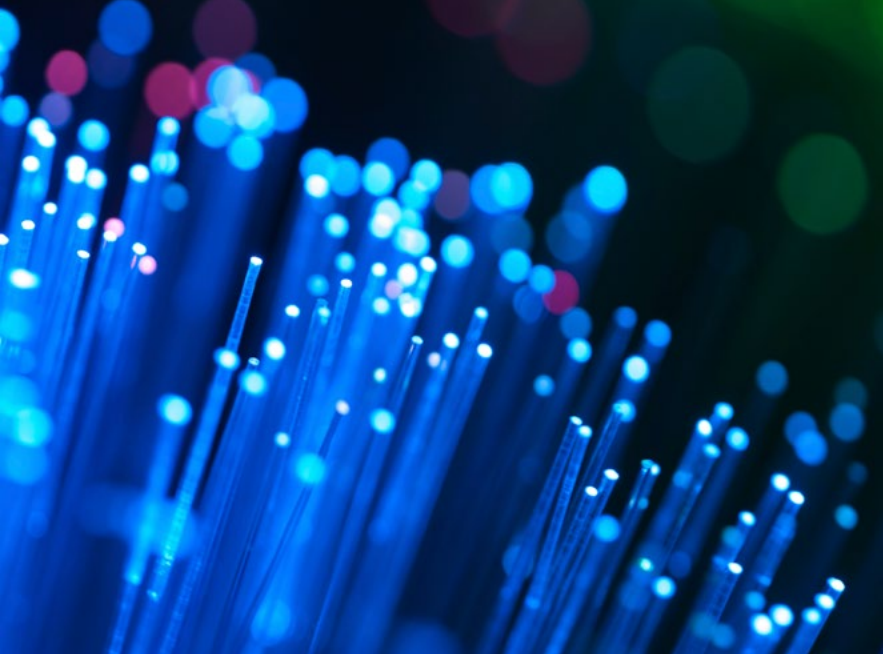




# ANNUAL REPORT 2015-2016





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## PARTNERSHIP BOARD CHAIR

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The past year has seen continued growth and consolidation in the research, mobility, impact and influence of WUN. Our network of leading research universities is now 18 members strong, from 11 countries on 5 continents. The Board has determined that the network should not grow beyond 25 members, and we are exploring potential new members to reach this size in the next few years. International research must be allowed to grow and flourish with time. Our 85 programs and over 2200 researchers worldwide demonstrate success in shared vision and teamwork.

I am pleased to note that our newer members are bringing further innovation, energy, added dimensions and reach to our programs; while also contributing new initiatives that strengthen the network. The WUN Plus cooperation that we have established with over 200 other institutions, universities, governments and international agencies allows us to align further in researching critical world issues and in bringing evidence to policy options. The engagement of established and early career researchers delivers on these opportunities.

Each year WUN progresses in its programs and refines the instruments we have developed for strategic workshops around the world to accelerate and focus our work. A regular set of teleconferences between steering groups from the Board, Academic Advisory Group, Global Challenge Groups and the Coordinators makes sure of communication, competitiveness and continuity.

And each year we hold our WUN annual conferences and AGM in a different region, focusing on practical programs and outcomes. After a successful set of meetings in Hong Kong in 2015, we now move to the European region, with a number of highly topical conferences and consultations, including on migration, which has become an ever more urgent challenge in all regions of the world.

This year we meet in Maastricht, synonymous with the establishment of the European Union. In doing so, we honour and celebrate Maastricht University. At 40 years old, the University has shown that young and old can do equally well in ascending the world's rankings, and that the intellectual strengths and innovation demonstrated since its foundation has made major contributions to aspects of reform in higher education. In WUN we can also learn from each other to strengthen the whole.

The annual Presidents Forum, bringing together our WUN Presidents, Vice Presidents and academic experts with local leaders, last year from China and this year from Europe, provides us with a distinct world view. The Forum acts as a think tank for debate and reform of higher education, with results in publications and position papers that are circulated to relevant academic and international agencies.

This annual report and AGM concludes my two year term as Chair of the WUN Partnership Board. It has been a pleasure to serve in this capacity and to help lead this remarkable community of scholars and students. In May 2016, I hand over the Chair to Joseph Sung, Vice-Chancellor and President of The Chinese University of Hong Kong, while I continue to assist as Vice Chair for a further year.



“Each year WUN progresses in its programs and refines the instruments we have developed for strategic workshops around the world to accelerate and focus our work.”

MAX PRICE  
CHAIR, WUN PARTNERSHIP BOARD  
VICE-CHANCELLOR, UNIVERSITY OF CAPE TOWN

## EXECUTIVE DIRECTOR

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I am pleased to report the continued development and strength of WUN. Our new partners, especially Amherst and Ghana, have brought welcome dimensions and extended reach. Our research portfolio is also encouraging, with many significant programs that meet the objectives of WUN in quality, impact, opportunity for emerging researchers and students, and in partnerships with governments and agencies.

This international platform is well placed for further opportunity with the major milestones in global policy agreements reached recently. These include the Sustainable Development Goals, COP 21 Paris Climate agreements, Trans Pacific Partnership, and China's Belt and Road approach to international engagement. WUN, with its capacities in the four Global Challenges in Climate and Food, Public Health, Higher Education, and Cultural Understanding, has some relevance to each of these, and has established some relationships with governments and international agencies that build trust. Several WUN experts serve as government advisors, on international strategy groups, or with development teams.

The current team that is WUN has not been developed on easy street! The Global Financial Crisis that exploded in 2008 took some time to reach universities and research agencies, and will not diminish soon. Against this negative trend in resources and their availability for competitive initiatives, WUN has progressed carefully and achieved strength across our activities. We are now implementing several new programs in the Global Challenges, and also applying four enablers: cross-cutting themes in Economics, Big Data; and regional groups with the Global China Group and the Africa Group that focus WUN-wide efforts and synergies.

The Research Development Fund, albeit modest, continues to support about 20 competitive new initiatives a year that help to build the partnership and the programs. The Sustainability Fund, established to strengthen successful interdisciplinary research groups (IRGs) towards major bids for national and international resources has taken longer to implement than expected three years ago, and will extend over 5-6 years with no further funding requests to members.

WUN has engaged successfully in an enhanced communications and social media program. In these difficult times, we are conscious that we must raise the profile of WUN and its partners, while delivering academic and financial return on investment in people, teams, mobility, impact and influence. The annual report provides a set of examples where good progress is being made.

All of this is due to the commitment, engagement and persistence of the WUN community, and we are very grateful that through their efforts WUN serves as an experimental laboratory for internationalisation, and a catalyst for interdisciplinary research, teamwork and opportunity. I thank all those who contribute, and especially our Chair Dr Max Price for his leadership, advice and support.

On behalf of all of us in WUN, I thank Nicholas Haskins for his great service as General Manager and Bee Nortjé for her expert support. We wish them well in their futures.

**JOHN HEARN**  
EXECUTIVE DIRECTOR, WORLDWIDE UNIVERSITIES NETWORK  
PROFESSOR OF PHYSIOLOGY, UNIVERSITY OF SYDNEY MEDICAL SCHOOL



“ Against this negative trend in resources and their availability for competitive initiatives, WUN has progressed carefully and achieved strength across our activities. ”

# ACADEMIC ADVISORY GROUP

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The first year as Chair of the Academic Advisory Group (AAG) has reinforced in my mind the breadth and depth of the many research collaborations that lie at the heart of WUN. These collaborations really are the engine room on which the success of the network depends.

The Research Development Fund (RDF) programme is the mechanism by which new collaborations are spawned within WUN. One of the AAG's key responsibilities is to oversee the annual RDF round and review submissions. In the most recent round, we had many excellent proposals, from which 15 projects were selected, giving an overall success rate of 41%. There was a good spread of project partners between the WUN universities and all four Global Challenges were represented. At the AGM in 2016, we will review the process for the RDF, aiming to ensure we do everything possible to stimulate successful proposals in the next round.

We all look forward to seeing the existing WUN research groups flourish over the coming year, in some cases accessing national and international funding streams, leading to projects with global impact. There is huge potential to grow further our success in securing major funding, and this objective will be a key topic for the AAG meeting at the AGM in Maastricht. Through working together, WUN is in a position to inform international research agendas and influence the priorities of funding agencies. For example, WUN was represented by several colleagues at COP 21, the Climate Change conference in Paris, where we organised a side workshop addressing the question of 'What are the research challenges associated with developing a climate-smart agri-food system?'

A central feature of WUN is of course the wide geographic spread of our members. This provides us with an important benefit in being able to address our four Global Challenges through adapting to the environmental and social context in different parts of the world. This ensures the research has global reach and impact. The recent development of the Global Farm Platform for example will support future research in this way, paralleling the earlier success of the Critical Zone Observatories.

The AAG and the four Global Challenge groups have been active over the past year in helping to build links between established researchers and students from our universities, and in many other ways, including the development of educational opportunities that align with the research. I'd like to extend a warm welcome to Joe Berger from UMass Amherst who has taken on the role of Chair of the GHEAR Global Challenge, and to thank Nick Lieven for his leadership of GHEAR over two years until October 2015.

The emerging cross-cutting themes of data analytics, economics, China and Africa are developing new communities (in part through the AGM) that have the potential to stimulate novel research directions and extend stakeholder engagement within our Global Challenges.

I'd like to finish by recognising the vital role that our WUN Coordinators perform in driving our network day to day; working with academic colleagues to identify research partnerships and supporting them in developing and sustaining excellent research proposals. Particular thanks go to Stefan Scherer for his leadership as Chair of the WUN Coordinator group.

**DAVID HOGG**  
CHAIR, WUN ACADEMIC ADVISORY GROUP  
PRO-VICE-CHANCELLOR FOR RESEARCH AND INNOVATION, UNIVERSITY OF LEEDS



“ Through working together, WUN is in a position to inform international research agendas and influence the priorities of funding agencies. ”



**86** INTERDISCIPLINARY  
RESEARCH GROUPS



**47** CONFERENCES & STRATEGIC WORKSHOPS



**16** PROJECTS COMPLETED  
AND RETIRED

**139** ACADEMIC  
PUBLICATIONS



**42** GRANTS FROM EXTERNAL ORGANISATIONS



EQUALING £8,016,440

**2,302** RESEARCHERS  
ACROSS THE WORLD



**31** ENGAGEMENTS IN  POLICY DEVELOPMENT

**4** GLOBAL CHALLENGES



# STRATEGIC PLAN 2014-2017

## 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 FOCUSED ON FOUR GLOBAL CHALLENGES:



RESPONDING TO CLIMATE CHANGE



GLOBAL HIGHER EDUCATION AND RESEARCH (GHEAR)



PUBLIC HEALTH



UNDERSTANDING CULTURES



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 AND EMERGING TALENT



ATTRACTING RESOURCES TO SUSTAIN OUR WORLD-CLASS TEAMS



CREATING ACCESS AND ADVANTAGE FOR OUR MEMBERS

### 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.

### 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.



## OBJECTIVES & STRATEGIES

1	STRENGTHEN AND GROW OUR UNIVERSITY NETWORK	<ul style="list-style-type: none"> <li>• Develop and maintain a dynamic portfolio of research and education programs in alignment with WUN members' priorities.</li> <li>• Strategically grow the membership as a network of peer universities with mutual strengths and regional diversity.</li> <li>• Build ownership and leadership within WUN to increase collaboration, commitment and sense of community.</li> </ul>
2	FOSTER INFLUENTIAL RESEARCH COMMUNITIES	<ul style="list-style-type: none"> <li>• Focus our efforts on four Global Challenges: <ul style="list-style-type: none"> <li>- Responding to Climate Change (food security, urbanisation, oceanography);</li> <li>- Public Health (lifecourse approaches to obesity, heart disease, diabetes);</li> <li>- Global Higher Education and Research (access and equity, new technologies);</li> <li>- Understanding Cultures (migration, digital futures, ageing).</li> </ul> </li> <li>• Incorporate cross-cutting themes in big data, macroeconomics, and regional programs on China and Africa into our Global Challenge programs.</li> <li>• Strengthen leadership and accountability to ensure quality and delivery.</li> </ul>
3	NURTURE RESEARCH TALENT	<ul style="list-style-type: none"> <li>• Create opportunities for the engagement and career development of talented researchers at the postdoctoral, postgraduate and undergraduate level in international research collaborations.</li> <li>• Facilitate the mobility of students and academic staff.</li> <li>• Promote equity for researchers in our programs.</li> </ul>
4	ENHANCE THE WUN PROFILE	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Increase the power of the "WUN voice" in an ambassadorial and lobbying role.</li> <li>• Strengthen the WUN brand and profile with internal and external audiences, ensuring WUN is recognised for the vast potential of its intellectual resources.</li> </ul>



# WUN CONFERENCE & AGM 2016



Maastricht University hosted 400 academics and university leaders from around the world at the [WUN Conference & AGM](#) in April 2016. Held each year at one of WUN's member universities, the Conference & AGM brings together the network's leadership, as well as researchers, experts, administrators, practitioners and policymakers, to discuss the direction of the network and research priorities related to WUN's four Global Challenges. This year's Conference & AGM also formed part of the celebrations marking the 40th anniversary of Maastricht University.

The event consisted of 10 events across 8 days and covered a broad array of issues including migration, public health, economics, youth resilience, internationalisation of higher education and China's global supply chains. At the AGM, members of the Partnership Board, Academic Advisory Group, Coordinators Group, and Global Challenge Steering Groups met to discuss the previous year's achievements and chart the future development of the network.

Among several noteworthy moments throughout the Conference & AGM was the signing of a collaboration agreement between WUN and the International Organization for Migration (IOM). The purpose of this alliance is to fill key gaps in the global knowledge base on migration in order to better inform global policy and practice. Through a number of combined activities and exchange fellowships, WUN and IOM will work together over the coming years to improve the quality of

migration data, analysis and research. WUN's strengths in public health research were bolstered with an agreement to place a WUN research fellow at the World Health Organization in Geneva. The fellowship will focus on lifecourse approach to healthy ageing and non-communicable disease prevention.

WUN's Global China Group hosted the 2nd China FDI Workshop titled '*Understanding China's FDI and Global Supply Chains: Europe and the World*'. Opened by the Chinese Ambassador to the European Union, this strategic workshop brought together Chinese and international researchers to examine the progress of President Xi Jinping's Belt and Road Initiative, focussing on China's external international FDI and global supply chains interpreted through examples in food, health, higher education and security. The delegates assessed international research priorities and developed a plan for future research working together with Chinese partners.

The joint WUN-Maastricht University International Classroom Symposium brought together WUN experts from around the world to share their research insights and best practices in regard to internationalisation in higher education. Delegates participated in four interactive workshops to discuss topics such as ethics, digital diversity and intercultural learning.

The next WUN Conference & AGM will take place in New York from 3-5 May 2017.

# WUN PRESIDENTS FORUM 2016



WUN hosted its annual **Presidents Forum** in nearby Brussels, where the leadership of WUN was joined by prominent delegates from the European Research Council, European Parliament and European Commission, as well as representatives from national embassies. Titled '*Open Doors: European Opportunities in Research & Education*,' the Forum focussed on the increasing internationalisation of knowledge through policy frameworks; the broader remit of the European Union and Europe-based agencies around the world; and the fundamental research questions through which WUN and its allied partners can contribute.

The Forum began with an address by Mr Jeroen Lenaers, Dutch Member of European Parliament. Mr Lenaers discussed the 'enormous challenges' currently facing Europe, emphasizing the important role that researchers can play in addressing them. He also emphasized the importance of adopting a long-term perspective that focuses on developing the next generation, which is also one of WUN's key objectives. A keynote speech was delivered by Professor Jo Ritzen, Former Dutch Minister of Education and Science and former President of Maastricht University, on how universities can claim their rightful place in the broader policy and research sphere. The delegates then heard from Professor Jean-Pierre Bourguignon, President of the European Research Council, who discussed the importance of organisations like WUN and the value of researchers and policymakers working together.

"Science, which has been and is my life, is a collective, public and international endeavour. New ideas have always spread rapidly. And these days, discoveries made anywhere are available almost instantly to the global scientific community. In 2013, over 35% of articles with an EU author were co-publications involving international partners. The top research institutions benchmark themselves at the global level. National and European policymakers therefore need to maximise the ability of their scientific communities to take part in and contribute to this overall enterprise. There is no such thing as national or European science," said Professor Bourguignon.

Mr Peter Dröll, Director of Open Innovation and Open Science at the European Commission showed how cooperation improves performance, since co-publications tend to have substantially higher impact. Ms Claire Morel, Director of International Cooperation at the European Commission, presented the many benefits of internationalisation, highlighting various programs such as Erasmus+, Marie Skłodowska-Curie Fellowships and Knowledge and Innovation Communities (KICs). The latter half of the Forum included two panel discussions with the WUN Presidents, during which a global perspective was considered in WUN partnerships with the European Union and affiliated agencies.

The next WUN Presidents Forum will take place in New York from 3-5 May 2017.



# FUTURE DIRECTIONS

WUN governance groups meet at the AGM each year to review progress and adjust direction where this improves quality and delivery of the Strategic Plan 2015-17 outcomes. The pace of change is accelerating in higher education, research and innovation. It is vital that WUN remains fit for purpose, aligned to the opportunities in advancing knowledge and impact in its areas of work, and to the strategic objectives of its members. There is significant change also in the WUN membership, leadership and international engagement. This year there were a number of new initiatives proposed and implemented, while preparations were initiated for a fundamental review of all activities in preparation for the Strategic Plan 2017-20.

## The WUN Partnership

All of us in WUN are pleased that new members, the University of Massachusetts-Amherst and University of Ghana, are active and highly engaged in the network. WUN is in discussion with ten other universities as prospective members that would further extend its capacity and global reach. We are pleased with interest from further UK universities, but must defer these for the present so that the global balance is improved. A research network must grow slowly, with equal peers, in a trusted community of scholars.

## WUN Programs

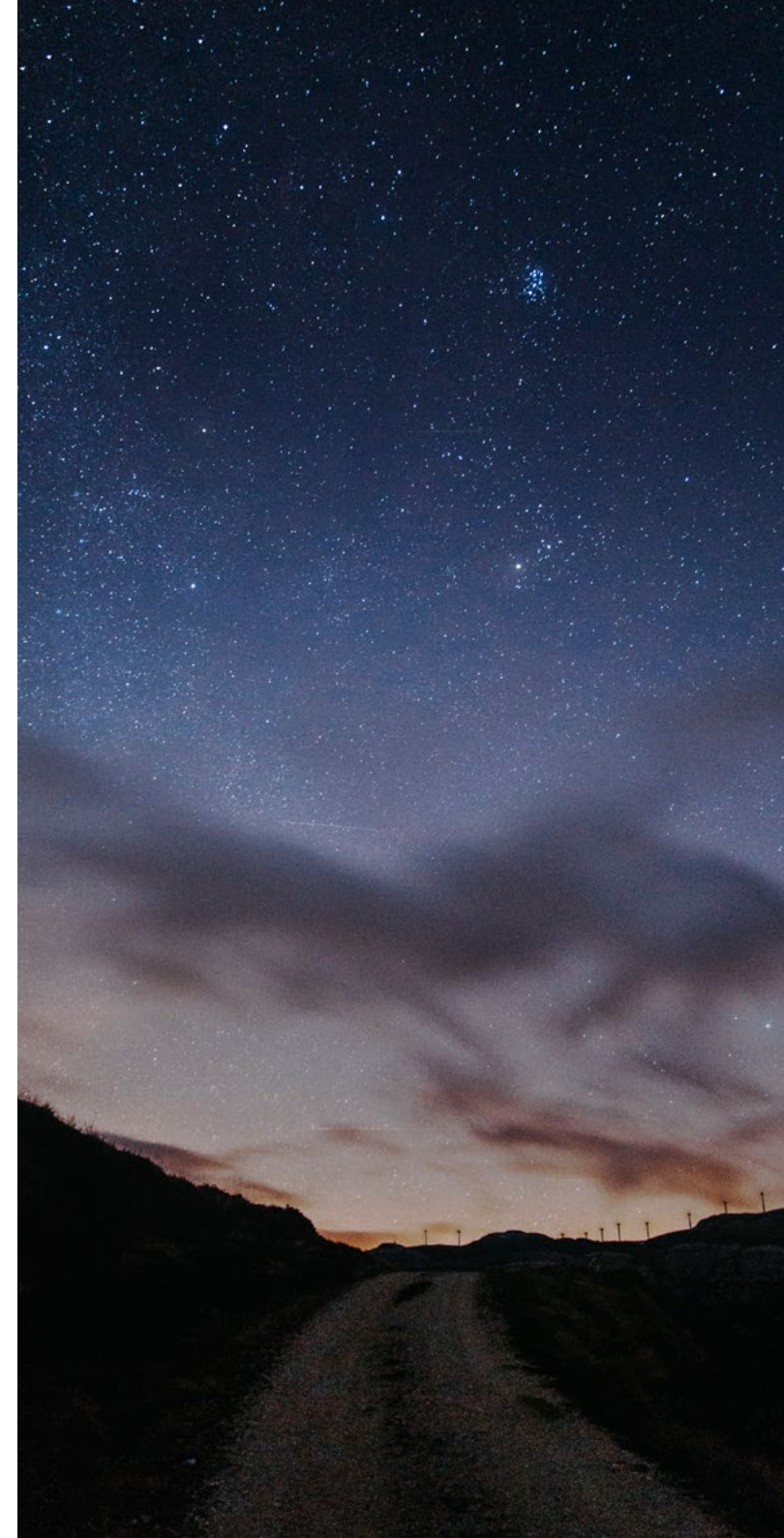
The introduction of enabling “cross-cutting” themes in Economics, Big Data/Web Science, and in regional groups for China and Africa are progressing. These groups held strategic workshops and consultations to determine their distinct added value to the network, work plans and sustainability. Agreements between the WUN Understanding Cultures Group and the International Organization for Migration (IOM); and between the Public Health Group and the World Health Organization; will allow research fellows and students to be placed and exchanged, and align research and policy partnerships.

## International Developments

As noted earlier in this annual report, WUN is advancing its relevance to major international policy frameworks, including the Sustainable Development Goals and the COP 21 Climate Change agreements. The Global Challenges of WUN in Climate and Food, Public Health in Non Communicable Disease, Higher Education and Research, and Understanding Cultures all have relevance and relationships with these global policy priorities. In research through the year, and at the WUN AGM on 3-5 May 2017, these capacities will be developed further. The Presidents Forum in New York is likely to focus on the Sustainable Development Goals and their practical implementation in higher education and research.

## WUN Strategic Plan 2017-20

The Board of WUN agreed that a major agenda item at the New York meetings will be the WUN Strategic Plan 2017-20. In preparation, a fundamental review of all WUN activities will be carried out. A survey of WUN members and major stakeholders in the second half of 2016 will seek innovation, increase quality and opportunity, and reduce non-competitive or distracting programs. Depending on the resolutions and shape emerging for the next strategic plan, the functions and location of the WUN Secretariat, the WUN governance structure, and the function of the Board may evolve accordingly.







## **GLOBAL CHALLENGE: RESPONDING TO CLIMATE CHANGE**

In 2015, world leaders signed a comprehensive deal to address climate change at COP21 in Paris. The agreement, signed by 195 nations, marks the first time that both developed and developing countries will be expected to help mitigate climate change by keeping global warming below 1.5 degrees Celsius. This is half a degree less than initially proposed, since it became clear early on in the negotiations that an increase of 2 degrees would result in disastrous consequences in certain hotspots. The new goal of limiting global average temperature rise to 1.5 degrees Celsius will instead facilitate an equitable, balanced ecosystem for all global citizens.

The WUN Responding to Climate Change Global Challenge fosters innovative, multidisciplinary research into the scientific, cultural, health and social dimensions of climate change. Key research themes include the drivers and pressures of climate change; the impacts on systems affected by climate change; and managing a response to climate change. Emphasis is placed on identifying climatic and societal response thresholds to make our research useful to stakeholders, and researchers work with policymakers and practitioners to deliver research-driven outcomes at the global, regional and local level.



# RESPONDING TO CLIMATE CHANGE

## MOVING TOWARD A SUSTAINABLE FUTURE FOLLOWING COP21

In December 2015, world leaders convened at COP21 in Paris, signing a comprehensive deal to address climate change. WUN joined as an official observer organisation, sending a delegation of some of its leading minds in responding to climate change, including Professor Debra Davidson (Alberta), Professor Nikolaus Kuhn (Basel), Professor Mark Eisler (Bristol), Professor Tim Benton (Leeds), Professor Duncan Cameron (Sheffield) and Professor Michelle Holdsworth (Sheffield).

WUN also co-hosted a side event with the University of Sheffield's Grantham Centre. Titled '*What are the research challenges associated with developing a climate-smart agri-food system?*', the meeting brought together scientists and social scientists to consider the need for more resilient food systems as a result of climate change. It was chaired by Grantham Centre Director, Professor Tony Ryan OBE, and was joined by WUN experts.

The discussion addressed many facets of climate-smart agriculture, including demand mitigation, water consumption in meat production, genetically modified crops, and the direct impact of climate change on farmers. By the end, it was clear that investment in new technologies is necessary to ensure stability in the agri-food system, which currently causes 30% of all GHG emissions.

Earlier that day, the Grantham Centre launched its first briefing note, led by Professor Duncan Cameron, on the unfolding global crisis of soil loss and its catastrophic impact on food security, which fed into much of the afternoon's discussion. Following the event, Professor Michelle Holdsworth published a commentary piece on how unhealthy diets contribute to climate change and hunger. Professor Peter Horton, Associate Director of the Grantham Centre, also published a piece the following day on the key issues around adapting the food system to climate change.

### KEY OUTCOMES

- Co-hosted international workshop with the University of Sheffield at COP21 on the issue of climate-smart agriculture, December 2015.
- Briefing note on the unfolding global crisis of soil loss and its catastrophic impact on food security.
- Commentary on how unhealthy diets contribute to climate change and hunger.

## LEGUMES: SOLUTIONS TO HUMAN HEALTH AND AGRICULTURAL SUSTAINABILITY

More efficient legume production, especially in developing economies, can mean food and nutritional security for the world's poorest and most vulnerable. Legumes can also play an important role in reducing non-communicable diseases, such as obesity, diabetes, heart disease and neurodegenerative diseases. Yet, to date, research on grain legumes has been neglected despite the wide genetic resources available.

Led by Dr Michael Considine (UWA), the WUN Grain Legumes Network is exploring the role that grain legumes can play in meeting future food, fodder and environmental demands. Comprised of 21 experts from 12 leading institutions across the world, the group met in November at Zhejiang University for its inaugural workshop titled "*Legumes 2020: The hub of diversification and adaptation to climate change in agriculture.*"

The workshop produced a policy statement highlighting the importance of grain legumes and to facilitate a coordinated approach towards their use in achieving an environmentally, socially and economically sustainable food and feed sector. It stresses the importance of legumes as a sustainable solution and serves as a call-to-action to policymakers, funding bodies and industry to work with university scientists towards identifying new technologies for legume crop improvement.

Follow-up workshops have since been hosted by The Chinese University of Hong Kong and the University of Western Australia. Members of the group also contributed to the Intergovernmental Panel on Climate Change in Paris (2015) and the Plant and Animal Genomes conference in San Diego (2016). Two independent review publications, as well as a Special Issue of the Journal of Experimental Botany, are currently in preparation for 2016. The group is also planning a WUN Summer School and an application for funding to the Wellcome Trust for 2017.

### KEY OUTCOMES

- Hosted inaugural Legumes 2020 workshop at Zhejiang University, which resulted in a policy statement, November 2015.
- Hosted two follow-up workshops at CUHK (December 2015) and UWA (January 2016).
- Two publications, as well as a Special Issue of the Journal of Experimental Botany, in preparation for 2016.



# RESPONDING TO CLIMATE CHANGE

## UWA SUMMER SCHOOL 2015

In early 2015, 10 graduate students from across the network, as well as six students funded by the US National Science Foundation, gathered in Perth for the inaugural WUN Summer School hosted by the University of Western Australia (UWA). Taking advantage of UWA's expertise and unique environment, the topic of the summer school was "Soil Science and Climate Change." The students, representing seven countries and nine WUN universities, spent two weeks sharing their global perspectives on responses to climate change and contributing their diverse disciplinary expertise to address landscape and soil-related climate issues.

Led by Assistant Professor Matthias Leopold and Dr Deirdre Gleeson, the program included a four-day "Critical Zone Soil Science and Climate Change" workshop, fieldwork at the UWA Future Farm and an intensive writing retreat at UWA's Albany campus, where students honed their academic writing skills. The feedback from participants was overwhelmingly positive, including that from Meshack Nkosinathi Dlodlu, a PhD student from the University of Cape Town.

"I think a summer school such as this one should be a part of every PhD student's training. In addition to the networking and establishment of contacts for collaboration in the present and in the future, the WUN summer school provided a great opportunity to learn some new field, laboratory and writing techniques, which are invaluable to my PhD studies and for future use in my research career. It also provided an opportunity to present my own research work and receive comments and suggestions from my peers. I believe I have been well trained for a career in academia."

In addition to personal and academic career growth, there are currently four research papers in progress as a result of the WUN Summer School. Two participants have also begun drafting a research proposal for the Australian Research Council (ARC).



### KEY OUTCOMES

- Four research papers in progress.
- Proposal to the Australian Research Council (ARC) in progress.

## STOMATA: SENSORS OF CLIMATE CHANGE

Since natural processes are highly sensitive to climate change, food security will depend on advances in plant science that improve crop productivity, reduce water demand and improve drought tolerance. Stomata, which are the microscopic pores on plant leaves, play a crucial role in plant productivity and water use. As atmospheric levels of carbon dioxide (CO<sub>2</sub>) rise, a plant's stomatal pores reduce in size and their number decreases, controlling water loss from the leaf's surface. Yet, little is known about the underlying mechanism responsible for this process.

Led by Professor Julie Gray from the University of Sheffield, a team of researchers from five WUN institutions (Bristol, Sheffield, Sydney, UWA, Zhejiang) is exploring whether altering stomatal characteristics could create crops that are more tolerant to drought or better suited to growth at higher atmospheric CO<sub>2</sub> levels. By identifying the genes responsible for stomatal function, they can be included in future crop breeding programmes for drought tolerance and water use efficiency.

In 2013, the group received a Research Development Fund grant and has since produced seven research papers based on their research. So far, the group has discovered that stomata are controlled at a molecular level by a plant hormone called ABA, which enables the plant to adapt to changes in atmospheric levels of CO<sub>2</sub> so that it needs less water. From an evolutionary perspective, this suggests that plants first developed a way to close their stomata in order to conserve water under drought conditions. Later, the same chemical signals were used to adjust CO<sub>2</sub> uptake for photosynthesis.

The group has been awarded significant external funding, including £25k from the Innovation and Knowledge Exchange (IKE) and over £1.5M from the Biotechnology and Biological Sciences Research Council (BBSRC). They are also recruiting a PhD student for a fully funded, four-year scholarship from the University of Sheffield's Grantham Centre for Sustainable Futures.

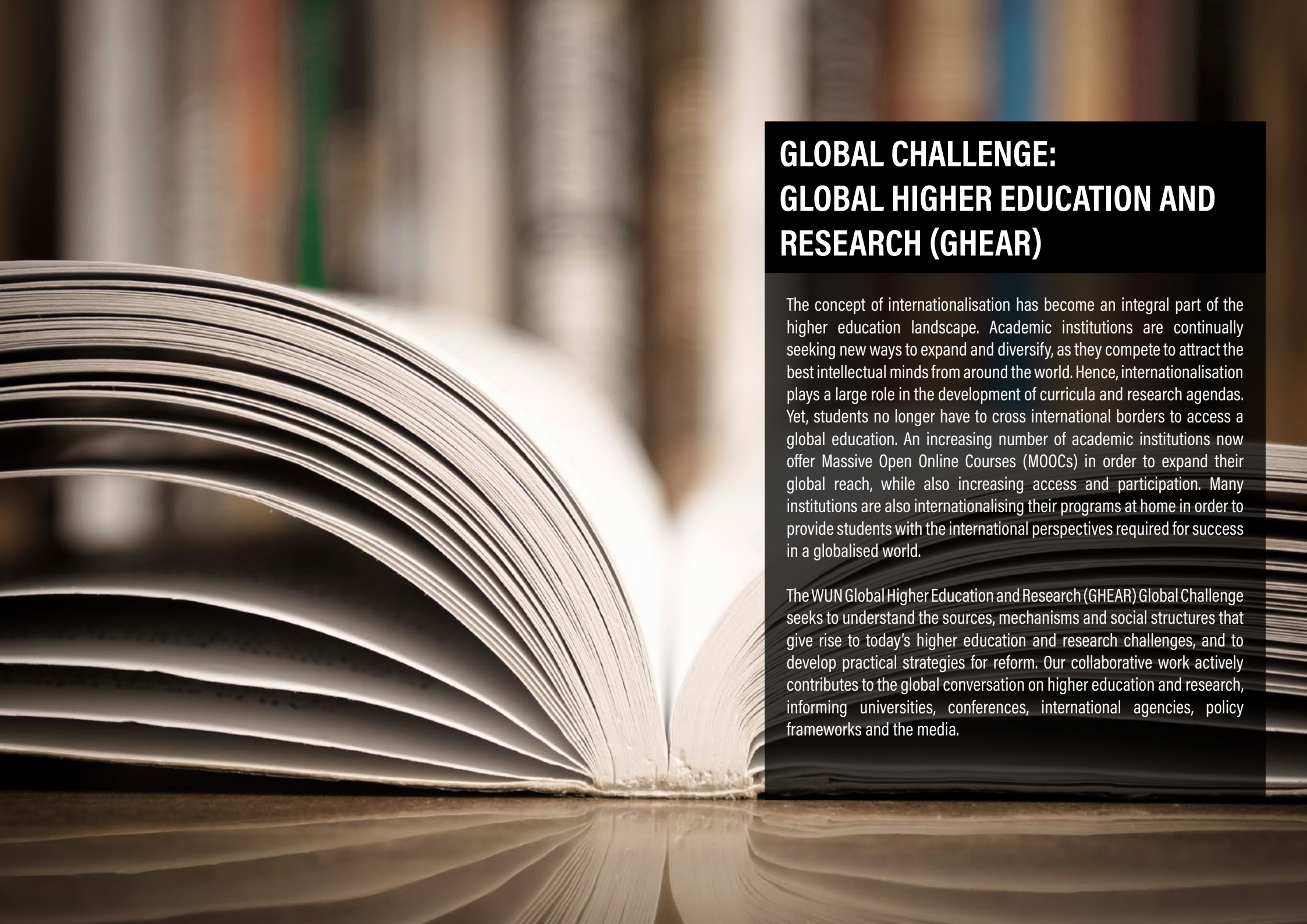


### KEY OUTCOMES

- Seven research papers published.
- Awarded over £1.5M from the Biotechnology and Biological Sciences Research Council (BBSRC), 2016-2019.
- Granted a fully-funded, four-year scholarship for a PhD student by the Grantham Centre for Sustainable Futures.







## **GLOBAL CHALLENGE: GLOBAL HIGHER EDUCATION AND RESEARCH (GHEAR)**

The concept of internationalisation has become an integral part of the higher education landscape. Academic institutions are continually seeking new ways to expand and diversify, as they compete to attract the best intellectual minds from around the world. Hence, internationalisation plays a large role in the development of curricula and research agendas. Yet, students no longer have to cross international borders to access a global education. An increasing number of academic institutions now offer Massive Open Online Courses (MOOCs) in order to expand their global reach, while also increasing access and participation. Many institutions are also internationalising their programs at home in order to provide students with the international perspectives required for success in a globalised world.

The WUN Global Higher Education and Research (GHEAR) Global Challenge seeks to understand the sources, mechanisms and social structures that give rise to today's higher education and research challenges, and to develop practical strategies for reform. Our collaborative work actively contributes to the global conversation on higher education and research, informing universities, conferences, international agencies, policy frameworks and the media.

# GLOBAL HIGHER EDUCATION AND RESEARCH

## WIDENING PARTICIPATION AND IMPROVING ACCESS TO EDUCATION

Widening participation in higher education has become a primary focus for many universities around the world. Still, while there is a growing body of evidence on how to address such issues, there are still no robust and replicable solutions for all contexts. The WiPIAR project, led by Professor Roger Dale from the University of Bristol, set out to explore this further. The problem, the group hypothesized, does not lie in the nature of the solutions proposed, but rather in the regional differences and lack of consensus on what might be considered a problem or how it might be addressed.

To tackle this issue, the group employed a version of the 'Delphi' technique, using an online questionnaire to canvass the range of understandings and constructions of the issue among WUN members, around the broad idea that inequalities in access to higher education cannot be explained by academic abilities alone. The group also carried out a meta-analysis of the 'widening participation' statements of all WUN member universities, which found that the most common initiatives included: outreach programmes, use of contextual data in admissions, financial aid, curricular and timetabling changes, and vocational routes into higher education.

From these analyses, two broad conclusions emerged. The first was that although these issues are common to almost all members, they often occur for different reasons and treating them equally conceals a wide and complex range of histories, purposes, objectives and goals. Therefore, we must not only ask what works, but also for whom? In what circumstances? In what respects? With what outcomes? The second conclusion was that this is not a problem that universities can be expected to solve on their own because there are always at least three parties involved: universities, their target audience and the forms of governance/funding available.



### KEY OUTCOMES

- Delphi study and meta-analysis, which uncovered a number of areas for further research in widening participation in higher education.

## PARTNERS IN GLOBAL HIGHER EDUCATION POLICY DEVELOPMENT

WUN has established "Knowledge Partnerships" with several international agencies in each of the four WUN focus areas. The purpose is to bring the worldwide research reach of WUN to align and inform global priorities in policy.

Examples are a research fellowship with the World Health Organization in NCDs and Adolescent health; a research fellowship with the International Organization for Migration (IOM) on comparative international policy; and advisory roles with these and government bodies in environment, food and nutrition security, maternal and child health.

In the core Global Challenge of Higher Education and Research, WUN has developed its Knowledge Partnerships with the OECD, British Council and Association of Commonwealth Universities. WUN researchers and institutional leaders participated in the OECD handbook in Internationalisation. WUN leaders also played strong roles in strategic conferences. For example, Nick Lieven in the OECD International Education Conference in Singapore in September 2015, as well as several WUN partners, including Professor Indira Samaresekera and Professor John Hearn, to the annual OECD Global Forum in Paris.

The British Council is a knowledge partner through the annual "Going Global" Higher Education conference. WUN has participated strongly for many years; and through membership of the Education Advisory Group. WUN is also a close partner with the Association of Commonwealth Universities in exchange speakers, projects and strategic development.

These interactions provide opportunities for the institutions, research and people of WUN to accelerate in their international engagement and internationalisation, bringing evidence-based research to build good policy options.



### KEY OUTCOMES

- Research fellowship with WHO and the International Organization for Migration (IOM).
- Knowledge Partnerships with the Association of Commonwealth Universities, British Council and OECD, including participation in the OECD handbook in Internationalisation.
- Participation in strategic conferences such as the OECD International Education Conference, OECD Global Forum and Going Global Higher Education Conference.





# GLOBAL HIGHER EDUCATION AND RESEARCH

## THE WUN PRESIDENTS FORUM

The annual WUN Presidents Forum takes advantage of having a global team of Presidents, from leading research universities in 11 countries on 5 continents, convene in a different geographic region each year. The Presidents, invited local Presidents, Vice Presidents and experts, focus on the theme and current challenge in global higher education.

In Hong Kong in April 2015, the Forum was held at the Shenzhen Campus of The Chinese University of Hong Kong. The theme was *'Global and Local: reform agendas for higher education in China and the World'*. The opening speaker, Professor Yang Fujia of Fudan and Ningbo, gave a provocative listing of reform imperatives. Professor Sir Eric Thomas of Bristol highlighted the advantage of being part of an efficient network that built a scholarly community and reduced the needs of parallel negotiations with several partners. Among the outcomes of the Forum were joint research projects, significant interest expressed in WUN and its Global China Group by Chinese Presidents, and further cooperation and cross-representation with WUN and Chinese universities in international workshops and policy initiatives.

Increasingly, the Presidents Forum is attracting high-level interest and participation from government and business. The distilled results of the Forum are usually written up as a position paper and circulated to the government and academic leaders, as well as to the related international agencies. Summary papers that identify reform challenges have been published in refereed journals.

The most recent Presidents Forum took place in Brussels, alongside the WUN Conference & AGM 2016. The focus was on the increasing internationalisation of knowledge through policy frameworks; the broader remit of the European Union and Europe-based agencies around the world; and the fundamental research questions through which WUN and its allied partners can contribute.



### KEY OUTCOMES

- Joint research projects established.
- Significantly increased profile for WUN and its Global China Group in China.
- Further cooperation and cross-representation with WUN and Chinese universities in international workshops and policy initiatives.

## LANGUAGE ASSESSMENT RESEARCH NETWORK

Most universities use international students' English language proficiency level as important criteria for admission. However, this practice is highly debatable since there have been many cases where English language proficiency does not accurately reflect academic ability. It is an ongoing challenge in the field of language assessment, posing questions such as 'What kind of language proficiency is required for academic study? How do we assess in a reliable, valid, cost-effective and fair way? What are the educational, political and social impacts of the use of English test scores?'

Led by Professor Lianzhen He from Zhejiang University, the Language Assessment Research Network (LARN) aims to address this challenge. The interdisciplinary team includes researchers from the University of Auckland, the University of Bristol, The Chinese University of Hong Kong, the University of Sydney, the University of Western Australia and Zhejiang University. Their goal is to create a sustainable global learning platform to collectively address these questions that affect internationalisation in higher education and impact high-stakes decision-making.

To date, the group has published one research paper and has received external funding of RMB200,000 from the China National Social Science Foundation. In July 2015, the Zhejiang-Bristol Joint Research Institute of Language Assessment was formally established and a workshop was held at each campus that same month, one of which contributed to the development of the Chinese Ministry of Education's China Standards of English. A student mobility plan is also in progress and the group hopes to launch a joint doctoral programme in language assessment, which will be based in China, in the future. A workshop on language assessment literacy, jointly organized by Zhejiang University and the University of Bristol, will take place in October 2016.



### KEY OUTCOMES

- Awarded RMB200,000 from the China National Social Science Foundation, 2015.
- Established the Zhejiang-Bristol Joint Research Institute of Language Assessment and hosted two workshops, July 2015.
- Expanded research capacity of WUN partners through joint PhD supervisions.







## GLOBAL CHALLENGE: PUBLIC HEALTH

The year 2016 marks the launch of the 2030 Agenda for Sustainable Development, adopted by world leaders last September at the United Nations. These 17 goals aim to end poverty, protect the planet, and ensure prosperity for over the next 15 years. Among these goals is 'Good Health and Wellbeing', which includes targets to reduce the global maternal mortality ratio; end preventable deaths of newborns and children under 5 years of age; reduce premature mortality from non-communicable diseases; ensure universal access to sexual and reproductive healthcare services; support for the research and development of vaccines; and more.

The WUN Public Health Global Challenge brings together some of the world's leading experts to explore socioeconomic, cultural and behavioural solutions across the lifecourse. Research focuses on three themes: the health of families and migrants across the lifecourse; health resilience in adolescents in different cultural contexts; and schools as a setting for reducing risk factors related to NCDs. Links are sought to major global initiatives such as the UN's Sustainable Development Goals, and special attention is paid to population-level and individual approaches that increase access to education, promote health literacy and empower women.

# PUBLIC HEALTH

## OPERA - OPTIMAL PREGNANCY ENVIRONMENT RISK ASSESSMENT

Led by Professor David Olson of the University of Alberta, OPERA is an international, interdisciplinary group of women's health researchers, care providers, foundations and international agencies dedicated to women at risk for preterm birth. An initiative of the Preterm Birth International Collaborative (PREBIC), its goal is to develop inexpensive and accessible means to predict adverse pregnancy outcomes as early as possible to promote effective interventions to mitigate risk, especially among populations of vulnerable women.

The organisation provides support in terms of special skills, study design, data evaluation and sharing, guidance, advocacy, information about best practices, and communicates discoveries to partners and target audiences. Comprised of 36 organisations and institutions from around the world, OPERA is supported by the March of Dimes (MOD) and is recognised by the World Health Organization.

In 2015, the group held its first international meeting in San Francisco, where 38 academics from across the network attended and presented papers. Six members also participated in the PREBIC Annual Meeting in Italy, integrating OPERA work into other preterm birth initiatives. A poster was also presented by Dr Olson at the Developmental Origins of Health and Disease Congress in Cape Town.

So far, a five-point plan for developing OPERA, including two future conferences, has been approved. The group is currently preparing two systematic reviews on abuse, violence and preterm birth, and a review of protocols for assessing risk for preterm delivery. It is also preparing a summary of its inaugural workshop for publication in the British Journal of Obstetrics and Gynecology. Going forward, it plans to organise a consortium of existing pregnancy cohorts to perform risk analysis; seek a pregnancy cohort in a vulnerable population; develop a template protocol to be trialed by pregnancy cohorts to assess risk; and advocate for funding to support an initial cohort assessment trial.



### KEY OUTCOMES

- Inaugural meeting held in San Francisco, where 38 members attended and presented papers, March 2015.
- Six members participated in the PREBIC Annual Meeting in Italy as part of the Global Initiatives Working Group, May 2015.
- Awarded funding from March of Dimes for inaugural meeting, 2014.

## EARLY LIFE OPPORTUNITIES FOR THE PREVENTION OF NCDs IN DEVELOPING COUNTRIES

Non-communicable diseases (NCDs) are responsible for 35 million deaths each year, affecting low and middle-income countries most heavily. This number is expected to rise by 17 per cent over the next decade, and organisations such as the United Nations and World Health Organization (WHO) now recognise that the prevention of NCDs requires a lifecourse approach.

Led by Professor Mark Hanson of the University of Southampton, experts from 27 organisations and institutions are leveraging their expertise in public health, epidemiology, underlying mechanisms and biomarkers, and translational clinical medicine, to present a concerted view on the prevention of NCDs. So far, the group has produced 14 publications and have met in Shanghai, Cape Town, Hong Kong, Southampton and Washington DC to further the collaboration. Funded by both public and private resources, work in developmental epigenetics of cohorts is taking place across the participating institutions.

Several group members are also involved in advocacy work, with high-level engagement at WHO and the International Federation of Gynecology and Obstetrics (FIGO). Professor Hanson currently serves as Co-chair of the WHO Working Group on Science and Evidence for the Commission on Ending Childhood Obesity (ECHO), as well as Chair of the FIGO Working Group on Maternal Nutrition, which published its recommendations on Adolescent, Preconception, and Maternal Nutrition in September 2015. Sir Peter David Gluckman of the University of Auckland and Chief Science Advisor to New Zealand Prime Minister, also served as Co-chair of the Commission on Ending Childhood Obesity. The resultant report was presented to the WHO Director-General in January 2016.

In April 2016, the group hosted two public health workshops in Maastricht. The group is also preparing to appoint a WUN/WHO Research Fellow to work with the WHO secretariat for one year in order to further build on this research.



### KEY OUTCOMES

- 14 research papers published in 2014-2015.
- Contributed to the Commission on Ending Childhood Obesity (ECHO) report, which will be presented to the World Health Assembly in May 2016.
- Development of a WUN/WHO Research Fellow position to strengthen the link between NGOs and academic institutions.





# PUBLIC HEALTH

## LESSONS FOR LIFE: INNOVATING AND EVALUATING SCHOOL AGE HEALTH EDUCATION INTERVENTIONS FOR THE PREVENTION AND CONTROL OF NCDs

As support for the lifecourse approach in preventing non-communicable diseases (NCDs) grows, the lack of research relating to the effective design and evaluation of teaching programs for adolescents has become apparent. Although some teaching materials have been developed, there is still no internationally accessible health education package for NCD prevention in teenagers.

Led by Dr Marcus Grace from the University of Southampton, experts from around the world are working to refine the design of innovative health-related teaching materials and activities, and to evaluate these by developing effective assessment instruments. Specifically, they are focusing on increasing access to health education among teenagers across a range of abilities, socioeconomic backgrounds and cultures; developing training for teachers, which is directly aimed at supporting the students' health training program; and the design of realistic methods of evaluating the impact of the learning activities on students.

The project began as an exchange of ideas between LENSscience in Auckland and LifeLab in Southampton, where students can analyse their DNA, use ultrasound to look at their own arteries, examine skeletons, assess their own diets, measure blood pressure and more. The project has since grown to include 13 WUN+ partners from around the world, including Danone, Johnson & Johnson, the UK Department of Education and the World Health Organization.

To date, the group has produced two publications and hosted a session at the European Science Education Research Association (ESERA) Conference in Estonia. Dr Grace has also been awarded £50,000 by the Research Councils UK's School-University Partnership Initiative, which facilitates engagement between researchers and secondary school students to bring contemporary research into formal and informal learning contexts.



### KEY OUTCOMES

- Two research papers published.
- Hosted a session at the European Science Education Research Association (ESERA) Conference, September 2015.
- Dr Grace awarded £50,000 by the Research Councils UK's School-University Partnership Initiative, 2016.

## HOME - HEALTH OUTCOMES OF MIGRATION EVENTS

The impact of migration on health is often neglected since international migrant policies tend to focus on aid, security, immigration enforcement, trade and labour. Furthermore, migrant health policies tend to be implemented at a national level. However, since it is now recognized by the World Health Organization that exposure to hazards during sensitive periods or accumulated over the life course significantly affects health outcomes, there is an urgent need to establish international policies that ensure equal health opportunities for migrants.

Led by Professor Yoav Ben-Shlomo from the University of Bristol, experts from 11 universities across four continents are exploring the effects of internal and external migration, and its impact on life course determinants of health. The project evolved from a previous WUN collaboration and aims to bring together researchers with a wide range of expertise and experience across both high income countries (HIC), and low and middle income countries (LMIC). To date, the group has hosted workshops in Cape Town and Southampton, and participated in the WUN Migration Conferences in Hong Kong and Maastricht. It has also received a \$40,000CAD grant from the Alberta Centre for Child, Family and Community Research, as well as joint funding from the University of Bergen and University of Western Australia for a researcher to undertake a systematic review of health interventions targeted at migrant populations.

The group is currently preparing three research papers and has ideas for grant applications to the National Institutes of Health (NIH) and the Economic and Social Research Council (ESRC). They are also considering the creation of sub-groups around migration in HIC and LMIC settings, and introducing expertise in areas such as law, policy and economics. A HOME meeting will also take place at the 6th European Conference on Migrant and Ethnic Minority Health in June 2016.



### KEY OUTCOMES

- Awarded \$40,000CAD from the Alberta Centre for Child, Family and Community Research, 2015.
- Received joint funding from the University of Bergen and UWA for research into health interventions targeted at migrant populations, 2015.
- Hosted two workshops in Cape Town and Southampton, 2014.







## GLOBAL CHALLENGE: UNDERSTANDING CULTURES

The world is currently witnessing the worst refugee crisis since WWII, as millions of refugees from the Middle East, North Africa and Western Asia flee violence and war in their countries. However, while the pressure has been steadily mounting for years, it was a photograph of a lifeless Syrian toddler washed up on the shores of a Turkish beach that galvanised many world leaders into action. The image, which illustrated the human cost of this humanitarian crisis, spread virally across social media and effectively transformed the debate around migration, once again proving its power to affect political change.

Technology continues to advance at a rapid pace and innovations in areas such as big data are increasingly being used to address some of the world's most significant challenges. The WUN Understanding Cultures Global Challenge brings together scholars from the humanities and social sciences, as well as other disciplines, to develop research into culture and society that addresses issues of relevance to policymakers. A key goal is to gain a better understanding of the consequences of globalisation for the world's cultures; how globalisation is challenging national, regional and individual cultural identities and practices. Researchers are particularly encouraged to explore new forms of knowledge exchange as a result of technological advancement.



# UNDERSTANDING CULTURES

## MIGRATION

The current humanitarian crisis has brought international migration to the forefront of the global policy agenda. As nations struggle to respond, the need for research-informed policy on migration has become clear. However, this will require collaboration across the disciplines, which is why WUN is developing stronger relationships with policymakers in addition to its robust program of research in the field of migration.

In April 2015, WUN held its inaugural Migration Conference in Hong Kong. The conference, which took a multi-disciplinary, multi-thematic and multi-cultural approach, was attended by migration experts from within WUN, as well as experts from respected organisations such as the International Organization for Migration (IOM) and the Rockefeller Institute of Government. As a result, WUN and the IOM's Global Migration Data Analysis Centre in Berlin have formed a strategic alliance to improve the quality of migration data, analysis and research in order to fill key gaps in the global knowledge base on migration.

WUN and the United Nations Research Institute for Social Development (UNRISD) also co-hosted a workshop where researchers presented their findings from a recent study of migrant precarity, exploring the linkages between migration and social protection from a rights perspective. The workshop included an interactive panel discussion with policy makers and practitioners from UN agencies and NGOs. The resultant brief makes suggestions on how to overcome migrant precarity and move a rights-based migration agenda forward.

The second WUN Migration Conference took place in April 2016 in Maastricht and included representatives from EU institutions, academia and NGOs. A special issue of the Journal of Mixed Methods Research, which was produced based on the first WUN Migration Conference, will also be published in July 2016.



### KEY OUTCOMES

- Hosted inaugural WUN Migration Conference in Hong Kong, April 2015.
- Collaboration agreement with IOM to improve quality of migration data, 2015.
- Co-hosted workshop with UNRISD on migrant precarity, September 2015.
- Special issue of the Journal of Mixed Methods Research, July 2016.

## TRANSCULTURAL UNDERSTANDING OF DESIGNING WITH CLIMATE CHANGE: A JOINT DESIGN RESEARCH STUDIO APPROACH

The UK's Committee on Climate Change warns that premature deaths from overheating could triple to 7,000 per year by the 2050s if new homes and public buildings continue being designed and constructed without regard to the impact of rising temperatures on an ageing population. Thus, sustainable climate change adaptation requires a transcultural approach that synthesizes different types of practical knowledge.

Led by Dr Chengzhi Peng from the University of Sheffield, leading design researchers from three WUN member universities, as well as Wuhan University and the University of Architecture and Technology in China, developed a novel pilot research programme to further explore sustainable climate change adaptation. The group took a joint design research studio approach, allowing for comparison of the key parameters of designing climate change adaptation in different cultural and climatic settings. It also furthered understanding of how climate change is approached in higher education in non-Western contexts. Their goal was to establish an evidence-based transcultural position for developing further research that would benefit higher education institutions globally.

In 2014, the group received a Research Development Fund grant to further develop the project and has since produced six publications based on their research. They have also hosted a conference in Sheffield, which was attended by 13 academics from across the network and followed by two workshops. Most notably, Dr Chengzhi Peng and Dr Randal Lawrence were recently awarded approximately £85,000 by the Grantham Centre for Sustainable Futures for a project titled '*Characterising Uncertainty in Complex Environmental Simulations for Public Engagement with Climate Change Conscious Sustainable Planning and Design.*' The two will jointly supervise a Grantham Scholar based at Sheffield's School of Architecture from 2016-2020.



### KEY OUTCOMES

- Six research papers published.
- Hosted "*Architecture and Resilience on the Human Scale, Cross-Disciplinary Conference,*" as well as two workshops, September 2015.
- Awarded approximately £85,000 by the Grantham Centre for Sustainable Futures, October 2016 – September 2020.



# UNDERSTANDING CULTURES

## NETWORKING YOUNG CITIZENS

Engaging young citizens in the political process remains a crucial concern for academics, policymakers, civics teachers and youth workers around the world. Not surprisingly, social media is increasingly being hailed as a means of re-engagement, given its profound influence on younger generations, and its role in defining political values and cultural norms.

Networking Young Citizens explores the contemporary political and civic engagement of young citizens both within and beyond their own societies. Led by Brian Loader from the University of York, the group's research interests range from 'unconventional' political engagement to changing political norms, the rise of smaller political parties, celebrity politics, identity and consumer politics, austere social conditions, rising social inequalities and political socialisation. It is also concerned with civic education in regard to online environments. Four WUN member universities (Leeds, Sydney, UWA, York) as well as 11 WUN+ partners across Europe, the UK, the US and South Pacific are currently involved.

In 2012, the group received US\$312K from the Spencer Foundation to conduct a two-year comparative study exploring whether social media use facilitates new forms of civic learning and engagement among young people, and the potential for these dynamics to mitigate longstanding inequalities in political engagement. The group has since published nine research papers, as well as one book. In April 2015, group members participated in two sessions about the cultural politics of cyberspace at the Understanding Global Digital Cultures Conference 2015 in Hong Kong, which was co-convoked by Mr Loader. Most recently, the group hosted a session titled '*Protest as a Norm of Youth Citizenship? When Contentious Politics Becomes Everyday Civic Engagement*' at a conference in Sardinia, Italy in June 2015. The group is currently developing a database in collaboration with the WUN Web Observatory project.



### KEY OUTCOMES

- Hosted a session at the Protest Participation in Variable Communication Ecologies: Meanings, Modalities and Implications conference, June 2015.
- Sessions at the Understanding Global Digital Cultures Conference, April 2015.
- Nine research papers published, as well as one book titled "The Networked Young Citizen Social Media, Political Participation and Civic Engagement", 2015.

## OBSERVING AND MINING THE WEB

The web offers unprecedented opportunities for spreading information. Not only do we now have the capacity to share rich data sets online, we also have vast amounts of data about our online activity. However, without a proper framework in place, it is difficult to take full advantage of this rich information resource.

The WUN Web Observatory project, led by Professor Dame Wendy Hall OBE at the University of Southampton, aims to bridge this gap. It works by enabling the sharing of research datasets between universities and research labs to support interdisciplinary, inter-institutional research. The project includes participants from 13 of WUN's member universities, each of which has a Web Observatory node that enables them to a) catalogue and share their resources b) discover and access resources in other WUN Web Observatory nodes and c) discover and access resources across the network of Web Observatories, which is deployed under the auspices of the Web Science Trust. As a result, members are able to share and use public or private datasets and analytics from around the world.

In November 2015, WUN sponsored an inaugural workshop at the University of Southampton. The goal of the workshop was to engage with members from across WUN in order to establish a network of Web Observatory nodes. The two-day event included an address from Professor Dame Wendy Hall OBE, working groups, roundtable discussions and presentations. Together, the group agreed on four research areas (Ageing and Wellbeing, Online Education, Disaster Management, Digital Literacy) and appointed a lead institution for each.

The group is currently mapping all datasets available across the network. It plans to meet again in September 2016 for preliminary data work and to develop one or more funding applications.



### KEY OUTCOMES

- Two-day workshop at the University of Southampton, November 2015.



# CROSS-CUTTING THEMES

The WUN vision boldly pronounces the network's ambition to "be a force in developing innovative solutions to some of the world's most significant challenges". WUN addresses this through its four Global Challenges - research pillars that are shaped by some of the biggest issues facing society: Climate Change, Global Higher Education and Research, Public Health and Cultural Understanding. These programs have been running for some years and have carved their own space in the global research dialogue on these topics. Yet WUN has great strengths in other areas that cut across these themes and which require greater coordination and fostering. In response, WUN has developed a series of cross-cutting themes. These are complementary research themes that intersect with the Global Challenges and add important dimension to them. Together, they form a research matrix that demonstrates the breadth and depth of WUN's research portfolio.





# CROSS-CUTTING THEMES



## AFRICA

The year 2015 saw the launch of the Global Africa Group, which aims to foster mutual understanding and collaboration between African and international institutions, while also serving as a bridge between West and East Africa. It takes an interdisciplinary approach and incorporates research strengths that exist in WUN across areas of social policy, politics, history, economics and anthropology to offer a broad view of Africa. Aligned with the UN Sustainable Development Goals, the group focuses on issues around natural resource management, climate change and adaptation, mining and industry policies, as well as issues around gender and development.



## BIG DATA

Although the opportunities afforded by big data are seemingly endless, there are still a number of barriers to making the most of this vast resource. Hence, the Big Data cross-cutting theme, which explores ways to harness the power of big data to better address global challenges. In 2014, the University of Rochester hosted the WUN Big Data Workshop to explore research opportunities in climate, health, education and migration. Since then, projects such as the WUN Web Observatory have begun to enable the sharing of datasets within and between universities and research labs to better support interdisciplinary, inter-institutional research.



## CHINA

Initiated in late 2013 and arising from existing research programs throughout the network, the WUN Global China Group seeks to build a greater two-way understanding of China. How the world sees China and how China sees the world is not only an important element of cultural understanding, but also impacts global responses to climate change, global public health, and higher education. The group incorporates WUN's research strengths across Chinese economy, society, social policy, politics, history, anthropology, literature, visual/performing arts and religion, while developing strong links with government, NGOs, industry and leading external academic partners.



## ECONOMICS

Launched in November 2015, the Economics cross-cutting theme takes a broad approach to Economics, encompassing both macro and micro dimensions. While economic aspects of the Global Challenges are a primary consideration, the focus of this research program spreads into areas such as trade, innovation and economic development, financial governance, macroeconomic policies and economic cooperation in a globalising world. Key focus areas are the economics of education and the dissemination of knowledge; the economics of public health; international economic development; global economic governance; and the economics of climate change.

# RESEARCH INVESTMENTS

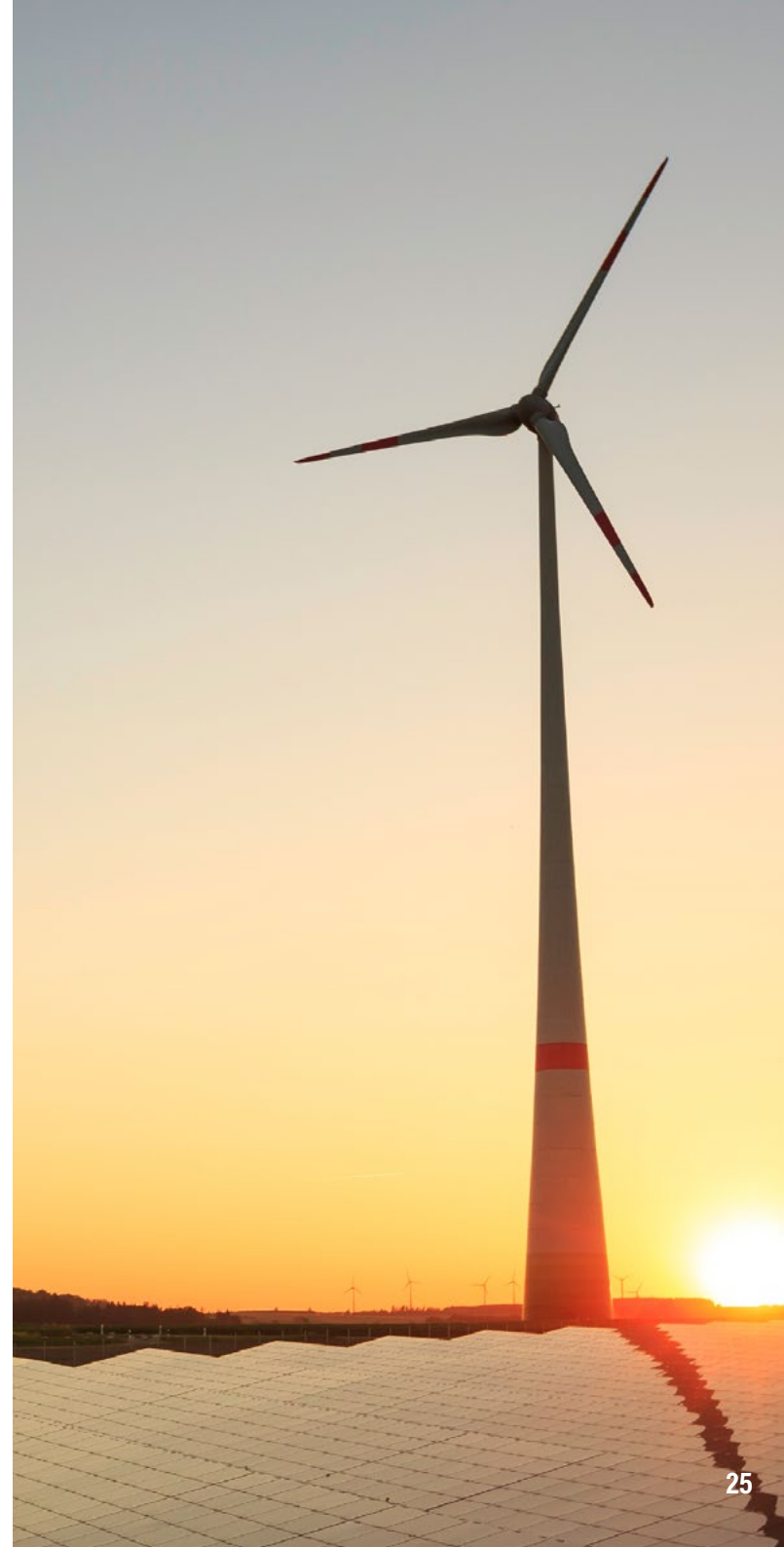
WUN is deeply committed to sponsoring meaningful, applied research that makes a difference to the world. We focus our efforts on our four identified Global Challenges and foster interdisciplinary, international teams to perform groundbreaking work that could not otherwise be undertaken by a university working alone. In 2015/16, WUN directly invested £288,563 in research through its three [funding programs](#) – the Research Development Fund (RDF), Sustainability Fund, and Global Challenge Steering Group Fund.

The RDF is an annual, competitive grant scheme that fosters innovative, high quality and sustainable research among member universities. Now in its 8th year, it has invested over £1.3 million into applied research and has led to the creation of 128 research programs. In 2015, WUN invested £156,213 across 15 grants. One of the programs that was awarded funding is Climate Resilient Open Partnership for Food Security (CROP-FS). The research program will develop strategies to minimize the impact of climate change on agriculture by enabling major food crops to grow under more extreme environmental conditions such as drought, high temperature, and irrigation with brackish or sea water. Led by Associate Professor Om Parkash at the University of Massachusetts Amherst, the international team consists of researchers at four WUN universities, as well as Jawaharlal Nehru University in India. The WUN grant will catalyse grant proposals to major funding bodies, academic publications and career-building opportunities for students and postdoctoral researchers.

Another program funded by the RDF 2015 was the Migration, Development and Global Transformations Network (MDGT). Led by Ann Singleton at the University of Bristol, the research program will fill key gaps in the global knowledge base on migration. As the crisis that unfolded in the Mediterranean in the summer of 2015 demonstrated, many governments around the world are left sorely lacking when it comes to migration policies that can respond effectively to global human flows. The MDGT Network aims to contribute to global migration policy, particularly the new 2030 Sustainable Development Goals. The project brings together a large interdisciplinary team of researchers from 10 WUN universities, as well as partners at Oxford University and the International Organization for Migration.

The WUN Sustainability Fund offers grants to support the further development of existing WUN programs that have demonstrated success and are ready to attract significant external funding from government, NGOs, international agencies, foundations and industry. In 2015, two major grants were awarded through the Sustainability Fund. The Global Farm Platforms program led by Professor Mark Eisler at the University of Bristol was awarded funding to further develop its successful research into sustainable ruminant livestock production and to establish its international network of model farms through the Global Farm Platform. The Web Observatory, led by Professor Dame Wendy Hall, at the University of Southampton builds on the success of a number of WUN programs in data science and digital cultures. The program aims to address the growing problem of enabling the sharing of research datasets within and between universities. Universities have such massive untapped banks of data, but barriers such as accessibility and lack of harmonization prevent us from taking advantage of the full potential of big data. This program establishes a global grid of web observatories that will catalogue, share and standardize data resources in a way that is scalable. The project includes 11 WUN universities, and several university and industry partners.

The Global Challenge Steering Group Fund provides funding for the development of WUN's Global Challenge programs. In 2015/16, funding was used to host the 2nd WUN Migration Conference in Maastricht; the WUN Global Health Partnerships Workshop in Maastricht; and the sending of a delegation of four thought-leaders from WUN universities to the COP21 Climate Change Conference in Paris.





# RESEARCH MOBILITY

WUN developed the [Research Mobility Program \(RMP\)](#) as part of its commitment to fostering the next generation of researchers. Through the RMP—which essentially serves as a WUN Passport—students and staff from WUN universities can travel to other member institutions for a period of up to three months to collaborate, learn, teach and share across borders. This allows early career researchers, including PhD students, to expand their knowledge and skill sets, widen their professional networks, and take advantage of new career opportunities. It also gives them access to expertise and facilities that may not be available at their home institution, while exposing them to new ideas and research cultures. Most importantly, it provides an invaluable opportunity for personal and academic growth which often leads to future international academic success. Although the programme is not centrally run or funded by WUN, member universities participate by making funds available for travel and subsistence, or by integrating the RMP into international research programmes. In 2015/16, 70 researchers from member institutions received funding to participate in the program.

One of these students was Shanika Donalds, PhD student in the Department of Human Ecology at the University of Alberta. In April 2015, Shanika attended a master class at the Centre for International Research on Care at the University of Leeds. The event was sponsored by the Global Social Initiative on Aging (GSIA) interdisciplinary research group, led by Dr Norah Keating of the University of Alberta. The master class focused on helping early career researchers develop conceptualisation of topics and research agendas. Paired with senior researchers who acted as mentors, the students had an opportunity to discuss research programmes, avenues for getting works published and the development and use of academic networks. It was also an invaluable opportunity for Shanika and her peers to develop closer ties with researchers from other WUN institutions.

While the RMP is targeted at early career researchers, it is also available to faculty members who are seeking collaborators at other WUN institutions. In 2015, Dr Dave Lewis from the University of Leeds visited South Africa to co-convene a 5-day conference with Dr Bert Mohr, Director of the Centre for Animal Research at the University of Cape Town and President of the South African Association for Laboratory Animal Science (SAALAS). Sponsored in part by WUN, the conference explored the education and training needs for laboratory science personnel in Southern Africa, and set out to find solutions to address these needs. The conference attracted 83 national and international delegates who collectively represented all sections of the laboratory animal sciences community. Dr Lewis will return in 2017 to further develop the collaboration.

Similarly, Professor Stephen Heung-Sang Wong from The Chinese University of Hong Kong spent two weeks working closely with Dr Helen O'Connor in the Faculty of Health Sciences at the University of Sydney. Together, they further developed their research plans and agreed to develop large-scale research projects that will attract long-term funding. Professor Wong also made several connections within the Faculty of Health Sciences, as well as the University of Sydney's Charles Perkins Centre.

"During my two-week visit to the university, I have successfully developed links with the Charles Perkins Centre and have held discussions on how to synergise our research teams so that we can work together on collaboratively funded projects. Additionally, I have given two research presentations to their staff and PhD students during the course of my visit. I have also held numerous meetings with their colleagues from the discipline of Exercise and Sports Science. These meetings have promoted the research work of my university in general, and of my department and research group in particular."



# CONFERENCES, EVENTS & STRATEGIC WORKSHOPS

Throughout the year, WUN hosts conferences, workshops, seminars, virtual seminars and events that bring an international community of researchers together to share ideas, spark collaboration and further our ground-breaking research. These events partner with leading universities, academic societies, international organisations, foundations and governments in order to ensure our research is informed and impactful. Listed below is a small selection of important events between May 2015 and April 2016. More information can be found on the events section of the WUN website.

## Fair and Just Practices: Art and heritage worlds from the perspectives of markets and law Maastricht, The Netherlands | 18-19 March 2016

As WUN explores the possibilities for an interdisciplinary research group in Heritage Studies, Maastricht University hosted this conference to analyze and contextualize unfair practices in art and heritage worlds from a variety of disciplinary and trans-disciplinary perspectives. The conference was held alongside one of the world's most admired art fairs: Maastricht's TEFAF.

## Steps to Sustainable Livestock Bristol, UK | 12-15 January 2016

Part of the highly successful WUN Global Farm Platforms project, this conference brought together academics, researchers, NGOs, policymakers and livestock producers to explore innovative solutions toward sustainability of ruminant systems, which is a key factor in adapting the world to climate change.

## Developing a Climate-smart Agri-food System Paris, France | 2 December 2015

As part of its official observer organisation status to the United Nations Framework Convention on Climate Change (UNFCCC), WUN hosted a workshop at COP 21. The workshop, co-hosted with the University of Sheffield, focussed on how climate change and associated changes in weather patterns challenge agricultural outputs and interact with rising global demand for food.

## Web Observatory Project Workshop Southampton, UK | 9-10 November 2015

WUN sponsored an inaugural Web Observatory workshop in Southampton in order to establish a network of Web Observatory nodes among its member universities. The two-day event included an address from Professor Dame Wendy Hall OBE, working groups, roundtable discussions and presentations. Together, the group agreed on four research areas (Ageing and Wellbeing, Online Education, Disaster Management, Digital Literacy) and appointed a lead institution for each.

## Multilingualism and Mobilities. Understanding Globalization. Cape Town, South Africa | 15-16 October 2015

This unique event brought together two WUN-funded research programs in a joint workshop. *The Multilingualism and Mobility in the Northern & Southern Hemispheres* and *Understanding Globalisation - Margins and Peripheries* share numerous objectives. In this workshop, they explored the ways that linguistic and cultural diversity presents opportunities and challenges, with the goal of productively shaping public education and migration policies.

## Pedestrian Pathways in the Healthy City Symposium Bristol, UK | 30 June - 2 July 2015

As part of its designation as European Green Capital City for 2015, Bristol hosted this WUN Symposium exploring the practice of walking as a central aspect of a liveable, healthy, environmentally sustainable city. The symposium is part of a wider WUN collaboration that produced an app to augment the walking experience in the city.

## Negotiating Transition to a 'Grown Up World' Southampton, UK | 10-12 June 2015

This international roundtable examined the journey to sexual and reproductive health for unaccompanied adolescent asylum seekers. At a time when Europe is particularly grappling with the vexing issue of migrant rights and wellbeing, this roundtable brought together academics with professionals working in the field.

## 4th Annual in-FLAME Workshop Marburg, Germany | 2-4 June 2015

The WUN in-FLAME Network came together for their 4th Annual Workshop among the scenic surrounds of a German castle in 2015. The 2-day program advanced the highly successful global collaboration focussed on the role of inflammation in early life NCDs. The network convened again in 2016 alongside the WUN AGM in Maastricht.

## WUN China Foreign Direct Investment Symposium Hong Kong, China | 27 April 2015

Hosted by the WUN Global China Group, the WUN China Foreign Direct Investment Symposium brought together researchers from China, Canada, Australia, South Africa and the UK to focus on the global investment trends, as well as country-specific public policy issues, that arise from Chinese investment.

## WUN Understanding Global Digital Cultures Conference 2015 Hong Kong, China | 25-26 April 2015

The WUN Understanding Global Digital Cultures Conference 2015 explored the emergence and development of global digital cultures through a number of themes, including social media, cultural identity and politics. Co-convened by Brian Loader from the University of York and Professor Jack Qiu from The Chinese University of Hong Kong, the 2-day event included four keynote speeches and 12 sessions where participants presented their research on a variety of topics related to digital culture.



# 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 18 leading universities in 11 countries across 5 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.

## Online tools and support

WUN provides a range of digital tools to support communication and collaboration among researchers:

- Virtual seminars that bring researchers from distant locations together to share ideas. This service also offers postgraduate students access to international scholars they may not otherwise interact with.
- Desktop conferencing to support meetings and smaller seminars, and to help develop collaborations.
- Public web pages for promoting projects and initiatives.
- All research groups involving three or more WUN member universities from two or more geographic regions are given space on the WUN website to promote activities.
- Cloud-based communications for sharing data, applications and preparatory work.
- Email lists for day-to-day communications and announcements.

WUN also offers funding support and advice to help interdisciplinary research projects identify, bid for and secure external funding. Assistance is provided by WUN's team of expert research managers and administrators.

## 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 & 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.

## Global Academy Jobs

WUN has partnered with Global Academy Jobs (GAJ) to develop a truly global academic mobility and recruitment portal. Since the joint initiative was formed in June 2012, GAJ has become one of the world's fastest growing online job portals, providing universities with access to academic talent around the world, as well as providing diverse career opportunities for academics at every stage of their career—from postdoctoral researchers to lecturers, professors, Presidents and Vice-Chancellors. To date, WUN's member universities have advertised 23,800 jobs through GAJ, representing a significant cost saving and profile generation to WUN members. Visit [www.globalacademyjobs.com](http://www.globalacademyjobs.com)

## Contacts

For more information about WUN, please contact:

**Executive Director:** Professor John Hearn, [jhearn@wun.ac.uk](mailto:jhearn@wun.ac.uk)

**General Manager:** Mr Nicholas Haskins (to 31 May 2016)

**General Manager:** Dr Mike Hasenmueller, [mhasenmueller@wun.ac.uk](mailto:mhasenmueller@wun.ac.uk)

**Program Manager (China):** Associate Professor Grace Liu, [gliu@wun.ac.uk](mailto:gliu@wun.ac.uk)

**Program Officer:** Ms Marije Nieuwenhuis, [mnieuwenhuis@wun.ac.uk](mailto:mnieuwenhuis@wun.ac.uk)



# **WUN CONFERENCE & AGM NEW YORK CITY, USA | 3-5 MAY 2017**

**The WUN Conference & AGM 2017 will take place on 3-5 May 2017 in New York City, USA.**

**New York City will play host to the core days of the WUN AGM and the Presidents Forum, with the preceding academic conferences and workshops taking place at nearby WUN member universities UMass Amherst and Rochester. By hosting the AGM, Global Challenge Steering Group meetings and Presidents Forum in New York City, we anticipate that member university delegations will be able to include important side meetings with the many alumni, donors, governments, industry and foundations that call New York home. We ask you to block these dates in your calendar now and we hope you will be able to join us in New York City!**





# LEADERSHIP AND GOVERNANCE

WUN is managed by a Secretariat consisting of the Executive Director, Professor John Hearn, and the General Manager, Nicholas Haskins. The network is governed by a series of three governance boards:

The **Partnership Board** is responsible for setting forth the policy of the network and is made up of the Presidents, Vice-Chancellors or Rectors of the member universities. The **Academic Advisory Group** is responsible for overseeing the academic portfolio of the network and advising the Partnership Board on strategic direction. It is made up of senior administrators, usually at the level of Vice President or Deputy Vice-Chancellor with responsibility for the research or internationalisation priorities of the member universities. The **Coordinators Group** manage the implementation of the WUN strategies and programmes on campus, and serve as the main contact point for network initiatives. This group shares information on collaborative opportunities and develops WUN's research programmes.

UNIVERSITY	PARTNERSHIP BOARD MEMBER	ACADEMIC ADVISORY GROUP MEMBER	COORDINATOR
The University of Alberta, Canada	Dr David Turpin	Ms Britta Baron	Dr Stefan Scherer (Chair)
The University of Auckland, New Zealand	Professor Stuart McCutcheon	Professor Jim Metson	Ms Usha Bhatia
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
The University of Cape Town, South Africa	Dr Max Price (Chair - to April 2016)	Professor Danie Visser	Ms Wilna Venter
The Chinese University of Hong Kong, China	Professor Joseph Sung (Chair - from April 2016)	Professor Sian Griffiths	Ms Shally Fan / Ms Yvonne Heung
The University of Ghana, Ghana	Professor Ernest Aryeetey	Professor John Owusu Gyapong	Professor Andrew Anthony Adjei
The University of Leeds, United Kingdom	Sir Alan Langlands	Professor David Hogg (Chair)	Ms Louise Heery
Maastricht University, The Netherlands	Professor Dr Martin Paul	Professor Tom van Veen	Ms Alexandra Rosenbach
The University of Massachusetts Amherst, USA	Professor Katherine Newman	Professor Elizabeth Chilton	Mr Michael Wright
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 Karen Tsui
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
The University of Western Australia, Australia	Professor Paul Johnson	Professor Robyn Owens	Associate Professor Judith Berman
The University of York, United Kingdom	Professor Koen Lamberts	Professor Deborah Smith	Ms Helen Rajabi
Zhejiang University, China	Professor Wu Zhaohui	Professor Yonghua Song	Ms Minjie Tian

## Global Challenge Steering Groups

GLOBAL CHALLENGE	CHAIR
Responding to Climate Change	Professor Peter Davies, The University of Western Australia
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

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

# List of WUN Interdisciplinary Research Groups

## GLOBAL CHALLENGE KEY

RESPONDING TO CLIMATE CHANGE

PUBLIC HEALTH GLOBAL HIGHER EDUCATION AND RESEARCH OTHER

LEAD PARTICIPANT UNDERSTANDING CULTURES

ACTIVITY NAME	LEAD ACADEMIC	WUN PARTNERS																		
		ALBA	AUCK	BASL	BERG	BRIS	UCT	CUHK	GHAN	LEED	MAAS	UMAS	ROCH	SHEF	SOUT	SYD	UWA	YORK	ZHEJ	
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’ climatechange 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																			



Activity Name	Lead Academic	WUN Partners																		
		ALBA	AUCK	BASL	BERG	BRIS	UCT	CUHK	GHAN	LEED	MAAS	UMAS	ROCH	SHEF	SOUT	SYD	UWA	YORK	ZHEJ	
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																			
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																			
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																			
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																			
Ideas and Universities	Mr Ian Wei																			

Activity Name	Lead Academic	WUN Partners																		
		ALBA	AUCK	BASL	BERG	BRIS	UCT	CUHK	GHAN	LEED	MAAS	UMAS	ROCH	SHEF	SOUT	SYD	UWA	YORK	ZHEJ	
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																			
Language Assessment Research Network	Professor He Lianzhen																			
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																			
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																			
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																			



ACTIVITY NAME	LEAD ACADEMIC	WUN PARTNERS																		
		ALBA	AUCK	BASL	BERG	BRIS	UCT	CUHK	GHAN	LEED	MAAS	UMAS	ROCH	SHEF	SOUT	SYD	UWA	YORK	ZHEJ	
Healthy Kitchens: Healthy Cities	Dr Helen Elsey																			
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																			
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																			
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																			
Provision of health service and community care for the elderly: intergenerational roles and equity	Associate Professor Eliza Lai Yi Wong																			
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																			

Activity Name	Lead Academic	WUN Partners																			
		ALBA	AUCK	BASL	BERG	BRIS	UCT	CUHK	GHAN	LEED	MAAS	UMAS	ROCH	SHEF	SOUT	SYD	UWA	YORK	ZHEJ		
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 Medieval 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																				
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 With and Without Children: Causes and Economic, Social and Psychological Consequences	Professor Junsen Zhang																				
Multilingualism & Mobility in the Northern & Southern Hemispheres	Dr Kristine Horner																				



Activity Name	Lead Academic	WUN Partners																		
		ALBA	AUCK	BASL	BERG	BRIS	UCT	CUHK	GHAN	LEED	MAAS	UMAS	ROCH	SHEF	SOUT	SYD	UWA	YORK	ZHEJ	
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																			
Pedestrian Pathways in the Healthy City	Professor Ralph Pite																			
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																			

The following IRGs were retired in 2016 as they had achieved their ambitions and came to a natural conclusion. These IRGs may well achieve further results and outcomes and we will report on any significant future achievements.

INTERDISCIPLINARY RESEARCH GROUP	LEAD ACADEMIC & INSTITUTION
ACCWA - Adapting to Climate Change for Water Adaptation	Professor Joseph Holden, University of Leeds
Changing Political Culture Through Education: Democratic Citizenship and the School Curriculum in Post-Apartheid South Africa	Professor Robert Mattes, University of Cape Town
Climate Change in the Media	Associate Professor Meng Ji, University of Western Australia
Comparative Analysis of International Refugee Resettlement International Law Obligations and Policy	Professor Jay Marlowe, University of Auckland
Global Health Justice Network	Dr Oliver Quick, University of Bristol
Global Public Health Justice: The Ethics of Research for Public Health	Professor Reidar Lie, University of Bergen
iMom - International Migration, Optimizing Maternity Health Research	Professor Gina Higginbottom, University of Alberta
Impact of Land Use Change on Future Water Quality	Professor Neil Coles, University of Western Australia
Mathematics of Non-communicable Diseases: Understanding failure of cell signalling	Professor Hinke Osinga, University of Auckland
Music, Memory and Migration in the Post-Holocaust Jewish Experience	Dr Stephen Muir, University of Leeds
Responding and Adapting to Climate Change: Recognizing and Managing Uncertainty in the Physical, Social, and Public Spheres	Professor Stephan Lewandowsky, University of Bristol
Watershed Re-analysis: Towards a Unified Framework for Model-Data Access, Analysis and Discovery	Professor Christopher Duffy, Pennsylvania State University
White Spaces Network	Dr Shona Hunter, University of Leeds

