available on our website [www.idf.org/bridges](http://www.idf.org/bridges)



# Information on other projects supported by IDF BRIDGES dedicated to the protection of women's health

## Stop diabetes: health related behavior and risk perception in women with lifestyle related metabolic diseases at high risk of diabetes

### INSTITUTIONS

Southern Health and Monash University and Jean Hailes Foundation for Women's Health

### INVESTIGATOR

Helena Teede (helena.teede@monash.edu)

### LOCATION

Melbourne, Australia

### BRIDGES GRANT FUNDING

USD 360,825

### DATES

January 2008 to December 2010

## Prevention of type 2 diabetes in women with gestational diabetes in urban India – a feasibility study

### INSTITUTIONS INVOLVED

All India Institute of Medical Sciences, New Delhi (India), The George Institute, Hyderabad (India), Faculty of Health Sciences, Flinders University (Australia), The George Institute For International Health (Australia)

### INVESTIGATORS

Nikhil Tandon (nikhil\_tandon@hotmail.com), Dorairaj Prabhakaran, Anushka Patel, Prasuna Reddy, Rohina Joshi, Ankush Desai

### LOCATION

Delhi and Hyderabad, India

### BRIDGES GRANT FUNDING

USD 64,890

### DATES

April 2010 to February 2014

## Gestational diabetes: things you need to know (but maybe don't) – design, development, pilot and evaluation of a DVD for women with gestational diabetes

### INSTITUTIONS INVOLVED

Queen's University Belfast; Belfast Health and Social Care Trust, Belfast; South Eastern Health and Social Care Trust, Northern Ireland; St Mary's Hospital, Manchester, UK

### INVESTIGATORS

Valerie Holmes (v.holmes@qub.ac.uk), Fiona Alderdice, David McCance, Roy Harper, Christopher Patterson, Michael Maresh

### LOCATION

Belfast and Manchester, UK

### BRIDGES GRANT FUNDING

USD 359,406

### DATES

October 2011 to December 2014



More information on these projects is available on our website [www.idf.org/bridges](http://www.idf.org/bridges)

# Information on other projects supported by IDF BRIDGES dedicated to the management of complications

## The Impact of Initiation of an Educational and Preventive Foot Care Center for Subjects with Diabetes in Qingdao, China (BRIDGES Research Net)

### INSTITUTIONS INVOLVED

Qingdao Endocrine & Diabetes Hospital;  
Qingdao Municipal Centre for disease control

### INVESTIGATORS

Lei Zhang (lei.zhang@diabeteschina.com); Yanhu Dong;  
Fenghai Ma; Yuan Sun; Munxiu Yao; Xia Hu

### LOCATION

Qingdao, China

### BRIDGES GRANT FUNDING

USD 20.000

### DATES

May 2014 to November 2014

## The impact of an educational and preventive foot care centre for people with diabetes in Alexandria, Egypt

### INSTITUTIONS INVOLVED

University Hospital, Alexandria Faculty of Medicine,  
Alexandria (Egypt), and Rotary International  
- Alexandria West Rotary Club

### INVESTIGATOR

Samir H Assaad-Khalil (assaadkhalil@hotmail.com)

### LOCATION

Alexandria, Egypt

### BRIDGES GRANT FUNDING

USD 62,791

### DATES

April 2008 to December 2011

## The Impact of a demonstrative Educational and Preventive Foot Care Centre for Subjects with Diabetes” in the first-line ambulatory healthcare center “CAA Cotocollao” pertaining to the National Social Security in Quito, Ecuador. (BRIDGES Research Net)

### INSTITUTIONS INVOLVED

Pontifical Catholic University of Ecuador (PUCE);  
Ambulatory healthcare center “CAA Cotocollao”

### RESEARCHERS

Erika Quishpe Narváez (erikaquishpenarvaez@yahoo.es);  
Karen Andrea Pesse Sorensen; Hugo Pereira Olmos; Victor  
Hugo Mena Maldonado

### LOCATION

Quito, Ecuador

### BRIDGES GRANT FUNDING

USD 20.000

### DATES

May 2014 to November 2014

## Cardiovascular risk in people with type 2 diabetes: an innovative dynamic prediction model

### INSTITUTIONS INVOLVED

The EMGO Institute for Health and Care Research,  
Netherlands; The National Institute for Health and Care  
Research, Netherlands

### INVESTIGATORS

Giel Nijpels (g.nijpels@vumc.nl), Amber van der Heijden,  
Jacqueline Dekker, Hendriek Boshuizen, Talitha Feenstra,  
Caroline Baan

### LOCATION

Amsterdam, Netherlands

### BRIDGES GRANT FUNDING

USD 65,000

### DATES

June 2012 to June 2014



More information on these projects is available on our website [www.idf.org/bridges](http://www.idf.org/bridges)

## The Establishment of an Educational and Preventive Foot Care Service for Subjects with Diabetes in Zimbabwe (BRIDGES Research Net)

### **INSTITUTIONS INVOLVED**

Zimbabwe Diabetes Association (ZDA) Research Committee; University of Zimbabwe, College of Health Sciences (UZCHS); Parirenyatwa Group of Hospitals; Harare Central Hospital Department of Medicine & Diabetes Clinic; Zimbabwe Ministry of Health and Child Care (MoHCC); City of Harare (CoH); Mangwiro Surgery

### **INVESTIGATORS**

Alica Matimba (alicepn@yahoo.com); John Chamunorwa Mangwiro; Lovemore Gwanzura

### **LOCATION**

Harare, Zimbabwe

### **BRIDGES GRANT FUNDING**

USD 20.000

### **DATES**

October 2015 to April 2016



More information on these projects is available on our website [www.idf.org/bridges](http://www.idf.org/bridges)



# Notes



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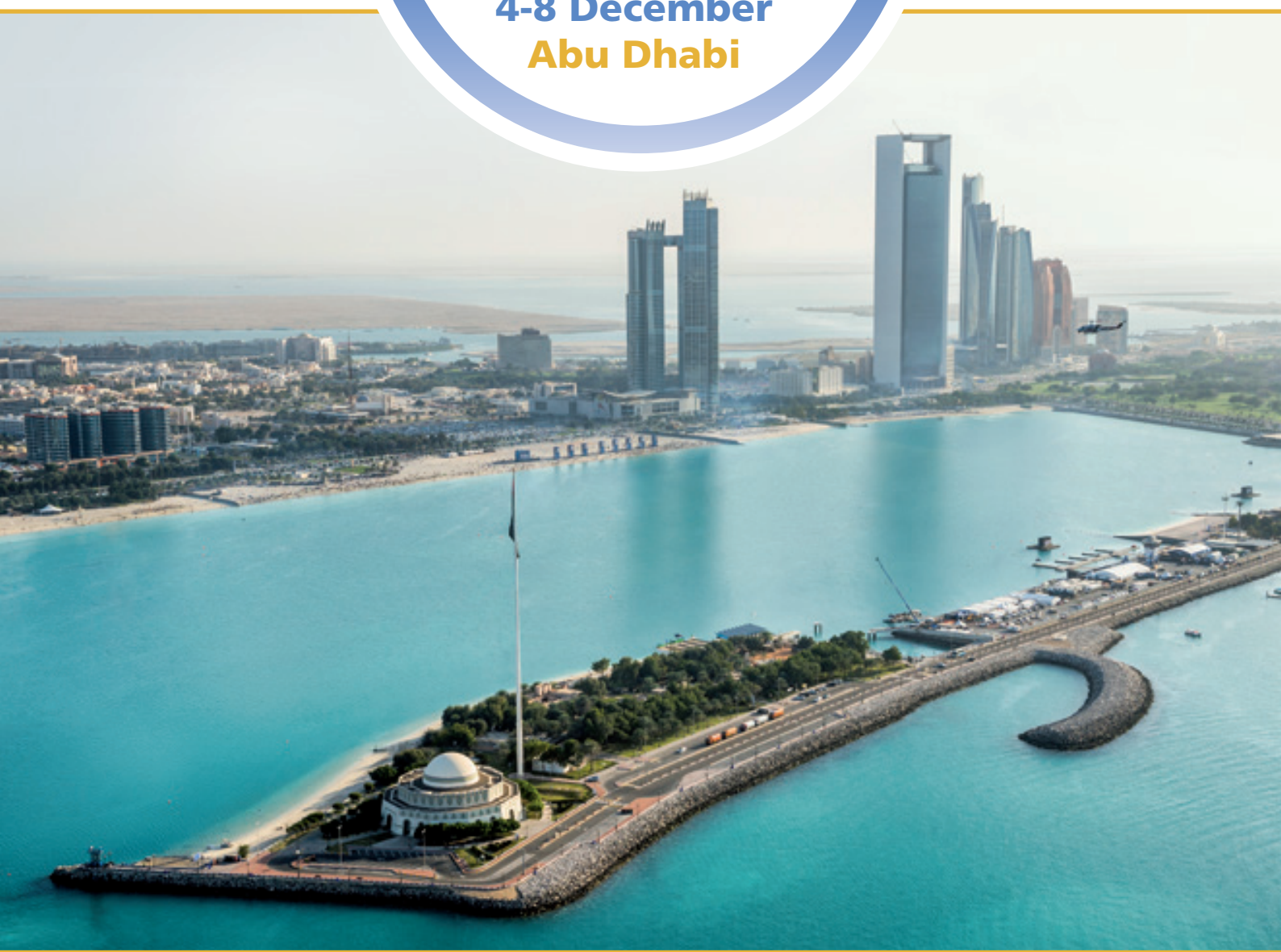
# Notes



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**2017**  
**4-8 December**  
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