





693,107

students enrolled at WUN universities 463,922 undergraduate 203,267 postgraduate

43,731

academic staff across WUN universities



2,766

years of academic tradition across WUN universities



88

Interdisciplinary Research Groups



38 st

conferences & strategic workshops*



E21M

external funding catalysed by WUN collaboration*



10

projects completed and retired*



academic publications*



36

engagements in policy development*

^{*} Based on reporting period 1 January 2016-31 July 2017

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From the Chair

It is a pleasure to present this annual report for the year 2016-17. This year, the Board steering group has met twice by teleconference, and once in person at the Annual Conferences and AGM in New York City 3-5 May. We held an extra meeting of a Board working group in Brussels on 10 February 2017, in order to focus the issues for the next strategic plan 2017-20.

There has been a great deal of change over the past three years in the global higher education landscape, research and teaching priorities and capacities. There is innovation in communications, and change also in the configuration and leadership of many of our member universities. We are delighted to welcome five new universities to WUN: Renmin University of China, National Cheng Kung University, the University of Nairobi, Tecnológico de Monterrey, and Universidade Federal de Minas Gerais. They expand our reach and complement our strengths, bringing us to a record 22 members. We look forward to a similar dynamic in 2017-18 as we shape WUN to be fit for the future. I thank all of those

who engage with WUN, and look forward to implementing the new Strategic Plan which emerged from our meetings and AGM in May.

Professor Joseph J.Y. Sung, SBS, JP

ChairWUN Partnership Board

Vice-Chancellor
The Chinese University Of Hong Kong



From the Executive Director

This year we have seen solid progress with our four Global Challenge research programmes and four enabling themes including the Global China Group and the Global Africa Group. We have a welcome emergence of some major developments among our 88 interdisciplinary research groups, including the areas of Ageing Health (with WHO), Migration (with IOM) and Heritage. We have built policy engagement programmes in higher education (with the British Council), BREXIT (with OECD and others), and the Sustainable Development Goals

(with the UN). These partnerships with policy leaders strengthen the impact of WUN in international development, and provide opportunities for our emerging and established researchers. The WUN mobility programmes continue at postgraduate levels, and are under development for new undergraduate options. We have also seen a change and renewal of the Secretariat, with the new team able to increase capacity in research and education development, and greater efficiency in administration and communications. More will be done in the coming year, including an enhanced

programme for engagement that will support and strengthen the reputation and profile of our members. With these developments, and the future directions adopted in our Strategic Plan 2017-20, we look forward to continuing teamwork, greater impact and the successful attraction of resources.

John Hearn

Executive DirectorWorldwide Universities Network

Professor Of Physiology University Of Sydney Medical School



From the Academic Advisory Group

The Academic Advisory Group focuses on the quality and review of programmes, the development and scrutiny of new initiatives, and fostering opportunities for both emerging and established researchers and educators.

This year, we implemented a new process for the Research Development Fund (RDF) and the Sustainable Development Fund that delivered greatly improved efficiency and outcomes. This entailed a better use of technology and enhanced engagement of the Academic Advisory Group in a more thorough and rigorous review process.

The RDF is the seed fund that builds Partnership and Research between WUN members, creates the 88 accessible communities of scholars that comprise WUN, and normally selects about 15 new programmes while retiring a set of completed programmes that have reached their objectives. This provides ongoing renewal of our research and assists with

the integration of new members.

A vital role of the group, as Vice Presidents of each university, is the championship of WUN on the individual member campuses, supporting and working with the Coordinators Group. As we move to our new strategic plan, the Group holds a pivotal role in matching the initiatives of WUN with the strategic research and education priorities of each member – so that WUN can be agile and responsive in meeting the needs of its members. We must ensure our network, as an agent of innovation in higher education and research, achieves more than the sum of its parts.

David Hogg

Chair WUN Academic Advisory Group

Professor of Artificial Intelligence & Former Pro-Vice-Chancellor For Research And Innovation, University Of Leeds

New to WUN



Renmin University of China

National Cheng Kung University







Tecnológico de Monterrey



Minas Gerais

Strategic plan 2014-2107

A world leading research university network, tackling global challenges through international collaboration.

WUN is a global network driving international research collaboration and developing research talent. Our membership spans 18 universities from 11 countries on 5 continents. We foster over 100 active research programs, engage over 2,000 researchers and students, and work with government, international agencies and industry.





















We exist to find solutions to some of society's most significant challenges and to improve quality of life.

Our research is focussed on four Global Challenges:



Responding to Climate Change



Global Higher Education & Research



Public Health (Non-Communicable Diseases)



Understanding Cultures

Our Vision

As a leading international higher education and research network, we will be a force in developing innovative solutions to some of the world's most significant challenges.

We take pride in being an experimental laboratory at the frontier of internationalisation. This approach is backed up by strong governance and rigorous quality management.

WUN is committed to:



Research that is innovative and makes a difference



Creating opportunities for established & emerging talent



Attracting resources to sustain our world-class teams



Creating access & advantage for our members

Our Mission

WUN draws upon the combined intellectual power and resources of its members to create opportunities in international research and graduate education. It partners with government, international organisations and industry to stretch ambitions and develop the next generation of leaders.

Values WUN's values underpin our approach to maximising the network's core strengths.

Develop	Nurture	Innovate	Collaborate	Impact
WUN actively develops our global research alliance and education programs to meet our objectives.	WUN nurtures and invests resources in the intellectual strengths and priorities of our members.	WUN seeks and instigates innovation in knowledge management and educational exchange.	WUN promotes opportunities that accelerate internationalisation for global collaborations between universities and with government, international organisations and industry on issues of global significance.	WUN actively develops our global research alliance and education programs to meet our objectives.

Objectives & Strategies

1 Strengthen & grow our university network

- Develop and maintain a dynamic portfolio of research and education programs in alignment with WUN members' priorities.
- Strategically grow the membership as a network of peer universities with mutual strengths and regional diversity.
- Build ownership and leadership within WUN to increase collaboration, commitment and sense of community.

2 Foster influential research communities

- Focus on four Global Challenges:
- Responding to Climate Change (food security, urbanisation, oceanography);
- Public Health (lifecourse approaches to obesity, heart disease, diabetes);
- Global Higher Education and Research (access and equity, new technologies);
- Understanding Cultures (migration, digital futures, ageing).
- Incorporate cross-cutting themes in big data, macroeconomics, and regional program on China and Africa into our Global Challenge programs.
- Strengthen leadership and accountability to ensure quality and delivery.

3 Nurture research talent

- Create opportunities for the engagement and career development of talented researchers at the postdoctoral, postgraduate and undergraduate level in international research collaborations.
- Facilitate the mobility of students and academic staff.
- Promote equity for researchers in our programs.

4 Enhance the WUN profile

- Position WUN as a recognised thought leader in our areas of expertise, engaging the WUN Presidents and experts as an international think-tank and as policy advisors.
- Increase the power of the "WUN voice" in an ambassadorial and lobbying role.
- Strengthen the WUN brand and profile with internal and external audiences, ensuring WUN is recognised for the vast potential of its intellectual resources.

WUN Conference & AGM 2017

The WUN Conference and AGM, held this year in New York City with allied academic workshops in Amherst, brought together our global knowledge partnership to focus on major regional and international challenges. In doing so, we engaged with universities, business, international agencies and NGOs to align our research and education objectives to practical and policy objectives.

The annual gathering concluded a strategic review of WUN to inform the 2017-2020 Strategic Plan (see page 9). It gave members the opportunity to understand mutual priorities, challenges, and opportunities, and to be inspired by this unique scholarly community. Connected to our annual governance meetings were several high impact academic workshops addressing heritage, higher education and research, data science, and public health. You can find more information on the heritage in migration project, the GHEAR workshop on the Sustainable Development Goals and higher education and the workshop on

the WUN website, while further details of the in-FLAME Global Network are available on its website.

The gathering concluded with a <u>Presidents Forum</u> on Higher Education in the achievement of United Nations Sustainable Development Goals. Speakers included WUN Presidents, experts and distinguished VIP guests including Professor Jeffrey Sachs (Columbia University), Dr Allan E Goodman (Institute of International Education), Mr Shantanu Mukherjee and Mr John Sebesta (UN), Ms Irene Braam (Bertelsmann Foundation), Mr David Barth (Ford Foundation), Ms Claudia Juech (Rockefeller Foundation) and Mr Michael King (IBM).

According to WUN's Executive Director, Professor John Hearn, WUN plays a role globally in policy and can also engage at an even higher level. The network's broad track record of policy

impact includes, for example, "the adoption and now implementation of non-communicable diseases in Public Health with WHO as part of the Sustainability Goals; the COP developments though our WUN Responding to Climate Change Group; and the enhanced emphasis on Higher Education and economic development through the WUN Higher Education Group with OECD, British Council and the Association of Commonwealth Universities," he says. "In Understanding Cultures, we engage through our Global China and Global Africa Groups, and in our close association with the International Organisation for Migration." The WUN Presidents, Vice Presidents and disciplinary experts across the Network form an international think tank and policy group in these arenas.

The next WUN Conference and AGM will take place in Perth, Australia from 20-25 May 2018.





Jeffrey Sachs addresses the Presidents Forum

wellness data for healthy societies on

Future Directions 2017-20

The WUN Partnership Board, meeting in Maastricht in April 2016, called for a fundamental review of WUN strategy and operations as we move from our Strategic Plans for 2014-17 to 2017-20.

An extensive review was carried out during 2016 in consultation with the Board, Academic Advisory Group, Global Challenge Groups, Coordinators, and internal and external stakeholders.

The results of this review were considered in detail by the WUN Board Working Group, meeting in Brussels on 9 February, who made recommendations to the AGM in New York. The comprehensive set of documents arising from this process will be kept up to date and is available in the WUN Document Bank.

Overall, the governance meetings and the Board accepted and endorsed the recommendations of the working group, adding definition and focus. The main outcomes are summarised as follows.

Research

WUN Global Challenge Groups will align research programmes appropriately with the relevant United Nations Sustainable Development Goals 2015-30, without being driven by them. The Groups will complete an analysis and an adjustment of revised research priorities and impact within six months, focusing on investment of the Research Development Fund and other resources accordingly.

Enabling Cores

WUN Cross Cutting Themes will not have a formal cross-cutting structure, simplifying their interaction and alignment with the Global Challenge Groups. The Economics and Big Data initiatives will engage actively in opportunities with the Groups. The Global China Group and the Global Africa Group, which have developed rapidly, facilitate the Global Challenge Groups in their research and education partnerships and engagement with Chinese and African contexts.

Education

Mobility programmes for postgraduate and early career researchers through the Research Mobility Programme will be extended. A new programme for undergraduate student mobility and engagement will be developed, including options for a "WUN Passport" across the network including research and learning through joint courses with credit transfer. A working group will bring a proposal and business plan to AAG and the Partnership Board in six months.

Engagement

WUN programmes will be enhanced, building alliances further with universities, business, governments, international agencies, NGOs and the public. A new Global Policy Group will be explored and developed – initially by a working group, reporting with a proposal within six months. There will be a stronger program of communication, using traditional and contemporary methods in publication, articles and thought pieces, regular and social media. Progress will be monitored to assess active engagement.

Next Steps

These amended strategic directions will be developed in due course through the WUN consultative and governance process. They will be integrated into the new WUN Strategic Plan, Annual Reports and communications with WUN members and stakeholders. The changes in direction, ambitions and expansions, will be developed carefully, with a realistic matching of the high ambitions, objectives and programs to the constraints of resources and budget.

Research Highlights 2016-2107

2016 was a year of upheaval and anxiety. Wars in Syria, Yemen and over a dozen other nations caused millions to flee their homes, but many faced a hostile welcome at their chosen destination as nationalist sentiments rise. Surprise election results in the UK and US caused dramatic political and policy fallout. It was also the hottest year ever recorded, for the third consecutive year. Problems of this scale and complexity

are precisely why WUN's Global Challenges exist. The aim is to develop innovative, practical ways to address the vital issues of public health, climate change, cultural understanding, and global higher education and research. This section contains just a small sample of our recent achievements. The full slate of research programmes is on pages 39-44.

In 2016, India recorded a temperature over 50 degrees for the first time - just one of many climate change milestones that year.

Global Challenge: Public Health

Public health is more important than ever in a world of unpredictable climate, shifting populations and widening inequality. Our Public Health Global Challenge brings together a diverse team of experts in public health to explore socioeconomic, cultural and behavioural approaches to health in various high priority areas. A key focus is projects that empower women and mothers, increase access to education, and promote health literacy. The team's work is also guided by the 2030 Agenda for Sustainable Development goals, focusing specifically on health across the lifecourse; the role of schools in reducing risk factors for disease; and healthy ageing.





Living Goods CC BY-NC-ND 2.0

CC BY-NC-ND 2.0

Healthy ageing for all

How lifecourse research can help more of us stay healthy as we age.

Populations across the globe are growing older. As a result, an urgent need has arisen for effective interventions that maintain quality of life for older people and reduce the burden of disease on them. "The question of how we can age with a minimum of ill-health is vital in economic as well as humanitarian terms," explained Professor Mark Hanson (Southampton), the project's PI. "Our group is exploring how early development can influence ageing processes later in life, with a vision of healthy ageing for all."

Like the World Health Organization (WHO), WUN emphasises the importance of lifecourse research in making progress in this area, since maternal, perinatal, infant, childhood and adult actors all contribute to non-communicable diseases in later life. The WUN team came together at a conference in Hong Kong in 2015 to tackle healthy ageing using just such an approach. In 2016, when WHO launched its global strategy and action plan to promote healthy ageing, our researchers were well-placed to take up the challenge.

A highlight of 2016-17 was the appointment of Dr Chandni Maria Jacob as WUN Research Fellow. Her focus is on how our inherent capacities develop over time, starting from before conception.

"While studying medicine in India I saw how changing diet, patterns of physical activity and demographics led to a sharp rise in diseases such as diabetes and cardiovascular disease," she said. "Our goal is to develop biomarkers that can be used to identify high-risk groups early in life, who can be targeted with prevention strategies." Dr Jacob will also convene a specialist meeting on lifecourse and healthy ageing at WHO headquarters in Geneva.

Highlights

- Appointment of Dr Chandni Maria Jacob as WUN Research Fellow
- Several WUN members attended the WHO meeting on trajectories of intrinsic capacity in Geneva, June 2017

The question of how we can age with a minimum of ill-health is vital in economic as well as humanitarian terms



A new era in diabetes testing

This gel-based method promises to make glucose measurement more reliable.

Diabetes affects over 400 million across the world, a number that has nearly quadrupled since 1980. Each year, around 1.5 million people will die from the condition, making it the third largest cause of death after cancer and angiocardiopathy. To reduce those numbers, patients need to be given effective diagnosis and treatment based on an accurate reading of their blood glucose concentration. But the current test for glucose can produce erratic results because an enzyme sensitive to temperature and moisture can denature during storage.

To solve the problem, an interdisciplinary team from Zhejiang, Leeds and York came together to develop an alternative way of detecting glucose that is more stable and reliable. "Our first task was to explore a variety of novel compounds and polymers that react to the presence of glucose without needing an electrochemical reaction involving the problem-causing enzyme," says Professor Li Wang (Zhejiang), the project's PI. This search culminated in the discovery of a technique involving specially prepared hydrogels, which deform in different ways depending on the concentration of glucose.



Professor Li Wang

I am excited about the potential of using our hydrogel method to make a reliable test for glucose

"Our hope is to make a real contribution to the fight against diabetes, which is becoming a huge health challenge," the researched explained. "I am excited about the potential of using our hydrogel method to make a reliable test for glucose which could reduce delays in diagnosis and make diabetes easier to manage."

The year saw also saw the team secure funding of 0.8 million RMB from the National Natural Science Foundation of China; the publication of one peerreviewed paper and the preparation of several more; and a fruitful visit from Professor Lin Long of Leeds to Professor Wang's lab at Zhejiang in March 2017. The team now plans to expand its research into the bi-hydrogels' properties and explore its practical applications with a commercial partner.

Highlights

- Promising discovery of novel hydrogel method for detecting glucose
- Paper on the saccharide-sensing ability of ferrocene-based compounds published in the Journal of Electroanalytical Chemistry
- Funding of 0.8 million RMB awarded by National Natural Science Foundation of China

Healthy kitchens, healthy communities

Everyday domestic activities such as cooking and child-care are the focus of this imaginative public health initiative.

In South Asia, the kitchen plays a crucial role in family life, especially for women and children. It's also the epicentre of activities that can promote or undermine health, according to the researchers in WUN's Healthy Kitchens project, an innovative collaboration by Leeds, UWA and York. "Health interventions often focus on one particular disease, condition or risk factor," said Dr Helen Elsey (Leeds), the project's PI. "But such a narrow approach can miss important influences and wider relationships."



Instead, the group is investigating the role kitchens play in a wide range of conditions from accidents to non-communicable diseases: this research will then form the basis of holistic, evidence-based interventions targeted at various health issues. Participation by poor urban women themselves is key, with the group publishing a peer-reviewed paper on women's assessments of the health risks they face in September 2016. Experts in lung health, indoor air pollution, non-communicable diseases and burns, as well as representatives from the disciplines of epidemiology, anthropology and sociology, will ensure a diversity of insights. In addition, the team has engaged a number of external partners from government, non-profits and research centres.

In 2016-17, the team has continued to expand its work in South Asia. A promising new avenue of enquiry is provision of childcare in urban slums to provide education, health, social and economic benefits. In December 2016, an early childhood development workshop on this topic was held in Leeds, following an in-country workshop in Dhaka funded by the UK's Medical Research Council that was held earlier in the year. The group also forged ties with the Nairobi-based Africa Population

Health Resource Centre, which conducts surveys of slum areas, and local NGO Carolina for Kibera. A priority going forward is connecting to other WUN universities with similar interests.

Highlights

- <u>Peer reviewed paper</u> on health risks facing women in Kathmandu published in PLOS ONE plus 10 more published in the 2016 calendar year
- Medical Research Council-funded project resulting from the kitchen study launched in Bangladesh
- Policy input given to the UK Department for International Development for development of Urban Health Reading Packs

The kitchen is the epicentre of activities that can promote or undermine health

Asian Development Bank

The art of resilience

Helping adolescents and the people who work with them adapt positively to adversity is the aim of this ambitious collaboration between researchers in South Africa, the UK & China.

Resilience is the ability to adapt in a positive way to significant adversity. While we know this ability makes a major contribution to our health and wellbeing, it is unclear how resilience can be nurtured among those who need it most. WUN's resilience research group, an interdisciplinary team of experts from four continents, is exploring how different professional and personal understandings of this concept can help or hinder the goal of building resilience. "The ultimate aim is to develop robust policies and programs that effectively develop this capacity," says Professor Steve Reid (Cape Town), the project's PI.

How can resilience be nurtured among those who need it most?



The group has two major projects which focus on different populations. The first was launched in 2014 at Cape Town and seeks to discover which factors promote resilience among migrant youth - including family, school and community influences – in order to plan effective interventions. This collaborative, cross-cutting initiative encompasses a variety of research, including a pilot study on international youth resilience in six countries; a collaboration between China and South Africa on migration policy and immigrant families; and a study on resilience among youth in contexts of petrochemical production and consumption in Canada and South Africa. The latter project, in which the WUN group is a small part of a much wider collaboration, received a grant of C\$2 million over 5 years from the Canadian Institutes of Health Research (CIHR).

The group's second major project focuses on the resilience of service providers in public health.

It consists of five studies focused on a range of occupations: community mediators working with urban youth in the UK; junior health professionals in South Africa, social workers in South Africa, health workers in Mainland China who work for organisations focused on sexual health, and paid and volunteer workers supporting LGBTI youth in Australia. Insights will be used to enhance training and education by defining which resilience factors can be enhanced by a structured intervention.

Highlights

- Participation in a C\$2 million grant from CIHR to study on youth resilience in the context of the petrochemical industry
- Two workshops held at Pathways to Resilience IV Conference, June 2017, Cape Town
- Launch of a new <u>academic blog</u> to report on the group's achievements

Global Challenge: Responding to Climate Change

2016 was Earth's hottest year on record for the third consecutive y ear.

Amidst deadly heatwaves and crop failures, there was also renewed hope as a result of the landmark agreement on climate targets reached at COP21 in Paris. WUN's Responding to Climate Change cluster aims to contribute research to help achieve those targets while also boosting our capacity to adapt to the warming planet. Researchers focus on delivering practical insights of use to policy-makers worldwide; for example, at COP22, a WUN sideevent on intangible loss and damage was followed by a publication on the topic on Nature Climate Change by PI Professor Petra Tschakert and collaborators (see page 18). Two prominent themes in 2016-17 are the role of crops in climate-proofing our food supply and the intangible damage caused by climate change. A third focus is the Himalaya region, where a major expedition to extract data from remote glaciers will soon take place thanks to £680,000 in funds from Leeds, an NERC grant and WUN's RDF. It will yield data allowing for predictions of the downstream impacts of melting glaciers.



A new vision for livestock farming takes shape

A worldwide farm network that aims to make livestock production sustainable.

While livestock make an important contribution to global food security, livestock farming has come under increasing scrutiny due to concerns over its contribution to climate change and effects on stressed agricultural land. In response, nine WUN universities are working to make ruminant production more sustainable. The initiative, first outlined in a 2014 position paper in Nature, is a growing international network of academic research farms.

Known as the Global Farm Platform (GFP), the network provides an "invaluable forum for the exchange of ideas, research findings, staff and students among facilities focused on sustainable ruminant livestock systems," said its founder and PI, Professor Mark Eisler (Bristol). The GFP was developed into a co-ordinated global initiative with the support of two grants from WUN's Research Development Fund and held its first conference in Bristol in 2016.

In 2016-17, the group's diverse activities included an international workshop on dairy cow welfare at India's Kerala Veterinary and Animal Sciences University (KVASU), a GFP partner and WUN+member. This was supported by a £40,000 grant from the UK's Biotechnology and Biological Sciences Research Council. The Kerala forum inspired another ambitious project that is exploring the link between soil health and livestock yield across four continents. This project has received £50,000 through the UK's Global Challenges Research Fund. Also in 2016-17, the Uruguayan government provided financial support for a PhD research project at Bristol examining cattle diseases in Uruguay.

Highlights

- Convened workshops on smallholder dairy production (held in Malawi), dairy cow welfare (held in India) and soil fertility (held in the UK)
- Attracted £90,000 in competitive funds from two UK government grant schemes
- Insights from the first Global Farm Platform conference held in January 2016 at Bristol will be featured in a special edition of *Animal: An International Journal of Animal Bioscience* in 2017

We're building an invaluable forum for the exchange of ideas, research findings, staff and students



Legumes for life

How pulses can help us eradicate hunger and adapt to climate change.

2016 was declared the International Year of Pulses by the UN in recognition of the key role that dried legumes such as peas and lentils have to play in food security. Protein-rich legumes will be particularly vital as climate change impacts worsen, since they are resilient to hotter conditions, a lack of water and poor soil. Boosting production of legumes through plant science and biotechnology is the goal of the WUN legumes group, which first came together at a major conference in Zhejiang in 2015. In August 2016, the group published a <u>landmark paper</u> on legumes in Nature Plants. In the article, 18 WUN plant scientists plus eight other scholars from WUN+ institutions argue that the neglect of legumes has been disastrous for human health and sustainable food production. Unless the world has access to staple crops that can tolerate harsh conditions, they warn, our planet will simply run out of food.

Also in 2016, a second WUN legume research group was formed that includes experts from seven member universities and 10 global partners. This cluster brings together plant biotechnologists, soil scientists, climate scientists and experts from many other disciplines to gauge the impact of grain legume R&D in developing countries.

One of its initial goals is to contribute a discussion paper on how to utilise new legume cultivation methods and technologies to promote sustainable agriculture and economic development. The group will hold a 10-day symposium and research summit at CUHK in June 2017 to share ideas and build the network.

Finally, a third WUN-supported collaboration seeks to apply a similar strategy to a wider range of food crops. The Climate-Resilient Open Partnership for Food Security, or <u>CROP-FS</u> for short, also launched in 2016. Agricultural and plant scientists from five WUN member universities and five global partners seek to establish an international network of researchers investigating how major food crops will survive environmental conditions such as drought, high temperature, and irrigation with brackish or seawater.

Their vision was published as an open letter in <u>Nature Correspondence</u> co-authored by UMass Amherst's Professor Klaus Nüsslein and Assistant Professor Om Parkash Dhankher.

Highlights

- Publication of a <u>landmark paper on legumes</u> in *Nature Plants*
- <u>Symposium and research summit</u> on impacts of legume R&D in developing countries to kickstart new global push to increase production
- Statement on food security and the importance of social science in *Nature* Correspondence
- Professor Kadambot Siddique (UWA) named as Special Ambassador for Pulses by the UN's Food and Agriculture Organization

Unless new crops are found that can tolerate harsh conditions, the researchers warn, our planet will simply run out of food.

The intangible costs of climate change

How should we assess the loss and damage caused by climate change?

The world's Least Developed Countries and Small Island States are particularly vulnerable to the effects of climate change, especially extreme events such as floods, droughts and hurricanes. To address current and future harm that cannot be avoided, the Paris Agreement signed at the COP21 summit includes a "loss and damage" provision that recognizes loss as an undeniable issue in climate negotiations and actions. But how do we measure irreversible losses when many negative impacts are hidden or invisible?

That question was addressed in an <u>side event</u> hosted by WUN at the COP22 conference in Marrakech in November 2016. A key theme of the discussion was that <u>loss and damage</u> is more than just material and economic harm. According to the <u>panellists</u>, the term encompasses a range of intangible effects such as the loss of sense of place and belonging, the erosion of human dignity, threats to cultural heritage and traditions, and long-term harm to human development caused by disruption to children's schooling. Watch the entire event <u>on YouTube</u>.

Just before the gathering, the project's PI Professor Petra Tschakert (UWA) and three coauthors published a paper on the <u>science of loss</u> n *Nature Climate Change*.

"Loss is inherently connected to what people at risk value and deem meaningful in their lives," says Professor Tschakert. "Our vision is to foreground value and place-based priorities to put vulnerable communities at the centre of analysis, and to identify where, how, and when to target concrete efforts for risk reduction and prevent intolerable losses."

Highlights

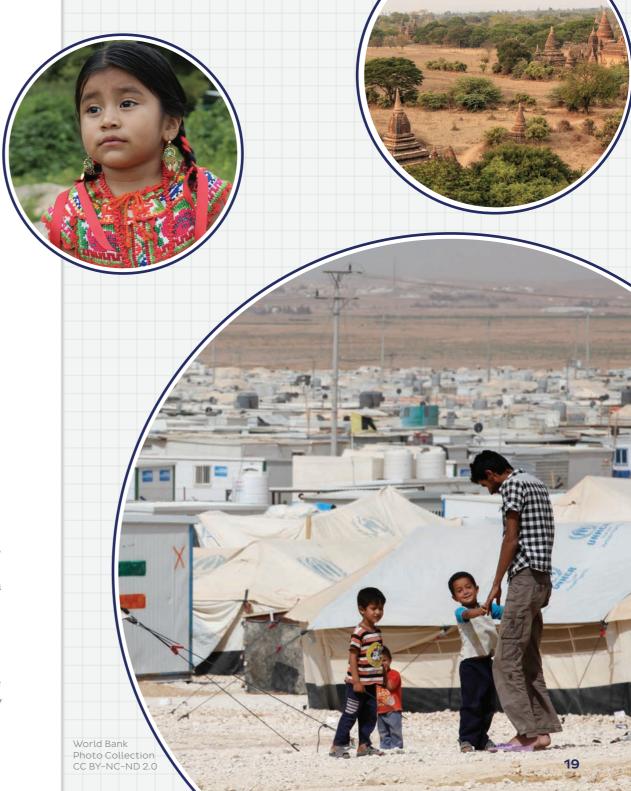
- Side-event hosted by WUN at COP22 conference in Marrakech, November 2016
- Paper on the <u>science of loss</u> published in *Nature Climate Change*; <u>advanced review paper</u> published in WIREs Climate Change
- Four-day conference on non-market loss from climate change hosted UWA, April 2016
- WUN White Paper on non-market loss and damage due to climate change
- Keynotes at the New Zealand Parliament on the challenges of climate change, poverty, and inequality, March 2017; and at the Environmental Humanities Conference in Sydney, December 2016; public lecture at UWA, September 2016.

Our vision is to foreground value and place-based priorities to put vulnerable communities at the centre of analysis

Global Challenge: Understanding Cultures

Today one in 100 people on Earth has been forcibly displaced from their home, the highest global proportion of refugees since the UNHCR began collecting data in the 1950s.

The biggest refugee crisis since World War Two shows no signs of abating. As millions flee conflict in the Middle East, North Africa and Western Asia, it is vital to understand the cultural issues surrounding refugees and migrants in general, including their motivations, aspirations, and the obstacles they face, in order to develop effective policy. WUN's Understanding Cultures cluster unites scholars from humanities and social sciences with those from many other disciplines, in shedding light on critical challenges such as this that require sophisticated, transnational insights into culture. In 2016-17, migration and migrants' experiences were again the focal point of many of our researchers, with other themes including the ageing population and civic engagement of young people. A three-day workshop on heritage and migration was held at UMass Amherst from 30 April to 2 May. The goal was formulating an agenda for WUN researchers to respond to the Understanding Cultures Global Challenge, with a key theme being how connectedness to the past promotes stability and wellbeing.



Migration beyond the headlines

Why a deeper understanding of migration is vital for effective policy.

Migration is one of the most prominent issues facing the global community. As climate change impacts increase, more communities will be displaced from their homes. To shape effective policy responses—and avoid the tragic failures that occurred during the recent Mediterranean humanitarian crisis—it is vital that we understand the emerging dynamics of migration. Yet despite strong contributions to migration research in areas such as labour migration and remittances, major gaps exist in our knowledge base. One such gap is so-called "hidden" migration that takes place within the Global South, within national borders, or between cities; another is migration research with a robust gender analysis.

The Migration, Development and Global Transformations collaboration aims to fill these holes in our knowledge, bringing together WUN migration researchers and data experts to incubate new research projects. Its principal external partner is the International Organization for Migration's Global Migration Data Analysis Centre (IOM-GMDAC), with which WUN signed a strategic alliance in April 2016. The first priority for the group has been to explore how WUN activities can build a knowledge base to support the UN's 2030 Agenda for Sustainable

To shape effective policy responses it vital that we understand the emerging dynamics of migration

<u>Development Goals</u> (SDGs). A symposium on hidden migration was held at Maastricht in April 2016 as part of the WUN Migration Conference to identify knowledge gaps and develop an agenda. Another symposium was then held in Bristol in March 2017 where team members shared research on a range of issues, including migration by older people and migration's impact on health; the group also made plans for future grant applications and publications.

Also, under the auspices of the alliance with IOM-GMDAC, Bristol is initiating an internship scheme for postgraduate research students to support the Centre's global data activities. "This scheme will allow students to contribute to the development of capacity-building tools in the area of migration data, analysis of Gallup World Poll data, and the establishment of GMDAC's Global Migration Data Portal," explained Ms Ann Singleton, the migration

group's PI. "Coupled with an annual Summer School on Migration Data for Policy starting in 2018, this internship scheme will support capacity-building activities and progress towards monitoring migration across the SDGs." Mr Frank Laczko, from the IOM-GMDC, added: "Good data on migration is essential if migration is to be managed effectively and the rights of migrants adequately protected."

Highlights

- Two-day symposium focused on research informing the UN's Sustainable Development agenda held at Bristol, March 2017
- Partnered with the IOM Global Migration Data Analysis Centre in Berlin to launch an internship scheme for postgraduate research students in support of IOM's global data activities

The civic network

Understanding how young people engage with politics on social media platforms such as Facebook is the focus of this fruitful long-running collaboration.

Originally launched in 2012 with the assistance of a USD\$312,000 grant from the Spencer Foundation, this Civic Network collaboration examines the connections between young people's use of social media and their political values and behaviour. A particular focus is the new attitudes and styles of politics emerging on platforms such as Facebook; the causes and potential impacts of these phenomena; and how they vary by geographic location and social background. Members of the initiative, who are also participants in WUN's Networking Young Citizens study group, hail from Leeds, Sydney, UWA and York and collaborate with WUN+ partners from across Europe, North America and Australia.

"Understanding online political youth culture continues to be of enormous importance to politicians, policy-makers and academics around the world," said Mr Brian Loader (York), the group's PI.

We want to understand and develop civic engagement and learning in young people's online environments.

"Democratic politics is increasingly being undertaken through social networks and young people remain at the forefront of this trend."

In 2016, the group published four co-authored publications including a study on celebrity politics, social networking and the political engagement of young people; and a comparison of young people's issue agendas and views on inequality in the context of concerns about so-called lifestyle politics. A three-day symposium on Contemporary Political Youth Culture and Communication was also held at York in June 2016.

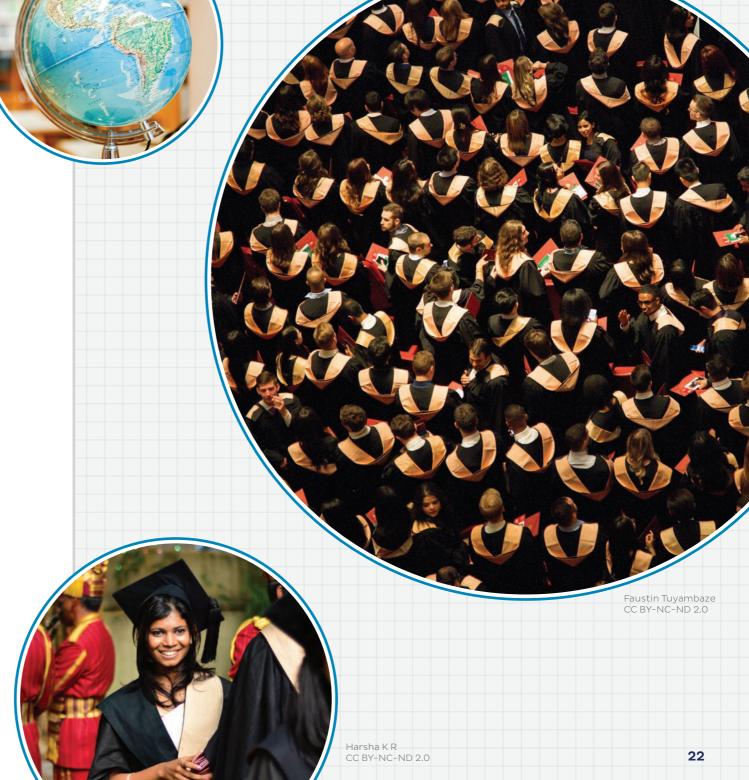
The international congress explored the sociocultural factors influencing the civic engagement of young people and how it is communicated. Topics examined included "unconventional" modes of political engagement, activist strategies, and social movements; changing political norms; the rise of smaller political parties; identity politics; and the influence of austerity, rising social inequalities, political socialization and civic education.

Highlights

- Three day symposium on Contemporary Political Youth Culture and Communication at York, July 2016
- Four peer-reviewed papers on political agendas, interactions and cultures

Global Higher Education & Research

The Global Higher Education and Research (GHEAR) Challenge applies scholarly expertise to a future-oriented body of research that focuses on addressing the most urgent challenges related to improving the value of higher education to individuals, communities, nations and the world. GHEAR is dedicated to improving equitable access and increased mobility throughout high quality and contextually relevant higher education, supported by necessary levels of public and private financial investment. Improving higher education through this set of inter-related issues is simultaneously the most important goal, greatest challenge, and most significant policy priority for tertiary educational institutions and systems around the world. Addressing how best to maximize the value of higher education in response to this complex challenge requires better understanding of the interaction among the drivers, policies institutional infrastructure, human capacities, and outcomes associated with the ongoing development of higher education throughout the world. In 2016-17, the group focused on equitable access and mobility to high quality and contextually relevant higher education supported by necessary levels of public and private financial investmen.



Has audit culture improved academic research?

Tracking and reporting academic publications has become a top priority for global universities, with the results used compare output and produce rankings.

Many universities have embraced this audit culture in order to boost the quantity and quality of their research. Yet scant evidence exists for the effectiveness of auditing in propelling academic research, as well as its wider impacts on academic inquiry and communities of scholars. To shed light on the issue, a global team of experts from four WUN universities came together to examine these issues in cooperation with external scholars.

The group's first milestone was a special edition of a peer-reviewed education journal focused on the <u>future of academic publishing</u> was published in 2014. Forums were held at CUHK in 2014 and at WUN+ partner Osaka University in 2015, followed by a panel convened at the Comparative and International Education Society conference in Vancouver in June 2016.

In November 2016, a paper in *Higher Education Policy* was published by Professor Anthony Welch (Sydney), who leads the project together with Dr David Post of Penn State.

"It found that academic audits have had a range of complex effects," says Professor Welch said. "But their overall result to distort the academic mission. Assessment regimes devalue collegiality, leaving in its place a norm of self-monitoring." This examination the impact of audit culture and academic production in Australian social science research was supported by the WUN's Research Development Fund.



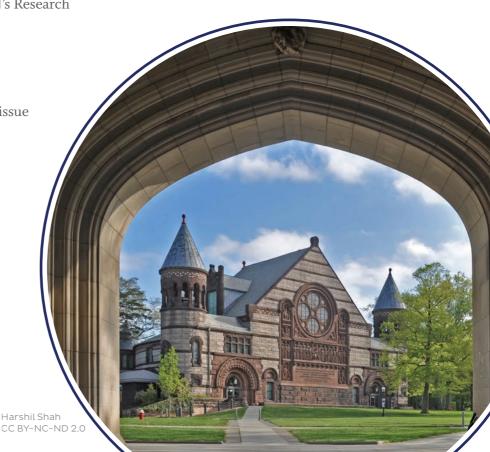
 Peer-reviewed article on research assessment published in a special issue of Higher Education Policy



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Harsha K R CC BY-NC-ND 2.0



Web Observatory gives access to global data

An ambitious initiative to share international research data begins to take shape.

Much of the world's research data is hidden away in universities and labs, with no way of accessing it, making connections between different projects, or sharing the tools required to analyse it. WUN's Web Observatory project, led by Professor Dame Wendy Hall DBE, FRS, FREng (Southhampton), aims to develop a better alternative. The project will catalogue the data repositories of WUN member universities, creating a self-updating, easily searchable directory of information that can be shared across our network and across disciplinary boundaries. But that's not all: each participating university will also be able to access resources across the network of Web Observatories, which is deployed under the auspices of the Web Science Trust).

Unlike the current generation of data management software platforms, the Web Observatory does not merely archive post-publication data; it allows access to data from active research projects, digital asset management systems, arbitrary cloud-hosted platforms or even real-time data feeds. Moreover, by using a technical trick known as "reverse proxying", Web Observatories decentralise control over access to the data.

In order to showcase the value of this approach, the project will launch research demonstration activities exploring various aspects of the Web Observatory infrastructure. One of these will aggregate datasets from online learning platforms across WUN, enabling the diverse usage patterns of MOOCs to be quantified and analysed. Participants in the Networking Young Citizens group will be able to use the Web Observatory infrastructure to expand their research across the globe to Africa, East Asia and South Asia.

"In the same way that the physicists share data about the pictures they take of the stars," says Professor Dame Wendy Hall, "we've got to find a way of doing this for the Web so we understand more about the digital planet that we're building."

Highlights

• Web Observatory project workshop held in Southampton, September 2016





WUN Web Observatory workshop, Southampton

Our goal is transformational growth through decentralisation

Professor Dame Wendy Hall

Helping first generation university students reach their potential

This WUN collaboration focuses on higher education's young pioneers: students who are the first in their family to enrol in university (FIFU)

While there is considerable research into factors affecting participation and achievement in university education, less documented are the factors that influence the success of these pathfinders. "Based on limited literature, we know this group is at risk of dropping out, especially in their first year of study, and that negotiating cultural obstacles involves a gain and loss of students' identities and a redefining of themselves," said the project's PI, Dr 'Ema Wolfgramm-Foliaki (Auckland). "This is experienced among diverse populations in higher education globally."

To fill the research gap, the group is designing, testing and authenticating a culturally appropriate methodology for use in gathering evidence about FIFU success; these include available information, social influences, investment approaches and

several other factors that can help or hinder educational outcomes. The project will also identify best practices for university teaching and student support that serve to build FIFU participation, and promote critical innovative thinking about this important challenge. In 2016-17, the team's book on methodologies was published by Bloomsbury.

The group's members hail from WUN universities Auckland, Sydney, UWA and Cape Town, as well as WUN+ institutions in Canada and the United States. From a national strategic perspective, the FIFU challenge is highly relevant to South Africa, Australia, USA, Canada and New Zealand, as each nation has set ambitious time-bounded university education agendas through to 2020. "But from an ethical perspective it is simply the right thing to do," adds Dr Wolfgramm-Foliaki. "Every student with potential deserves the chance to succeed at university."

Highlights

- Publication of book on methodologies for understanding experiences of first generation university students, edited by Dr Amani Bell (Sydney) and Associate Professor Lorri J. Santamaria (Auckland)
- Co-authored paper on students' narratives in *Quality in Higher Education*

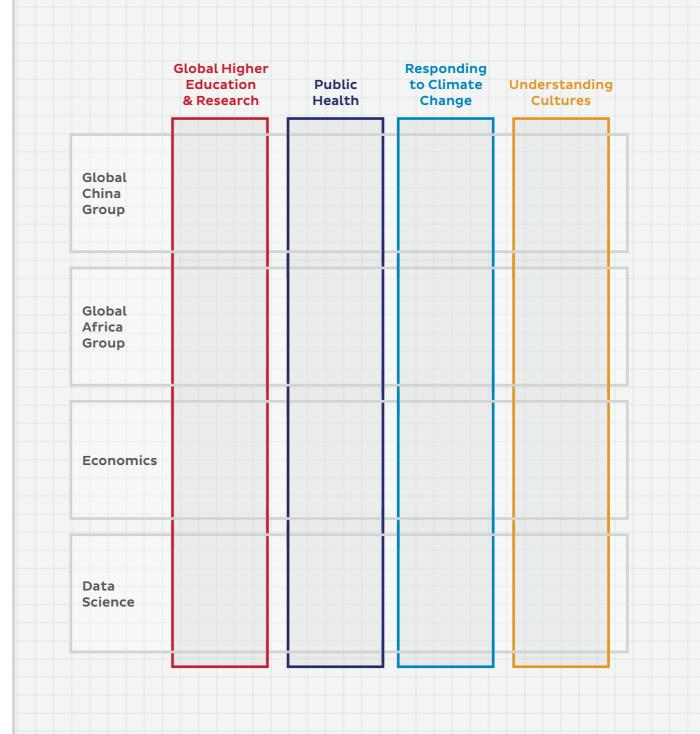
Every student with potential deserves the chance to succeed at university



Cross-Cutting Themes

WUN members play a important role in national and global forums on the issues of public health, climate change, cultural understanding, and higher education and research.

But these four challenges are not the only areas in which we offer expertise. To capture insights, methods and perspectives from researchers engaged in other fields of enquiry, WUN has identified four complementary themes which "cut across" the four Global Challenges. Data science, economics, and the study of contemporary Africa and China are areas of research that intersect with all of our Global Challenges; by bringing experts from those fields into dialogue with our existing project teams, we can enhance the depth, quality and originality of our research.



Data Science

Data-driven research and analysis has become a popular tool for academic enquiry from the intrepretation of brain scans to the study of how political cultures shift over time. But there are well-known pitfalls in designing robust data search techniques and in interpreting the results. This WUN cross-cutting theme seeks to find new ways of harnessing the power of big data and applying it to high-quality, international research. At WUN's Annual Conference and AGM in New York in May 2017, the first team project was launched: an effort to utilise the insights of health data derived from our Global Challenge research. A workshop was held to formulate plans for a comparative study of patient pathways in health systems across several countries based on WUN's large repository of longitudinal data, which will be subjected to high-powered data analytics. Also on the agenda was the ethical and technical challenges of disseminating and linking data sets and the promotion of WUN's network of data scientists and users of data.

Global China Group

As the world's most populous country and second-largest economy, China plays a critical role in tackling the challenges that affect us all. The Global China Group strategic plan aims to build a stronger two-way understanding of China in order to strengthen partnerships and the exchange of ideas and solutions. One area of focus for the group is China's outbound foreign direct investment, which presents immense opportunities as well as challenges to resource-rich countries like Australia and Canada. Economic growth is another priority area for research. Rapid development has dramatically reduced poverty in China, but it has slowed significantly while also increasing pressure on natural resources. In October 2016, UWA hosted a workshop focused on the challenges arising from China's growth prospects and its global implications. Avoiding the "middle-income trap" and macroeconomic implications for the world economy were two of the timely issues discussed.





Global Africa Group

Launched in 2015, WUN's Global Africa Group aims to nurture fruitful collaborations between African and international institutions while also forging ties between West and East African research. Closely aligned with the UN Sustainable Development Goals, the group's five major research priorities are outlined in its 2016-18 strategic plan: environmental change and food security; public health; governance, inequality and social inclusion; higher education and research capacity; and natural resources for inclusive growth and sustainable development. A wide range of disciplinary strengths are represented, especially social policy, politics, history, economics and anthropology. In June 2017, the group converged on Ghana's Legon campus for the first strategic research workshop. The event brought together over 60 researchers from 12 WUN partner universities and 10 other universities to facilitate research collaboration on food security, public health, governance, and other important issues.

Economics

The Economics cross-cutting theme seeks to expand our strengths into areas such as trade, innovation and economic cooperation. At the WUN Conference and AGM in April 2016, the group convened workshops to address two distinct issuses: the Climate Change Global Challenge and international student mobility. At the latter event, Maastricht's Professor Jo Ritzen and his students presented their research into the links between education investments in young people and cognitive skill levels in adulthood, and also the links between those skill levels and productivity in the manufacturing and services sector. "Our findings indicate that adults' skill levels are strongly related to accumulated public investments in education," explains Professor Ritzen, former Dutch Minister of Education and Science and former President of Maastricht. "Timing appears central, with investments in primary education playing the most fundamental role, and investments in tertiary education being crucial to fully realise the benefit of early investments." They also found sectoral labour productivity is strongly associated with workers' cognitive skill levels, suggesting growth-accounting must be based on sectorrelevant skills. A new project will examine the competencies of migrants as measured by PIAAC and PISA, OECD initiatives that seek to compare skills across countries.

Green Shoots:

WUN's emerging projects

What's around the corner for WUN in 2018? Here is a selection of our "green shoots" – promising new collaborations that are expected to deliver results over the coming years. Watch this space! For the full list of active research groups, see page 38.

Making health and social care sustainable

This research collaboration led by PI Professor Sue Yeandle (Sheffield) will assess the impact on care systems of demographic, cultural trends and socioeconomic trends in order to offer a critical assessment of policy options.

Winning the fight against parasitic worms

A parasitic roundworm called *Angiostrongylus* cantonensisis is the leading cause of eosinophilic meningitis worldwide, with a fatality rate as high as 36% in children under two. PI Dr Eric Morgan (Bristol) heads this interdisciplinary effort to track how climate change is affecting the distribution of these parasites in order to stop their spread.

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Air pollution sensors for everyone

This innovative project aims to equip ordinary people to build low-cost pollution testing equipment. Pollution-linked disease causes more than 7 million early deaths per year, according to the PI, Dr Richard Peltier (UMass Amherst).

Spotlight on Ghana's coastal heritage

Ghana coast is dotted with World Heritagelisted forts and castles, some of which are over 500 years old. Led by PI Associate Professor Kodzo Gavua (Ghana), this study brings together WUN universities and several WUN+ partners to better understand the past and present of the coastline and its people.





Associate Professor Elena Carbone

Empowering mothers for health

Mothers with low health literacy have poorer overall health, experience more pregnancy complications, have babies of lower birth weight, and are less likely to breastfeed. While this is widely recognised, most interventions focus only on improving information delivery to mothers, rather than seeing maternal health literacy as a valuable asset everyone should possess.

"More than just person's reading or writing ability, maternal health literacy refers to both cognitive and social skills," said the PI, Associate Professor Elena Carbone (UMass Amherst). "We want to work with mothers to develop those skills, as well as the knowledge, confidence, and empowerment to maintain their health, their children's health, and that of their community."

This project will be the foundation of a longterm research plan with the ultimate objective of developing a universal strategy to promote maternal health literacy and empower women globally.

WUN Policy Think Tank

Can we bring evidence to improve policy and practice for people's lives?

With 22 international universities, four Global Challenges, over 200 cooperating Centres, 12 major agencies as global knowledge partners, 88 Interdisciplinary Research Groups, and over 2,000 engaged researchers, there must be many ways in which WUN discovery and knowledge can translate to evidence-based policy. But translation and transition needs communication. The welding of teams from several cultures cannot be assumed. International engagement, the building of communities of scholars, and the inclusion ofother essential players becomes an art in itself. WUN is a pioneer in this area, organising several interrelated activities to ensure success.

First, we hold strategic workshops in key challenge areas to form interdisciplinary teams and communities. Second, we deliver WUN Presidents Forums in current and fast-moving areas, where the combined brainpower of WUN

leaders, administrators and researchers – along with invited world experts – can chart research and education strategies. Third, we work with governments, agencies, business, and NGOs as knowledge partners who can make our teams fit for purpose. Fourth, we develop and publish analysis and opinion pieces as well as policy options arising from our activities. For examples of these activities, please refer to the Think Tank page on the WUN website.

There is no room for complacency, and today's digital news and information overload presents significant challenges for communicating ideas. WUN publishes the findings of its research in the conventional, top-quality journals related to its fields. We also publish policy-related commentary and proposals from our workshops, and from Presidents and experts, especially in higher education and research.

We are exploring non-traditional communication channels such as video, social media and interactive platforms. We must also work on engaging our leaders and experts in the key policy fora.

As WUN develops its Strategic Plan for 2017-20, much has changed since the articulation of our Strategic Plan 2014-17. The world is a more uncertain place and political tectonics have shifted; the leadership and capacities of WUN have grown and adjusted and must be fit for future; the networks model of the past five years must evolve into the quality, feasibility and sustainability goals of the fast-approaching future; and the strengths and opportunities of our research and education colleagues at all levels need appropriate development. As an experimental laboratory for internationalisation and international engagement, WUN must build consensus and commitment for its role, delivery on its potential, and the attraction of resources to sustain its people, programmes and profile as innovative teams building the future.





Sustainable Success Stories

Our most successful projects make full use of WUN's global community of scholars to create a thriving collaboration that's sustainable over the long term.

Our network has seen significant success in many of its interdisciplinary research groups, whether they started from humble beginnings and received seed funding through an RDF grant, or were established projects that received assistance from our Sustainability Fund to develop major bids at the most competitive level of international research projects. We have examined WUN's success stories and can identify key criteria for success. These include strong and continuing leadership, a committed team, fundamental research questions, very high quality research, association with a leading international society in the field, and finally, a persistence in applying for funds.

One example is WUN's International Inflammation Network, better known as <u>in-FLAME</u>. This network of researchers from 19 countries which has generated more than 50 academic papers and well

over \$200,000 in research grants. Their goal is to understand which life factors cause inflammation, a common element in many non-communicable diseases such as cancer, asthma and diabetes. "I believe our greatest achievement is in establishing a thriving network that is built on strong relationships and friendship as much as it is on science and research," said the group's PI, Professor Susan Prescott (UWA). "We have also actively recruited people from many fields. This creates the perfect environment to promote collaborative ideas and capitalize on opportunities."

Another impressive collaboration in the public health field is <u>OPERA</u>, a network of researchers, care providers and agencies working to ensure every woman at risk of an adverse pregnancy outcome has access to diagnosis and medical interventions. An initiative of the Preterm Birth International Collaborative, OPERA receives support from WUN as well as major institutional donors such as the March of Dimes and the Gates Foundation. On 12 November 2016, the PI Dr David Olson (Alberta) led the first OPERA workshop in China with the aim of inspiring a pregnancy risk assessment program in China.





Professor Susan Prescott

One of our most ambitious climate change-related projects is the <u>Critical Zone Observatories</u> <u>Consortium</u>, an international venture led by Professor Steven Banwart (Sheffield) which seeks to address global soil degrataion. WUN funding of just £15,000 helped to move the project from the lab into the field; the group has since been awarded funds of nearly €7 million from the European Commission and close to £900,000 from the UK's Natural Environmental Research Council (NERC).

Research Investments

WUN invests directly in innovative, meaningful research that makes a difference to the world, focusing our efforts on the four Global Challenges.

We aim to sponsor interdisciplinary, international teams doing ground-breaking work that could not be undertaken by a single university working alone. In 2016-17, we directly invested £216,523 into research through three funding programmes: the Research Development Fund (RDF), the Sustainability Fund, and the Global Challenge Steering Group Fund.

Our keystone scheme is the RDF. It provides competitive seed grants to establish global research projects which can then approach national and international bodies for further funds. Over the past eight years, £1.6 million has been invested in 140 research programmes.

In 2016, applications were of a very high quality and an impressive 40% of proposals were funded. The 12 successful projects received a total of £111,473. Migration and health were two prominent themes across the projects supported by the RDF, with areas of focus including remittances sent home by migrants that can promote well-being across international borders, and the health experiences of children who migrate.

The Sustainability Fund is a supplementary grant aimed at programmes that have already demonstrated success and are ready to attract significant external funding from government, NGOs, international agencies, foundations and industry. In 2016, the Sustainability Fund awarded grants totalling £45,050.

WUN's Global Challenge Steering Group Fund is another source of financial support for our four over-arching research programmes. Every year, the four Global Challenge groups can access up to £15,000 each to boost their research and policy impacts; for example, by assisting in engagement opportunities with the Institute of Migration (IOM), WHO and UNFCCC.





Research Mobility

We're nurturing a new generation of researchers for international academic success.

Our Research Mobility Programme (RMP) scheme enables PhD students and early career researchers to travel to another WUN member institution to widen their knowledge and professional networks. The scheme also gives young scholars access to facilities that may not be available at home, exposes them to different research cultures, and provides mentorship and career opportunities. The RMP is delivered by our member universities who make funds available for travel and subsistence or integrate the scheme into an existing research programme.

Thomas Keating, a PhD candidate in Bristol's School of Geographical Sciences, visited Sydney's Faculty of Architecture, Design and Planning in May 2016. A key objective was to meet with <u>Dr Lian Loke</u>, a renowned theorist and designer of wearable technologies, and discuss how such devices modify the senses.

"I feel very fortunate to have all the ideas and opportunities it has opened up," he said. "I was able to advance my research into technology and affect theory at one of the world leaders in embodied technology design." Thanks to what he learnt in Sydney, Mr Keating was selected to join a series of workshops on living with technology where he aims to develop post-PhD opportunities.

The scheme also supports the longerterm personal and academic growth of participants. **Makalani Myrtveit** of Bergen visited Auckland's Department of Health Psychology as part of the scheme in 2013 when she was a PhD student; today she is a successful postdoctoral fellow who is researching cancer risk among children with birth defects.

"It helped my improve my language skills and gave me experience in international cooperation," she said. "The people I met inspired me to aim high and continue developing."

> Thomas Keating

The people I met inspired me to aim high



Makalani Myrtveit
Photographer: Eivind Senneset

Conferences, Events & Strategic Workshops

Throughout the year, WUN hosts conferences, workshops, virtual seminars and many other events to bring our community of researchers together to share ideas and spark collaboration.

These often involve other universities, academic societies, NGOs and governments to ensure our research is impactful. This is a sample of the diverse range of events held across our network from August 2016 to August 2017.

For more information, please refer to our events webpage.

Data Analysis with Privacy Protection for Epidemiology Research Workshop 22-23 August 2016, Bristol

This workshop focused on privacy protected federated approaches to data analysis within epidemiology. Attendees considered current and emerging approaches, opportunities, risks, and the specific methodologies required for this research.

CROP-FS Project Workshop

28-29 September 2016, Hangzhou

24 WUN and partner researchers presented papers at this workshop, the second of two events launching the WUN RDF-funded CROP-FS programme. This interdisciplinary collaboration targets opportunities for funding from private, federal, and international sources to develop climate resilient crops with improved yields.

Small Sensor Symposium 13-14 October 2016. York

An international community of researchers interested in using small air quality sensors to better understand human exposure came together at this inaugural global forum. Academics, industry and government stakeholders, and advocacy-based researchers discussed the value and limitations of such technologies, and canvassed strategies for their use in research capacity building.

COP22 Side Event on Non-Material Loss 16 November 2016, Marrakech

Held alongside the COP22 summit, this forum focused on the often overlooked issue of nonmaterial climate change loss. Please refer to page 18.

Developmental Origins of Respiratory Disease Workshop

27-30 November 2016, Bergen

Hosted by Bergen, this workshop aimed to facilitate joint analyses of the developmental origins of respiratory health and disease. The event attracted 16 attendees from early career researchers and PhD candidates to senior researchers in fields suh as pidemiology, mouse models and epigenetics.

WUN Presidents Forum on BREXIT and Higher Education

9 February 2017. Brussels

The aim of this WUN Presidents Forum was to review the current status, opportunities and threats, and future projections of BREXIT. Leading experts from across WUN and beyond discussed strategies for building and strengthening bridges between institutions and researchers at European-UK and international levels.

Heritage in Migration and **Displacement Workshop**

30 April-2 May 2017, Amherst

The goal of this workshop was to formulate an agenda for the WUN in its approach to the role of heritage in the Understanding Cultures Global Challenge and the Network more broadly. A central theme was the importance of sustaining connections to the one's past for social and economic stability and the overall wellness of individuals, communities, and nations.

Wellness Data Workshop

1-2 May 2017, New York City

WUN's Data Science Cross-Cutting Theme convened this workshop aimed at leveraging WUN's longitudinal datasets in order to improve public health. See the report on page 22.

Sustainable Development Goals for Higher Education Workshop

1-2 May 2017, Amherst

The UN's fourth Sustainable Development Goal, which includes six targets related to higher education in various ways, was the primary focus at this event. Discussion focused on how to improve equitable access and mobility with high quality and contextually relevant higher education supported by necessary financial investment from the public and private sectors.

WHO/WUN forum on intrinsic capacity across the life course

28-30 June 2017. Geneva

At this forum convened by WUN and WHO, lifecourse researchers converged in Geneva to share knowledge, observations and technical data on humans' intrinsic capacities at different stages of life. An intense program of talks and discussions covered issues such as why changes in locomotor function, cardiorespiratory health and cognition are associated with different life stages, and how such changes should be measured. The meeting ended with a discussion of future research priorities in order to promote healthy ageing.

Global Africa Group Workshop

8-9 June 2017, Accra

The WUN Global Africa Group's first Strategic Research Workshop saw 60 researchers from 12 WUN universities plus 10 outside institutions converge at the University of Ghana. See page 28.

Legume R&D Summit

8-17 June 2017, Hong Kong

Over 100 participants from six continents participated in the WUN Symposium cum Research Summit on Impacts of Grain Legume Research and Development in Developing Countries. Hosted by the Chinese University of Hong Kong (CUHK), the event aimed to share knowledge and ideas on the development of legumes research with the aim of building a global collaboration network transcending geographical boundaries, career hierarchy, and expertise difference.

Situational Judgement Test (SJT) **Best Practice Workshop**

24-25 July 2017, Sydney

Hosted at the University of Sydney, this workshop focused on the design and scoring of SJTs, a popular psychoemetric testing tool. Experts from the UK, South Africa, and the UN joined 38 participants from Australian medical and dental schools and other institutions. The workshop forms part of WUN's Developing and Researching the Economics and Mathematics of Selection project, established at York.

Partner With Us

Agencies, policymakers and philanthropic organisations

WUN partners with a wide range of international agencies and organisations including the UN, OECD, WHO and World Bank Institute in order to deliver sustainable solutions to global challenges. By partnering with us, your organisation can harness the resources of 22 leading universities in 13 countries across 6 continents through one channel. Together, we can define a truly global research agenda that makes an impact on scientific discovery, policy frameworks and communities around the world.

Researchers at WUN universities

Each year, WUN researchers come together in new and exciting international collaborations across our four Global Challenge themes. If you are a researcher at a WUN institution—whether early in your career or established in your field—and you wish to start a new project or find out more about existing collaborations, contact your local WUN Coordinator

Researchers outside WUN

WUN works closely with experts from several other universities around the world, as well as the private sector, in order to expand our intellectual reach and ensure the very best minds contribute to our research. These external partners, known as

WUN Plus (WUN+) partners, make an important contribution to joint projects and are appropriately named on funding programmes and publications. However, WUN+ partners do not qualify for direct funding from WUN.

Universities wishing to join WUN

WUN is a network of peer universities from around the world. If you are a research-intensive university with a global reputation, a vision for international excellence and strengths in our priority research areas, we are interested in hearing from you. The first step towards membership is a willingness to participate and invest in WUN. All new members are approved by the WUN Partnership Board.

WUN partner operations

Each WUN member chooses their own model of implementation and operation for WUN. However, we have studied the criteria for successful engagement and they include:

- The President of the university acting as champion for the network, engaging with the Partnership Board, advising on strategy and resource development, and attending the annual conference and AGM.
- A senior university officer, preferably a Vice President, with the responsibility for research or internationalisation of a research strategy.

- A full or part-time Coordinator to manage the programme and projects of WUN within the university and to act as an intermediary between the network and the university community. The Coordinator works with academics to develop initiatives, follow up on programmes, track achievements and communicate academic and funding opportunities.
- A modest sum set aside by each member university to support collaboration among members.

Contact Us

For more information about WUN, please contact us:

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General Manager Dr Mike Hasenmueller mhasenmueller@wun.ac.uk

WUN Conference & AGM 2018

The next WUN Conference & AGM will be held in Perth, Australia from 20 to 25 May 2018. Save the date!

WUN members will converge next year in Perth, associated with the University of Western Australia (UWA), for the WUN Conference and AGM.

Attendees can expect a warm Aussie welcome in the vibrant city of Perth, a nexus between Africa, Asia and Oceania that boasts sunny weather, beaches, native flora and fauna, and of course our excellent member UWA. As usual, the event will be a multi-purpose gathering that incorporates the yearly Presidents Forum as well as a range of academic workshops and forums organised

by WUN's global challenge collaborations and project

teams.

We invite you to block out these six day in your calendar now and hope you will be able to come say "g'day" in Perth next year.



Governance Teams

As a non-profit organisation responsible to its members and partners, WUN has robust governance procedures in place to ensure it operates prudently and efficiently while delivering high-quality, impactful programmes.

Overall administration of the network is the job of the Secretariat, which handles day-to-day operations, communications, and strategy implementation.

Governance of WUN is divided among three separate bodies made up of representatives from each WUN university. The Partnership Board is responsible for setting the policy of the network; it consists of the various Presidents, Vice-Chancellors or Rectors of our universities. The Academic Advisory Group (AAG) oversees the network's academic portfolio and advises the Partnership Board on strategy; it consists of senior administrators, often Vice Presidents or Deputy Vice-Chancellors with responsibility for research or internationalisation. The Coordinators Group implements WUN strategies and programmes on campuses and shares information on collaborative opportunities. Each coordinator is the local point of contact for WUN programmes.

Finally, WUN's Global Challenges are guided by four Steering Groups made up of representatives of the WUN Partnership Board, the AAG and the Coordinators Group in addition to a panel of research experts drawn from the relevant field. The Chairs of the Global Challenge Steering Groups represent the Global Challenges in the WUN Academic Advisory Group.

WUN Steering Group Chairs

Global Challenge	Name & Memember University
Responding to Climate Change	Professor Peter Davies The University of Western Australia Professor Peter G. R. Smith The University of Southampton
Global Higher Education and Research	Professor Joseph Berger The University of Massachusetts Amherst
Public Health (Non-communicable Disease)	Professor Anne Christine Johannessen The University of Bergen
Understanding Cultures	Professor Dawn Freshwater The University of Western Australia

WUN Secretariat

Role	Name
Executive Director	Professor John Hearn
General Manager	Dr Mike Hasenmuller
Research Development Manager	Associate Professor Grace Liu PhD
Program Officer	Ms Marije Nieuwenhuis
Company Secretary	Ms Helena Smith

WUN University Representatives

University	Partnership Board Member	Academic Advisory Group Member	Coordinator
The University of Alberta, Canada	Dr David Turpin	Ms Britta Baron	Dr Stefan Scherer
The University of Auckland, New Zealand	Professor Stuart McCutcheon	Professor Jim Metson	Ms Deborah McAllister
The University of Basel, Switzerland	Professor Dr. Dr. h.c. Andrea Schenker-Wicki	Professor Dr Maarten Hoenen	Mr Erich Thaler
The University of Bergen, Norway	Professor Dag Rune Olsen	Professor Anne Christine Johannessen	Mr Bjorn Erik Andersen
The University of Bristol, United Kingdom	Professor Hugh Brady	Professor Nishan Canagarajah	Dr Susan Jim (Chair)
The University of Cape Town, South Africa	Dr Max Price	Professor Kgethi Phakeng	Ms Wilna Venter
The Chinese University of Hong Kong, China	Professor Joseph J.Y. Sung, SBS, JP (Chair)	Professor Fanny Cheung	Ms Shally Fan
The University of Ghana, Ghana	Professor Ebenezer Oduro Owusu	Professor Francis Dodoo	Professor Andrew Anthony Adjei
The University of Leeds, United Kingdom	Sir Alan Langlands	Professor Lisa Roberts	Ms Anna Lewandowska
The University of Nairobi	Professor Peter Mbithi Vice-Chancellor	Professor Lucy Irungu	Professor Madara Ogot
National Cheng Kung University	Professor Huey-Jen Jenny Su	Professor Tung-yang Chen	Dr Joy Lin; Ms Huang Tzu-Yi
Maastricht University, The Netherlands	Professor Dr Martin Paul	Professor Tom van Veen	Ms Aisling Tiernan
The University of Massachusetts Amherst, USA	Professor Katherine Newman	Associate Professor Martina Nieswandt	Mr Loren Walker
Renmin University of China, China	Professor Liu Wei	Professor Wang Liming	Ms Wu Jin; Ms He Xujiao
The University of Rochester, USA	Professor Peter Lennie	Dr Jane Gatewood	Mrs Ruth Levenkron
The University of Sheffield, United Kingdom	Sir Keith Burnett	Professor Gill Valentine	Ms Danielle Bertrand
The University of Southampton, United Kingdom	Professor Sir Christopher Snowden	Professor Peter Smith	Ms Eleonora Gandolfi
The University of Sydney, Australia	Dr Michael Spence	Professor Duncan Ivison	Ms Amanda Sayan
Tecnológico de Monterrey, Mexico	Dr David Garza	TBC	Dr Arturo Molina Gutiérrez
Universidade Federal de Minas Gerais, Brazil	Professor Jaime Arturo Ramirez	TBC	Professor Fabio Alves
The University of Western Australia, Australia	Professor Dawn Freshwater	Professor Robyn Owens	Associate Professor Judith Berman
The University of York, United Kingdom	Professor Koen Lamberts	Professor Deborah Smith	Mr Andrew Brown
Zhejiang University, China	Professor Wu Zhaohui	Professor Yonghua Song	Ms Minjie Tian

List of WUN Interdisciplinary Research Groups

Global Challenge Key

Responding to Climate Change

Public Health

Global Higher Education & Research

Understanding Cultures

Participant

		WUN	I PAF	RTNE	RS															
Research Group	Lead Academic	ALB	AUK	BAS	BER	BRI	υст	снк	GHA	LEE	MAA	UMAS	REN	ROC	SHE	sou	SYD	UWA	YRK	ZJU
Adopting REDD+ for Conservation, Sustainable Community Livelihood and Climate Change Mitigation	Associate Professor Lawal Marafa																			
Ancient Soils and Modern Land Use - a Challenge for Critical Zone Science	Assistant Professor Mattias Leopold																			
Building sustainable mountain systems in sub-Saharan Africa: assessing the linkages between communities, ecosystem services, environment and health	Dr Robert Marchant																			
Changing Coasts, Climate Change and Other Drivers	Professor Robert Nicholls																			
Climate Change: Understanding Systemic Shocks in Integrated Infrastructures	Dr Nick Taylor Buck																			
Climate Resilient Open Partnership for Food Security (CROP-FS)	Associate Professor Om Parkash																			
Critical Zone Observatories	Professor Steve Banwart																			
Developing Compatible Energy and Climate Strategies	Dr Håvard Haarstad																			
Economics Cross-Cutting Theme	Professor Tom van Veen																			
Enhancing Food Security through Urban Agriculture	Associate Professor Debra Davidson																			
Exchanging mobility for intensification modes of livestock production in African pastoral systems: trade-offs and challenges for pastoralists' climatehange adaptive capacity.	Professor Nikolaus Kuhn																			
Global Farm Platforms for Optimisation of Grazing Livestock Production Systems	Professor Mark Eisler																			
Global Patterns of Climate Adaptation in Kelps	Dr Thomas Wernberg																			
Health Promoting Responses to Climate Change	Associate Professor Ralph Maddison																			
Healthy-Polis – Developing Urban Lifecourse Approaches in response to Climate Change	Professor Clive Sabel																			
Himalayan Climate Change: Debris Covered Glacier Response, Water Availability, Biodiversity and Ecosystem Response	Dr Andrew Bush																			
Impact of Climate Change on the Socio-Ecology of Animals: Effects on Epidemic Disease Spread and Species Invasion	Dr Luca Giuggioli																			
Impacts of future climate and land use changes on public health and food security in Sub-Saharan Africa and South East Asia	Assistant Professor Amos Tai																			
Impacts of Grain Legume Research and Development in Developing Countries	Professor Hon-Ming Lam																			

		WU	N PAI	RTNE	RS															
Research Group	Lead Academic	ALB	AUK	BAS	BER	BRI	UCT	снк	GHA	LEE	MAA	UMAS	REN	ROC	SHE	sou	SYD	UWA	YRK	ZJU
Indian Ocean Archaeology Network	Professor Alistair Paterson																			
Legumes as the Hub of Diversification and Adaptation to Climate Change in Mediterranean Agriculture	Dr Michael Considine																			
Managing the Globalization of Water Services in a World Affected by Climate Change: Regulatory and Economic Challenges	Associate Professor Julien Chaisse																			
New Insights into the Transmission of Angiostrongylus Lungworms by Gastropods Under Climate Change: A Comparative Approach	Dr Eric Morgan																			
Non-market valuation of loss and damage under climate change	Professor Petra Tschakert																			
Ocean Eddies in a Changing Climate: Understanding the Impact on Coastal Climates and Worldwide Fisheries Production	Associate Professor Andrew Jeffs																			
Resilient Pasts and Sustainable Futures? Designing Socially Significant Scenarios	Dr Rob Marchant																			
Spatial Framework for Assessing Environmental Livelihood Security	Dr Eloise Biggs																			
Stomata: Sensors of Climate Change	Professor Julie Gray																			
Transcultural Understanding of Designing with Climate Change: A Joint Design Research Studio Approach	Dr Chengzhi Peng																			
Web Observatory	Dame Wendy Hall																			
A study of the role of governing boards in African higher education institutions.	Dr Teerooven Soobaroyen																			
Challenges of Access and Equity: the Higher Education Curriculum Answers Back	Dr Tai Peseta																			
Community of Learning for African PhD fellows	Assistant Professor Dr Mindel Van de Laar																			
Developing and Researching the Economics and Mathematics of Selection (DREAMS): Global Perspectives	Dr Paul Tiffin																			
Economics Cross-Cutting Theme	Professor Tom van Veen																			
Feasibility Study of Recommender Systems in Academia	Dr Evgueni Smirnov																			
Global Regionalisms, Governance and Higher Education	Professor Susan Robertson																			
Heritage Forts and Castles and Coastal Cultures of Ghana	Associate Professor Kodzo Gavua																			
Ideas and Universities	Mr Ian Wei																			
Labor Market Outcomes Among Highly-Skilled Immigrants and Return Migrants: The Role of Place of Education	Associate Professor Yuying Tong																			
Lab Trove	Professor Jeremy Frey																			

Possarch Group	Lead Academic	WU	N PAI	RTNE	RS															
Research Group	Lead Academic	ALB	AUK	BAS	BER	BRI	UCT	снк	GHA	LEE	MAA	UMAS	REN	ROC	SHE	sou	SYD	UWA	YRK	ZJU
Language Assessment Research Network	Professor He Lianzhen																			
Mobility and Higher Education	Professor Tom van Veen																			
Open WUN	Professor Graeme Earl																			
Web Observatory	Dame Wendy Hall OBE																			
Widening Participation: 'First in Family' Students Succeeding in Universities	Dr 'Ema Wolfgramm-Foliaki, Associate Professor Airini, Dr Lorri Santamaria																			
The Worldwide Challenge of English	Professor Andrew Linn																			
World-class Universities, Publication and Research Assessment: Rethinking the Mission of Higher Education in the Global Age	Professor Anthony Welch																			
'Air Sensors Everywhere'	Dr Richard Peltier																			
Assessment and Intervention Technologies for the Movement Ability of Older Adults: A Cross-Country Study	Dr Gangmin Ning																			
Collaborative Care for Dementia in Rural China Primary Care	Associate Professor Chen Shulin																			
Data Analysis with Privacy Protection for Epidemiological Research (DAPPER)	Professor Paul Burton																			
Data Diplomacy: Political & Social Dimensions of Data Collection & Sharing	Dr Timothy Dye																			
Dementia Prevalence and Impact in Low Income Areas in South Africa	Dr Celeste De Jager																			
Developing and Researching the Economics and Mathematics of Selection (DREAMS): Global Perspectives	Dr Paul Tiffin																			
Early Life Opportunities for Prevention of Non-communicable Disease in Developing Countries	Professor Mark Hanson																			
Economics Cross-Cutting Theme	Professor Tom van Veen																			
Global Health Justice Network	Dr Oliver Quick																			
Global Initiative Promoting Meaningful Engagement of People with Advanced Dementia Ageing in Supported Living Environments	Dr Sanetta Du Toit																			
Global Public Health Justice: The Ethics of Research for Public Health	Professor Reidar Lie																			
Health Literacy Network	Associate Professor Kirsten McCaffery																			
Health Promoting Responses to Climate Change	Associate Professor Ralph Maddison																			
Healthy Kitchens: Healthy Cities	Dr Helen Elsey																			

Daniel Committee		WU	N PAF	RTNE	RS															
Research Group	Lead Academic	ALB	AUK	BAS	BER	BRI	υст	снк	GHA	LEE	MAA	UMAS	REN	ROC	SHE	sou	SYD	UWA	YRK	ZJU
Healthy-Polis – Developing Urban Lifecourse Approaches in response to Climate Change	Professor Clive Sabel																			
Helminths and Allergy in South-Africa and Northern Europe	Professor Cecilie Svanes																			
Hidden Voices: Exploring the Health Experiences of Children Who Migrate	Dr Jill Thompson																			
HOME – Healthy Outcomes of Migration Events	Professor Yoav Ben-Shlomo																			
Immune Responses Underlying COPD Pathology	Dr William Horsnell																			
in-FLAME – International Inflammation Network	Professor Susan Prescott																			
Knowledge-Attitude-Practice (KAP) of caregivers in institutions of elder care in Zhejiang Province	Professor Hengjin Dong																			
Lessons for Life: Innovating and Evaluating School Age Health Education Interventions for the Prevention and Control of NCDs	Dr Marcus Grace																			
Migration Policy, Welfare Boundary, Social Integration & Health-related Quality of Life of Children from Immigrant Families	Associate Professor Qiaobing Wu																			
Mpower: Empowering Mothers for Health	Associate Professor Elena Carbone																			
Negotiating Transition to a 'Grown Up World': the Journey to Sexual and Reproductive Health for Unaccompanied Adolescent Asylum Seekers	Dr Jane March-McDonald																			
OPERA – Optimal Pregnancy Environment Risk Assessment	Professor David Olson																			
Pedestrian Pathways in the Healthy City	Professor Ralph Pite																			
Promoting Wellbeing Across Borders: Migration, Social Remittances and Health	Professor Sarah Salway																			
Provision of health service and community care for the elderly: intergenerational roles and equity	Associate Professor Eliza Lai Yi Wong	5																		
Reducing Inequality in Oral Health	Professor Linda Slack-Smith																			
Resilience in Young People and Service Providers	Professor Steve Reid																			
Scoping Survey of Autism Support and Resources: Social Integration of Diagnosis, Healthcare and Support Systems	Professor Huso Yi																			
Schools as a Setting for Reducing Risk Factors for Non-communicable Diseases	Ms Jacquie Bay																			
Shaping Health Systems	Professor Stephanie Short																			
Supporting Patients to Make Best Use of Their Medicines	Associate Professor Parisa Aslani																			
Sustainable Care: connecting people and systems	Professor Sue Yeandle																			

		WU	N PA	RTNE	RS															
Research Group	Lead Academic	ALB	AUK	BAS	BER	BRI	ист	снк	GHA	LEE	MAA	UMAS	REN	ROC	SHE	sou	SYD	UWA	YRK	ZJU
Understanding Non-communicable/Communicable Disease Syndemics in Transitional Societies	Professor Naomi Levitt																			
Web Observatory	Dame Wendy Hall																			
67,000 More Helping Hands: An International Collaboration to Further Engage Pharmacists in Improving Primary Healthcare	Professor Ross Tsuyuki																			
Addressing Multiple Forms of Migrant Precarity – Beyond "Management" of Migration to an Integrated Rights-Based Approach	Professor Nicola Piper																			
CARMEN (Co-operative for Advancement of Research through Medieva European Network)	Dr Elizabeth Tyler																			
Data Diplomacy: Political & Social Dimensions of Data Collection & Sharing	Dr Timothy Dye																			
Economics Cross-Cutting Theme	Professor Tom van Veen																			
Global Adjustments to China's Growth Transition	Professor Peter Robertson																			
Global Africa Group	Professor John Hearn																			
Global China Group	Professor John Hearn																			
Global Initiative Promoting Meaningful Engagement of People with Advanced Dementia Ageing in Supported Living Environments	Dr Sanetta Du Toit																			
Global Social Initiative on Ageing	Professor Norah Keating																			
Heritage Forts and Castles and Coastal Cultures of Ghana	Associate Professor Kodzo Gavua																			
Hidden Voices: Exploring the Health Experiences of Children Who Migrate	Dr Jill Thompson																			
In-Herit: The Role of Heritage in Ontological Security During Migration and Displacement	Professor Elizabeth Brabec																			
Indian Ocean Archaeology Network	Professor Alistair Paterson																			
Indigenous Research Network	Associate Professor Catriona Elder & Dr Vicki Grieves																			
Knowledge-Attitude-Practice (KAP) of caregivers in institutions of elder care in Zhejiang Province	Professor Hengjin Dong																			
Labor Market Outcomes Among Highly-Skilled Immigrants and Return Migrants: The Role of Place of Education	Associate Professor Yuying Tong																			
Migration, Development and Global Transformations (MDGT)	Ms Ann Singleton																			
Migration Policy, Welfare Boundary, Social Integration & Health-related Quality of Life of Children from Immigrant Families	Associate Professor Qiaobing Wu																			
Migration With and Without Children: Causes and Economic, Social and Psychological Consequences	Professor Junsen Zhang																			

Pagangh Graup	Lead Academic	WU	N PA	RTNE	RS															
Research Group	Lead Academic	ALB	AUK	BAS	BER	BRI	UCT	снк	GHA	LEE	MAA	UMAS	REN	ROC	SHE	sou	SYD	UWA	YRK	ZJ
Multilingualism & Mobility in the Northern & Southern Hemispheres	Dr Kristine Horner																			
Negotiating Transition to a 'Grown Up World': the Journey to Sexual and Reproductive Health for Unaccompanied Adolescent Asylum Seekers	Dr Jane March-McDonald																			
Networking Young Citizens	Mr Brian Loader																			
Non-market valuation of loss and damage under climate change	Professor Petra Tschakert																			
Older Workers & Caregiving	Dr Janet Fast																			
Open WUN	Professor Graeme Earl																			
Pedestrian Pathways in the Healthy City	Professor Ralph Pite																			
Promoting Wellbeing Across Borders: Migration, Social Remittances and Health	Professor Sarah Salway																			
Structural Reinforcement of Inequality	Dr Francis Drake																			
Sustainable Care: connecting people and systems	Professor Sue Yeandle																			
Transcultural Understanding of Designing with Climate Change: A Joint DesignResearch Studio Approach	Dr Chengzhi Peng																			
Transformative Justice Network	Professor Paul Gready																			
Understanding Globalization- Margins and Peripheries	Associate Professor Ana Deumert																			
Web Observatory	Dame Wendy Hall																			
Characterising the Transient Radio Sky with SKA Precursors	Professor Patrick Alan Woudt																			
Spintronics	Dr Yongbing Xu																			













































