



Uachtarán na hÉireann  
President of Ireland

## MESSAGE FROM MICHAEL D. HIGGINS

I am delighted to congratulate all of those involved in the DOCTRID III Conference. A truly democratic society is one that recognises the need to build together an active, inclusive citizenship; based on participation, equality and respect for all. The work you do is of the utmost importance as we continue to work to achieve such a society; one where everyone receives the opportunity to participate at every level and in every way – to be the arrow; not the target.

I wish you a successful conference and I thank you for your commitment to achieving a citizenship based on parity of opportunity and the accordance of equal value to every citizen.

Go raibh míle maith agaibh go léir.

A handwritten signature in blue ink, reading "Michael D. Higgins". The signature is fluid and cursive, with a large initial 'M'.

Michael D. Higgins  
Uachtarán na hÉireann  
President of Ireland





DAUGHTERS OF CHARITY SERVICE  
FOR PEOPLE WITH AN INTELLECTUAL DISABILITY

## MESSAGE FROM DERMOT DESMOND CHAIRMAN OF RESPECT

As Chairman of Respect it is my privilege to welcome you to the third DOCTRID Conference at Castleknock Hotel. Thank you to all who have participated in the previous two Conferences and a warm welcome to those of you joining us for the first time. Most especially I welcome all our friends from overseas. This initiative is the brain-child of Sr Martha Hegarty who sadly is no longer with us but her legacy lives on and it behoves us to continue the great work that Sr Martha started.

Over the past number of years, Prof Brian Harvey (RCSI) and Dr Mike Leahy (MSU) have been preparing a strategy to promote collaboration in Intellectual Disability research between Irish Universities, the Daughters of Charity Technology & Research for Intellectual Disability programme (DOCTRID), Michigan State University (MSU) and University of Massachusetts Medical School (UMASS). Two major research fellowship programmes will form the focal point for the third DOCTRID Conference. At this DOCTRID III Conference the formal launch of the MSU-DOCTRID Fellowship programme and a series of presentations will explore DOCTRID-University research collaborations and fellowship opportunities.

The lectures from DOCTRID university partners will stimulate discussion around potential areas of collaboration between USA and Ireland and will explore fellowship mobility opportunities under the EU ASSISTID COFUND. We appreciate your engagement with the DOCTRID programme and look forward to your participation at the Lectures and Workshops which will be enriched by your expertise and experience. We hope that the conference will stimulate further inter-disciplinary and inter-institution collaboration in finding ways that advanced technologies can be used to better the lives of those among us with autism or intellectual disabilities.

I wish you an enjoyable and productive time.

Dermot Desmond  
Chairman, RESPECT



DAUGHTERS OF CHARITY SERVICE  
FOR PEOPLE WITH AN INTELLECTUAL DISABILITY

## MESSAGE FROM ZOË KILLEEN, DC DIRECTOR OF RESPECT

A warm welcome to all of you joining us for this third International DOCTRID Conference, and in particular to those who have travelled from overseas.

A very special welcome to Dr Lou Anna K. Simon, President of Michigan State University, and her colleagues. MSU has been at the heart of DOCTRID since the beginning, and has contributed hugely to its development. A special welcome also to our new Hegarty Fellows, who will be telling us later about their research.

The guiding principle of DOCTRID is to find ways that technology can enhance the lives of those among us with intellectual disability and help them achieve their full potential. This involves not just themselves, but also the families, carers and teachers who surround them with support. Clearly the technology has the potential to enhance many of these activities. More directly, it may open a new world to those with certain disabilities and help us better understand their lives.

A great start has already been made thanks to the leadership of Dr Mike Leahy (MSU) and Prof Brian Harvey (RCSI), Director of the DOCTRID Research Institute. They have our deepest gratitude for their untiring work and commitment to this project and for the successful application for the Marie Curie COFUND. Our thanks to all our partner universities, who are being joined today by Queen's University Belfast and the University of Ulster, most welcome additions. Thanks also to our advisors, who give their time, wisdom and expertise. The continued encouragement and support of our Chairman, Mr Dermot Desmond, for DOCTRID is especially appreciated.

As we take part in our third DOCTRID conference we remember the late Sr Martha Hegarty who had the vision to host the first conference on Assistive Technology and Research and launch the DOCTRID project. I know that she is with us today in spirit and encouraging us to make haste in the best interest of people with an intellectual disability.

I take this opportunity to thank all those who have made this event possible and I trust that the day will be most inspirational and memorable and I ask for God's blessing on this work, which can help so many lives.

*Zoë Killeen D.C.*

Zoë Killeen DC  
Director of RESPECT



MICHIGAN STATE  
UNIVERSITY

MESSAGE FROM  
**LOU ANNA K. SIMON, PH.D.**  
PRESIDENT  
MICHIGAN STATE UNIVERSITY

On behalf of Michigan State University, I would like to welcome you to the DOCTRID III Conference on Assistive Technologies for Autism and Intellectual Disability.

We are proud to be associated with our Irish partners in creating and developing the DOCTRID Research Institute, designed to promote interdisciplinary research excellence to improve the quality of life for people with intellectual disability. It was Sister Martha Hegarty's vision to bring universities together with the Daughters of Charity Service in an international, collaborative partnership. It is a privilege to contribute to that vision.

It is most appropriate as we launch the MSU-DOCTRID Research Fellows Programme that we also honour Sister Martha. The three Hegarty Fellows, who began their appointments in July, will work jointly with Irish partner institutions on key research issues as they relate to autism and intellectual disability. We are delighted that Sister Martha is an MSU alumnus, having graduated from the master's degree programme in Rehabilitation Counselling in the late 1980s.

Michigan State University has benefited from its partners within DOCTRID to the point that we have created our own interdisciplinary research initiative. We look forward to being part of a larger global approach to addressing some of the compelling research goals so clearly articulated by DOCTRID.

Michigan State University honours its three core values of quality, inclusion, and connectivity through this partnership with the universities, the Daughters of Charity and RESPECT.

A handwritten signature in blue ink that reads "Lou Anna K. Simon". The signature is fluid and cursive.

Lou Anna K. Simon, Ph.D.  
President, Michigan State University

## DAUGHTERS OF CHARITY SERVICE



### SR GORETTI BUTLER, DC PROVINCIAL, DAUGHTERS OF CHARITY

It is my privilege on behalf of the Daughters of Charity to welcome you to this International DOCTRID Conference. I welcome in particular all who have travelled from overseas to be part of what should be a day where we together look at new and innovative ways of enhancing the lives of people with an Intellectual Disability.

A special feature of this conference is the presence with us of our new Hegarty Fellows to whom I extend a warm welcome.

We are all becoming more dependent on technology in all aspects of our lives. We see its value in our homes, schools and places of work, in our communication, travel and leisure. The advances in the use of technology are immense and I know that this research will find new ways of improving the lives of people with an Intellectual Disability in ways we never dreamed of.

This conference will enlighten us, will challenge us, and will enthuse us as we try to move forward in our understanding of how technology and research opens up new possibilities and opportunities for the development of our special people. The collaborative approach of so many people and the subsequent research will help inform policy and practice into the future.

I take this opportunity to thank all those who have made this day possible. I hope that all will find the conference stimulating and inspirational.

A handwritten signature in blue ink that reads "Goretta Butler".

Sr Goretta Butler, DC  
Provincial, Daughters of Charity



# DOCTRID

DAUGHTERS OF CHARITY  
TECHNOLOGY AND RESEARCH INTO DISABILITY

**DENIS CRONIN**

**CEO**

**DAUGHTERS OF CHARITY SERVICE**

For well over a hundred years the Daughters of Charity have been supporting people with intellectual disability and assisting them to take their rightful place in society. There have been many changes during this time and the pace of change has increased significantly in recent years. Today there are only two Daughters of Charity working in the Service, however the ethos and philosophy of the “Daughters” continues through the dedication and commitment of our lay staff in supporting over 1,800 service users across Dublin, Limerick and North Tipperary.

The organisation is now primarily funded by the Health Service Executive (HSE) but depends on the support of fundraising groups and organisations like RESPECT to develop new initiatives. The Service is indebted to RESPECT for responding to the call for research funding and supporting the DOCTRID concept. The appointment of Professor Brian Harvey as Director of Research has been an inspired choice and I would like to say a special word of thanks to Brian for all his work and dedication in getting us to this stage on a journey that is really an exciting prospect, not just for the Service but for all people with disabilities.

Within the Service we already use a variety of aids and assistive technologies to support service users. We recognise however that we are only scratching the surface. This is not our area of expertise but we know that there is great potential and are really excited about the possibility of working with various academic and commercial groupings to help develop disability specific technologies. I believe that the synergies that can be achieved through the collaboration of the various prestigious institutions involved will bring enormous benefits to the service users for the future.

I welcome all to this conference and to DOCTRID generally. I hope that you find the conference stimulating and challenging and that together we can harness the power of technology to support people with disabilities to live a better life.

A handwritten signature in blue ink that reads "Denis Cronin". The signature is fluid and cursive, written in a professional style.

**Denis Cronin**  
Chief Executive Officer  
Daughters of Charity Service.

# THE DOCTRID RESEARCH INSTITUTE

In 2010, The Daughters of Charity Service (DoC) and its fundraising body RESPECT embarked on an ambitious plan led by the late Sister Martha Hegarty to establish an interdisciplinary research institute for intellectual disabilities: The DOCTRID Research Institute was thus established with the support of four Irish Universities, the Royal College of Surgeons in Ireland (RCSI) and Michigan State University (MSU). In September 2011, the Daughters of Charity and RESPECT appointed Professor Brian Harvey of the RCSI as Director of Research, to design, implement and oversee a strategic plan for the establishment of the DOCTRID Research Institute. Professor Harvey has also expanded the number of universities participating in DOCTRID by adding three additional Irish Universities, Queen's University Belfast, the University of Ulster and the University of Massachusetts Medical School (UMMS) in the USA.

The DOCTRID Research Institute operates as a coalition of scholars in a distributed research network that funds and carries out collaborative inter-disciplinary research and training across all Irish universities and USA partners. DOCTRID is designed to serve as a centre of research excellence in conducting evidence-based research to inform policy and practice to improve services, care and outcomes for the individuals served at the Daughters of Charity Service and other service delivery organisations serving individuals with autism and intellectual disability in Ireland and on a global basis

Universities in Ireland and the USA have partnered with the Daughters of Charity Service and RESPECT to create this unique institute. They are: Dublin City University (DCU), National University of Ireland Maynooth (NUIM), National University of Ireland Galway (NUIG), Trinity College Dublin (TCD), University College Dublin (UCD), University College Cork (UCC), University of Limerick (UL), Queen's University Belfast (QUB) and the University of Ulster (UU). In addition, the Royal College of Surgeons in Ireland (RCSI) is a partner in the DOCTRID Research Institute, as well as Michigan State University (MSU) and the University of Massachusetts Medical School (UMMS). Memoranda of Understanding have been signed between all of these parties and the Daughters of Charity Service and RESPECT.

DOCTRID undertakes collaborative research with university and industry researchers and is closely linked to the DoC Services. DOCTRID supports this partnership with the universities and the DoC Service, through the acquisition of funding for sustainable research programmes, fellowships and development of assistive technologies. The primary aim of DOCTRID is to implement and sustain empirical and evidence-based research to better the lives of people with autism spectrum disorders and intellectual disability. The recent launch by Michigan State University of the Hegarty Fellowships and the EU COFUND Award ASSISTID are of inestimable importance in establishing DOCTRID as an international programme for advanced research in autism and intellectual disabilities.

DOCTRID is positioned in a unique place and time-frame to undertake and support research and technologies to address critical needs in the area of autism, intellectual and other neurodevelopmental disabilities in order to make an important, meaningful and sustainable impact on the quality of life of individuals with these disabilities on a global basis. It is not aligned to any specific university nor to selective research projects. DOCTRID has the support of all the Universities on the island of Ireland and key partners overseas, in particular, Michigan State University and UMMS. Thus DOCTRID is well placed to operate a distributed international model for its research institute. The establishment of DOCTRID is opportune given the funding opportunities in Connected Health, a national research priority, in the context of ICT for social inclusion and Assistive Technologies for disability in the EU framework programme of Horizon 2020, and the US-Ireland Partnership Grant (HRB-NI, HRC, NIMH).



## MSU Hegarty Fellowships

In 2012, we received initial funding from the MSU Office of the Vice President for Research and Graduate Studies, Office of the Provost and the College of Education. The funding from MSU is being used to fund three interdisciplinary post-doctoral research associates (MSU-DOCTRID Hegarty Fellows Programme) who officially began their appointments with MSU in July of 2013, following international peer-review and are housed within the College of Education in the Office of Rehabilitation and Disability Studies. These highly unique fellowships are named in honour of the late Sister Martha Hegarty who was a visionary and leader in the design and development of DOCTRID. These Hegarty Fellows will be co-located at both MSU and selected Irish partner universities during their two-year research appointments with MSU-DOCTRID.

## The ASSISTID programme

The EU Marie Curie COFUND in Assistive Technologies for Autism and Intellectual Disability (ASSISTID) aims to enhance the training and mobility of experienced researchers through the undertaking of research projects which will be interdisciplinary and focused on enhancing the lives of people with autism and intellectual disability. The new EU ASSISTID Marie Curie fellowship programme will build on the experience of the DOCTRID partner institutions with regards to the implementation of assistive technology research and devices for autism and intellectual disability.

ASSISTID research projects will focus on the development and application of assistive technologies for the practical benefit of carers and individuals, and may include empirical studies, behavioural psychology and assessment, rehabilitation effectiveness, policy and ethical dimensions. Fellows will have access to the Daughters of Charity Services and other Intellectual Disabilities Service Providers, so that they can more easily translate the findings from their basic science into practical applications.

The ASSISTID Fellowship programme will be launched in January 2014.

## DOCTRID Conference Planning Committee

- **Dr Mary Staines**, Clinical Director for Mental Health at Stewarts Hospital and Conference Chair
- **Sr Zoë Killeen** – Director of RESPECT
- **Mr Liam Walsh** – Development Officer, RESPECT
- **Prof Brian Harvey** – Director of Research, DOCTRID
- **Prof Michael Leahy** – Director of MSU-DOCTRID and the Hegarty Fellows Programme
- **Mr Denis Cronin** – CEO, DOC Service
- **Prof Michael Ryan** – Former head of the School of Computing at Dublin City University
- **Mr Michael Horgan** – Former CEO of the Royal College of Surgeons in Ireland
- **Dr Danny O'Hare** – Former President of Dublin City University

## RESPECT Fundraising Board



(From left): Sr. Zoë Killeen, Dan Lenihan, Lee Mallaghan, Noel Kidney, Terry Larkin, Danny O'Hare, Willie Coonan, Anthony Collins, Michael Stanley and Marian Kelly

# DOCTRID CONFERENCE

Tuesday 15th October 2013 – Castleknock Hotel

8.00–9.00am Registration and Welcome Coffee

9.00–10.00am ***Launch of DOCTRID Research Institute***

Welcome and session chair **Sr Zoë Killeen**, Director of RESPECT

Address from **Mr Dermot Desmond**, Chairman of RESPECT

Ceremonials and Signing of MoUs by The Queen's University Belfast and University of Ulster

Address from: **Maire Geoghegan-Quinn**, EU Commissioner for Research – Video Message

ASSISTID COFUND Award

Address from: **Lou Anna K. Simon**, President, Michigan State University

10.00–11.00am **Opening of the DOCTRID Conference**

*Conference Co-chairs:* **Dr Michael Leahy** and **Prof Brian Harvey**

***Interdisciplinary and International  
DOCTRID Research***

**Dr Michael Leahy** – MSU RAIND Programme

**Short presentations from MSU Hegarty Fellows**

**Stacy Clifford, Carolyn Shivers, June Lianjun Chen**

**ICAN-MSU Collaborative study: Geraldine Leader NUIG and Connie Sung MSU**

11.00–11.30am Tea/Coffee Break

11.30am–1.00pm ***Research Presentation from  
DOCTRID University Partners***

**Session I – 4 lectures**

**Dr John Dinsmore** Trinity College Dublin

**Prof Lizbeth Goodman** University College Dublin

**Dr Cian Ó Mathúna** Tyndall National Institute – University College Cork

**Dr Nancy Salmon** University of Limerick

1.00–2.00pm **Lunch and Horizon 2020 Brainstorming**



2.00–3.30pm

## *Research Presentation from DOCTRID University Partners*

### **Session II – 4 lectures**

<b>Prof Karola Dillenburger</b>	Queen's University Belfast
<b>Dr William McIlvane</b>	University of Massachusetts Medical School
<b>Dr Tomás Ward</b>	National University of Ireland, Maynooth
<b>Prof Paul Whelan</b>	Dublin City University

3.30–4.00pm

Tea/Coffee Break

4.00–5.30pm

## *AT, Autism and ID*

### **Assistive Technologies, Autism and Intellectual Disability Entrepreneurs**

<b>Industry:</b>	<b>Mick Donegan</b>	SpecialEffect
	<b>Lisa Domican</b>	Grace Apps
	<b>Mitch Tomlinson</b>	Peckham Industries

<b>AT and Autism:</b>	<b>Dr Josh Plavnick</b>	MSU
	<b>Dr Brooke Ingersol</b>	MSU
	<b>Prof Louise Gallagher</b>	TCD
	<b>Dr Deirdra Murphy</b>	UMASS Lowell
	<b>Dr David Polakoff</b>	UMASS Shriver

5.30–6.00pm

## *Wrap up and reflections from the day*

Dr Michael Leahy and Prof Brian Harvey

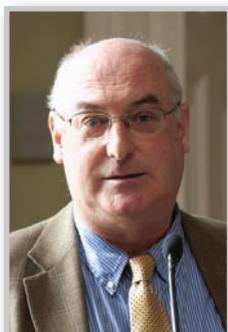
6.00 pm

Light Refreshments with Networking Opportunity

7.30–8.00 pm

*Reception followed by Conference Dinner*

# CONFERENCE CO-CHAIRS



**Prof Brian Harvey**

## **Prof Brian Harvey**

Prof Brian Harvey, Director of Research, DOCTRID International Programme in Research and Technology for Intellectual Disability. Brian Harvey was the first and longest-serving Vice-President for Research appointed in an Irish University from 1998-2010. Through this role, he co-ordinated large-scale national and EU research programmes bringing in over €300million in funding which has contributed to the building of research institutes and the recruitment of hundreds of researchers. Brian's role in promoting EU research collaborations has been recognised at home and abroad. He was awarded a knighthood (Chevalier) of the French Order of Merit in 2006 by the President of France for his role in developing Ireland–France scientific exchanges and PhD cotutelle programmes. In 2000, he was elected a member of the European Academy of Sciences and Humanities and in 2007 elected to the Royal Irish Academy. He is a founding fellow of the Irish Academy of Medical Sciences. Brian is a co-ordinator of the EU FP7 Marie Curie Career Enhancement Programme for doctoral fellows in Biophotonics ([www.nbip.ie.cemp](http://www.nbip.ie.cemp)), the Erasmus European Molecular Imaging Doctoral School ([www.emids.eu](http://www.emids.eu)), and a member of the EU COST Action in Cystic Fibrosis (<http://www.cost-bm1003.info/>). He is Ireland's national delegate to the EU ESFRI EuroBioImaging Consortium

(<http://www.eurobioimaging.eu/>) and currently serves on the European Research Council Advanced Awards Panel and is expert advisor to the French Research Agency ANR and the Danish Medical and Clinical Sciences Grants Council. Brian is a physiologist with over 200 publications in the area of molecular endocrinology of steroid hormone action in cancer and inflammatory disease. His academic roles include Professor and Head of the Department of Molecular Medicine at the Royal College of Surgeons in Ireland ([www.rcsi.ie/molmed](http://www.rcsi.ie/molmed)) and co-ordinator of the National Biophotonics and Imaging Platform Ireland ([www.nbipireland.ie](http://www.nbipireland.ie)). In 2011 he was appointed by the charity RESPECT Ireland as director of research of the DOCTRID international research institute for assistive technologies ([www.respect.ie](http://www.respect.ie)). In 2011 he was appointed by the charity RESPECT Ireland as director of research of the DOCTRID international research institute for assistive technologies ([www.respect.ie](http://www.respect.ie)). In May of this year, Brian was awarded an honorary doctorate in science from Michigan State University.



**Dr Michael Leahy**

## **Dr Michael Leahy**

Dr Michael Leahy is a professor of rehabilitation counselling and director of the Office of Rehabilitation and Disability Studies. He has a doctorate in Rehabilitation Psychology from the University of Wisconsin-Madison and over 35 years of experience in rehabilitation as a counsellor, administrator, researcher and educator. Prof Leahy is a Licensed Professional Counsellor (LPC), and a Certified Rehabilitation Counsellor (CRC). His continuing research interests include professional competency development and education, professionalisation, regulation of practice, disability and rehabilitation policy, vocational assessment, case management practices and employment outcomes for people with disabilities, evidenced-based practices in rehabilitation counselling, and services for individuals with intellectual disability and autism.

Michael is a Past-President of the National Council on Rehabilitation Education, a Past Chair of the Alliance for Rehabilitation Counselling, and a Past-President of the American Rehabilitation Counselling Association (ARCA). He is the Director for MSU-DOCTRID International Research Institute (Hegarty Fellows Programme) and is a Co-Director of the MSU interdisciplinary programme of Research on Autism, Intellectual and other Neurodevelopmental Disabilities (RAINND). He has published more than 150 referred journal articles, books, book chapters, and research monographs, and presented his research to a variety of rehabilitation and business audiences, including international presentations. He has also acted as the principal investigator and managed nearly 30 large-scale research, training and service delivery grant projects at the state, national and international levels, and has been the recipient of over 20 national research and professional service awards during his career.



**Lou Anna K. Simon**  
President, Michigan  
State University

### **Lou Anna K. Simon**

Lou Anna K. Simon, the 20th president of Michigan State University, leads the university's work to advance the common good in Michigan and around the world. An MSU graduate, she began her career at Michigan State after earning her doctorate in 1974. From there, she moved into a variety of administrative roles, including assistant provost for general academic administration, associate provost and provost and vice president for academic affairs. She was appointed president by the MSU Board of Trustees in January 2005.

As president, she has engaged Michigan State University in a strategic and transformative journey to adapt the principles of the land-grant tradition to 21st-century challenges. She has expanded MSU's reach in the state and around the world by focusing the university's strengths on solutions that enhance and protect quality of life: clean and affordable energy, access to education, safe and plentiful food, and health care. She outlined these commitments and the philosophy driving them in her monograph, *Embracing the World Grant Ideal: Affirming the Morrill Act for a Twenty-first-century Global Society*.

President Simon's key initiatives, particularly in economic development and international engagement, reflect her commitment to applying knowledge to benefit society and further the global common good.

President Simon is a member of the American Council on Education and the Council on Competitiveness, a nonpartisan, nongovernmental organisation working to ensure U.S. prosperity. She serves as chair of the National Security Higher Education Advisory Board, a group of presidents and chancellors of several prominent U.S. universities that consults regularly with national agencies responsible for security, intelligence and law enforcement. She also serves as chair of the National Collegiate Athletic Association's executive committee, the association's overarching governing panel.

Her resolute commitment to advancing Michigan's economic future has been a hallmark of her presidency. She serves on the board of directors of Business Leaders for Michigan and the Detroit Branch of the Federal Reserve Bank of Chicago. In the area of international engagement, Simon is a member of the executive committee of the Partnership to Cut Hunger and Poverty in Africa.

Research at Michigan State University reflects her commitment to advancing knowledge and discovery to improve quality of life. Under her leadership, MSU has expanded its research in, among other areas, biofuels and green energy, medicine and medical technology, physics and rare isotopes, safe water, and agriculture to address world hunger. With the support of external funding now exceeding \$500 million annually, President Simon is helping ensure that Michigan State University makes a significant positive difference locally and globally.



**Ian Gray**

### **Ian Gray**

Ian Gray received his B.Sc. and Ph.D. degrees in Food Science from Queen's University, Belfast, Northern Ireland, in 1968 and 1971, respectively. After a two-year, post-doctoral research programme at Michigan State University, he joined the faculty at the University of Guelph, Ontario, Canada, in 1974. He returned to Michigan State University's Department of Food Science and Human Nutrition in 1978. In 1987, he received the Walter Cruess Award for Excellence in Teaching Food Science and Technology from the Institute of the Food Technologists (IFT) and, in 1994, he received Michigan State University's Distinguished Faculty Award.

He was director of the Michigan Agricultural Experiment Station (MAES), now known as AgBioResearch, from 1996 until he became vice president for Research and Graduate Studies in 2004. He was vice president until August 2012. In that role, he led the growth of Michigan State University's research portfolio to a half-billion-dollar, internationally respected enterprise. His strategic vision in developing the university's research excellence resulted in world-class infrastructure improvements and a series of faculty hires in complex materials, global water issues, neurodegenerative diseases,

plant science, and reproductive health. He also spearheaded the formation of Michigan State University's Innovation Centre, leveraging the economic potential of research ideas, engaging companies in research projects, and developing sustainable university spin-outs.

His own research interests centered on food safety and toxicology, including the formation of toxic compounds in foods as a result of processing and cooking, mechanisms of oxidation of lipids (including cholesterol) and the control of these mechanisms by natural antioxidants. He has published extensively and has more than 180 peer-reviewed publications. Currently, he is developing interdisciplinary research initiatives for Michigan State University in autism and intellectual disabilities, as well as in global food safety and security, and food processing.



Denis Cronin

## **Denis Cronin, CEO, Daughters of Charity Disability Support Services.**

Mr. Denis Cronin, Chief Executive Officer of the Daughters of Charity Disability Support Services is responsible for the activities of the Service across the three regions – Dublin, Limerick and North Tipperary. Denis joined the Service in 2000 as Planning and Development Officer after a very successful career in the Defence Forces. He was appointed Assistant CEO (Dublin) in 2005 and succeeded Mr. Walter Freyne as CEO in 2011.

Denis has a BA from UCG, an MA in Leadership, Planning and Defence Studies, Camberley (UK) and an MA in Healthcare Management. He is a Director of the National Federation of Voluntary Bodies, a national umbrella organisation for non-statutory agencies who provide direct support to people with intellectual disability in Ireland.

Managing a large service with over 1,800 service users and 1,900 staff, in a difficult economic environment, is very challenging. Denis is determined to progress the Services strategic plan which emphasises the provision of supports to people with disabilities in a “person centred, community based and socially inclusive manner”.

## **Memorandum of Understanding**

By and Between

**The Daughters of Charity of St. Vincent DePaul**

and

**RESPECT**

and

**The Queen’s University of Belfast**

and

**University of Ulster**

for

**The Support of an Interdisciplinary Research Institute  
at the Daughters of Charity Service**

**Whereas** The DOCTRID Research Institute has been established as an Interdisciplinary Research Institute on Intellectual Disability at the Daughters of Charity Service that operates from a collaborative, international, research model;

Understanding the need for enhancing the capacity of the Daughters of Charity to carry out ongoing research and empirical studies that inform policy and practice and identify new evidence-based practices that can be effective in the delivery of services to People with Intellectual Disabilities;

Recognising the value of collaborative research relationship with the university community to enhance the productivity, value and ...

Signing of Memoranda of Understanding:  
Mr. Dermot Desmond, on behalf of DOC Service

Prof James McElnay, Pro-Vice-Chancellor, Queen’s University Belfast  
Prof Karola Dillenburger, School of Education, Queen’s University Belfast  
Prof Richard Barnett, Vice-Chancellor, University of Ulster  
Dr Mickey Keenan, School of Psychology, University of Ulster

In the presence of representatives of  
the Daughters of Charity:

Sr Goretti Butler DC, Provincial  
Sr Zoë Killeen DC, Director of RESPECT

# MSU HEGARTY FELLOWS



**Stacy Clifford** – Ph.D. Vanderbilt University

Stacy Clifford is a Hegarty Fellow in the MSU-DOCTRID programme whose educational background bridges political science and disability studies. Her primary research interest is the development of normative theories that increase the community inclusion and political empowerment of people with intellectual and developmental disabilities. Areas of research include deliberative democratic theory, feminist care ethics, critical disability studies, liberal theories of justice, and qualitative research methods. Her publications appear in *Contemporary Political Theory* and *Disability Studies Quarterly*.



**Carolyn Shivers** – Ph.D. Vanderbilt University

Carolyn Shivers is a Hegarty Fellow in the MSU-DOCTRID programme. Her background includes direct care service for children and adults with intellectual and developmental disabilities, as well as education in developmental psychology and quantitative methods. Her past research experience includes physical and psychological development in individuals with genetic disorders and life course outcomes among siblings of individuals with intellectual and developmental disabilities (IDD). Current research interests focus on processes among families of individuals with IDD and mutually-beneficial interventions for siblings and children with IDD.



**June Chen** – Ph.D. East China Normal University

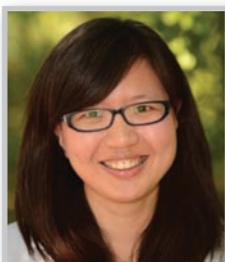
Lianjun (June) Chen is a Hegarty Fellow in the MSU-DOCTRID programme. Her educational background includes special education, laws and policies in special education, and psycho-counselling. Her primary research interest is the development and sustainment of community-based services for supporting people with neurological disabilities to improve their quality of life. June started working for people with disabilities in different settings since 2005. She was closely involved in several community-based projects funded by local government in Shanghai China, to promote social inclusion for people with intellectual disabilities. As a Hegarty fellow, June is under the mentorship of both Dr Connie Sung from MSU and Dr Geraldine Leader from NUIG. She is quite looking forward to the cross-culture collaboration in community based research.

# ICAN-MSU COLLABORATIVE STUDY



**Dr Geraldine Leader** BA PhD.

Dr Geraldine Leader is Course Director of the M.Sc. and structured Ph.D programmes in Applied Behaviour Analysis. The M.Sc was launched in 2006 to meet the growing need for practitioners who can work effectively within systems to improve the quality of services in the fields of intellectual and developmental disabilities, education, rehabilitation and mental health. The structured PhD is the first of its kind outside North America. Graduates are prepared to work in the full spectrum of applied, research and academic settings. Geraldine was the founding chair of the Division of Behaviour Analysis in the Psychological Society of Ireland (PsSI) and is also a member of the International Association for Behaviour Analysis (ABA) and the European Association of Behaviour Analysis (EABA).



**Connie Sung** Ph.D.

Connie Sung is an assistant professor of rehabilitation counselling at Michigan State University. Her educational background includes rehabilitation counselling/psychology, neuropsychology and occupational science. Her research focuses on evidence-based practice, psychosocial adjustment, vocational rehabilitation and quality of life of individuals with neurological disorders. Her recent work includes cross-cultural examination of determinants to enhance social competence and evaluation of intervention strategies to improve vocational outcomes of people with neurodevelopmental disabilities.

# DOCTRID PRESENTATIONS

## **Dr John Dinsmore – Health Innovation Lead, CPHI**

Dr Dinsmore is a health psychology researcher whose work has focused on analysing the behavioural change, illness perceptions, cognitive mediators, quality of life and quality of care of individuals living with chronic illnesses. He has worked on various collaborative psychology and technology projects with Intel, the Technology Research for Independent Living Centre (TRIL), The Queen's University of Belfast, The Royal College of Surgeons Ireland, Imperial College London, University of Ulster Jordanstown and the National University of Ireland Galway, covering conditions such as stroke, COPD, schizophrenia and obesity. John is currently engaged in research and development projects examining the impact of psychological principles such as behavioural change to the development of assistive technologies and services in chronic illness self-management as part of an enhanced user experience model.

## **Professor Lizbeth Goodman BA MA MLitt PhD**

Lizbeth is Professor of Inclusive Design for Education and Chair of Creative Technology Innovation at University College Dublin, where she is an Executive Board member of the Innovation Academy and has recently been put forward to the EC as the Digital Champion for Research and Digital Inclusion for Ireland. Lizbeth founded the SMARTlab in its first iteration in 1993, and has developed the award winning practice-based PhD Programme through the institute, along with the associated MAGIC Multimedia and Games Innovation Centre and Gamelab, which Lizbeth designed with industry collaborators as a prime knowledge transfer space in the London docklands. Lizbeth and her teams specialise in developing ground-up technology solutions for people of all levels of cognitive and physical ability, from mainstream learners of all ages, to 'special' and 'gifted' learners and lifelong learners in the developed and developing worlds. In all her work, she applies a universal design method to practice-based innovation to transform lives through providing unlimited access to education and tools for creative expression.

Prior to joining UCD, Lizbeth was Director of Research for Futurelab Education, working with David Puttnam's team to establish innovative platforms for the future of education in a context of global change. She is known as an expert in Digital Inclusion, including learning models for communities at risk. She is an award-winning advocate of community-based ethical learning and teaching models using interactive tools and games to inspire and engage learners of all ages. She specialises in working with people who do not have physical voices (whether due to disability, injury, illiteracy, or other social/political factors), enabling the use of new creative technologies for expression vocally, in writing and with movement and music.

## **Dr Cian Ó Mathúna**

Dr Ó Mathúna is Head of the Microsystems Centre at the Tyndall National Institute in Cork, Ireland. With a complement of over 80 researchers and an annual budget of €5M, the Centre incorporates two Research Groups – Microelectronics Applications Integration (MAI) and Life Science Interface (LSI). Dr Ó Mathúna leads the MAI Group with research activities in Ambient Electronics Systems, Micropower Systems and Interconnection and Packaging.

Dr Ó Mathúna received B.E., M.Eng.Sc., and Ph.D. degrees from the National University of Ireland, Cork, in 1981, 1984, and 1994, respectively. From 1982 to 1993, he was co-manager of the Interconnection and Packaging Group, National Microelectronics Research Centre (NMRC), University College Cork, Ireland.

In 1993, he joined the Irish Government-sponsored Programme in Advanced Technology, PEI Technologies (formerly Power Electronics Ireland), based at NMRC, as Technical/Commercial Director.

In 1997, he rejoined NMRC as Group Director with responsibility for Microsystems.

In 1999, he was appointed Assistant Director at NMRC with responsibility for microelectronics integration with research in Ambient Electronics, Biomedical Microsystems, and Energy Processing for ICT.

## **Dr Nancy Salmon**

Becoming a lecturer in the Department of Occupational Therapy here at UL is the culmination of thousands of decisions made over my lifetime. I'll touch on a few of the pivotal ones that led to moving from Halifax, Nova Scotia to Ireland in January 2011. After graduating with my BScOT from Dalhousie University (1989) I worked for several years in Canada both in hospital and early childhood settings. I then moved to Philadelphia, PA where I developed a community based, private practice while completing my post-professional MScOT (1998) specialising in pediatrics, augmentative and alternative communication and disability rights. My first foray into research, a qualitative study focused on the transition experiences of teens with disabilities leaving high school, led to an enduring love of learning and research. This passion caused me to constantly question what I observed in my professional practice particularly on the harm imposed by the stigma of disability. It became clear that I needed to learn more about the social and political forces that shape the lives of people with disabilities. To this end I completed an Interdisciplinary PhD focused on disability studies at Dalhousie University in 2010. I engaged with teens who navigated stigma to create lasting friendships. This attention to sustainable relationships at home, at work and in the community has carried forward into my current work, funded by a Marie Curie Career Integration Grant. From 2012-2014 I will complete a series of international case studies (Ireland, Canada, UK) attending to the experiences of people with intellectual disabilities who have

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transitioned from institutions into community living. As chair of Intellectual Disability Studies at UL (IDS@UL), I work closely with colleagues from a range of disciplines on a range of initiatives. For example the Research Active Programme (RAP) is an innovative eight week training programme designed to build research capacity within the disability community. The goal is to enable people with disabilities to become effective co-researchers within university and community organisations. Members of IDS@UL were also excited to host our first conference on June 6, 2012. For IDS@UL updates bookmark our blog at <http://idsatul.posterous.com/>

### **Prof Karola Dillenburger**

Karola Dillenburger is Professor of Behaviour Analysis and Education and Director of the Centre for Behaviour Analysis at the School of Education at Queen's University Belfast, where she also co-ordinates the MSc in Autism Spectrum Disorders, leads the approved Behaviour Analyst Certification Board (BACB) online course sequence and supervises many Masters and Doctoral Students. Her research focuses on evidence-based early intervention for vulnerable children including those diagnosed with autism spectrum disorders, parent education and parenting across the lifespan.

Professor Dillenburger is a Board Certified Behaviour Analyst-Doctoral (BCBA-D) and has worked extensively in child care, education and therapeutic settings before being called to Queen's University Belfast over 20 years ago. She has published widely, including five paper-copy books and one ibook, five multimedia training resources on DVDs and CD-ROMs, and over 50 academic peer-reviewed papers. She frequently is invited to teach or deliver international keynote addresses in USA, India, Europe and Australia.

### **Dr William McIlvane**

Dr McIlvane directs a multi-focus programme at the UMMS Shriver Center that addresses a number of scientific problems relevant to understanding and perhaps correcting behaviour deficits of persons with autism and related neurodevelopmental disabilities. One focus is development of procedures to encourage progressively more rapid learning of behaviours involved in symbolic communication. Another is to adapt behavioural neuroscience methods – including animal modelling – to further understanding of brain processes involved in symbolic behaviour. A third focus of Dr McIlvane's programme is to develop valid nonverbal neuropsychological testing methods for use with individuals and populations that do not understand verbal instructions. Dr McIlvane's programme has a strong emphasis on development of assistive technologies to support efforts of clinicians and special educators. For example, methods emerging from the Shriver research programme are being used to teach practical skills in regular and special education classrooms in both the United States and in Brazil.

### **Dr Tomás Ward, BE, MEngSc, PhD, MIEEE**

Dr Ward received the B.E. (Electronic), M.Eng.Sc. (Biomedical Engineering) and Ph.D (Biomedical Engineering) degrees from University College, Dublin, Ireland in 1994, 1996 and 1999 respectively. In 1999 he was appointed Lecturer in the Department of Computer Science at the National University of Ireland (NUI), Maynooth. In 2000 he was appointed Lecturer in the Department of Electronic Engineering at NUI Maynooth where he is now Senior Lecturer. His current primary research areas include the application of brain computer interfaces for neurorehabilitation particularly in stroke, closed loop communication protocols for distributed interactive applications and connected health. Dr Ward serves on the Engineering Sciences committee of the Royal Irish Academy and previously on the Irish Research Council for Science, Engineering and Technology. He is a Senior Member of the IEEE since 2011. Dr Ward is also a cofounder of a Vivid Spectrum Technologies (2012). This company is developing distributed sensing technology with applications in connected health.

### **Prof Paul F. Whelan**

Prof Paul F. Whelan (B.Eng., M.Eng., Ph.D. Cardiff University) is Professor of Computer Vision and member of the Faculty of Engineering and Computing in Dublin City University. His research addresses advanced needs-driven image segmentation and associated quantitative analysis with applications in computer vision and medical imaging (specifically computer aided detection and diagnosis focusing on translational research). This is done within an engineering framework focusing on the automatic extraction of key image features with a view to the quantitative analysis, classification and/or tracking of key information within an image or sequence of images. He is the founding Director of the Centre for Image Processing and Analysis (CIPA) based in DCU.

As well as publishing over 180 peer reviewed full papers, Prof Whelan has co-authored two monographs namely "Intelligent Vision Systems for Industry" (1997-Springer) and "Machine Vision Algorithms in Java" (2000-Springer). He is a Senior Member of the IEEE, a member of the IAPR, a Chartered Engineer and a Fellow of the IET. Prof Whelan's recent work has been funded by the Higher Education Authority (HEA), Enterprise Ireland, EU-FP7, Wellcome Trust and Science Foundation Ireland. For additional details please refer to [www.cipa.dcu.ie](http://www.cipa.dcu.ie).

# AT AND AUTISM

## Assistive Technologies, Autism and Intellectual Disability Entrepreneurs

### **Lisa Domican – Grace App**

Lisa Domican is a Wicklow-based mother of two autistic children. She set up the company Grace App Communication and developed a simple picture communication app in collaboration with a successful games developer that allows non verbal people with Autism and other disabilities to communicate effectively. In interacting with people with autism, Lisa advocates in ‘the 3 As’: Awareness, Acceptance and making Allowances. She hopes through using these steps people can help reduce the challenges that make living with autism, in a world designed for “normal” people, so stressful.

### **Mike Donegan – SpecialEffect**

Professor Donegan’s research draws on his many years of practice-based work as a teacher and an Assistive Technology specialist who has extensive experience in assessing, teaching, training and supporting people with complex communication difficulties. During 2004-2009 he was the User Requirements Coordinator in COGAIN ([www.cogain.org](http://www.cogain.org)), a European Network of Excellence investigating the use of gaze control for people with complex disabilities. In 2008, he founded a charity, SpecialEffect ([www.specialeffect.org.uk](http://www.specialeffect.org.uk)) which uses specialised technology to enhance access to videogames and creative self-expression for people with a wide range of disabilities. Many of those he supports have very complex disabilities, including locked-in syndrome. In April 2009, he was involved in SMARTlab’s ground-breaking ‘Duet for Eyes’ performance at the Science Gallery, Dublin, during which two people with complex disabilities performed a musical duet using gaze controlled technology, accompanied by some of Ireland’s leading professional musicians. He was an Advisor for the European Commission funded “T.O.B.I.” (Tools for Brain-Computer Interaction) Project, 2008-2013. He has presented and published widely in the area of Assistive Technology. He co-wrote and edited “Gaze Interaction and Applications of Eye Tracking: Advances in Assistive Technologies”, which was published as a Premier Reference Source by IGI Global in 2011. Mick continues to be driven by a passion to utilise whatever technology is available to reduce the gap between potential and performance for all people with disabilities and an eagerness to collaborate with others who are similarly motivated to enhance their quality of life as much as possible, as quickly as possible.

### **Prof Louise Gallagher – TCD**

Louise Gallagher (MB MRCPsych PhD) is Professor of Child and Adolescent Psychiatry at Trinity College Dublin (TCD). She graduated from Medicine in University College Dublin in 1994 and completed psychiatry training in the Dublin University (TCD) Training Scheme in psychiatry in 2000. As part of a Wellcome Trust Mental Health Training Fellowship, she completed her PhD in psychiatric genetics in TCD in 2004. She has a special interest in autism spectrum disorders and other complex neurodevelopmental disorders. Prof Gallagher’s lab in TCD is focused on understanding behavioural phenotypes and comorbid mental health disorders, underlying genetic susceptibility and the neurobiology of ASD and related neurodevelopmental disorders. Her group is engaged in a range of molecular genetic approaches and functional and structural neuroimaging (MRI and EEG) and more recently through collaboration with NUIG (Prof Sanbing Shen) in the use of stem cell technology to understand the neurobiology and aid in the discovery of biomarkers and drug targets for neurodevelopmental disorders. The overarching goals of her group are to provide hope for neurodevelopmental disorders through improved understanding and better treatments. She is involved in a number of collaborative international initiatives including the Autism Genome Project, Early Signs and Symptoms of Autism EU COST Network, FemNat-CD (FP7 collaborative study of Conduct Disorder in females) and consulted to the EU ROAMER project, a Roadmap for mental health disorders in Europe. Prof Gallagher has a clinical commitment as a psychiatrist in the HSE providing services to children and adolescents with mental health disorders comorbid to neurodisability including intellectual disability, autism and other neurodevelopmental disorders.

Web <http://www.medicine.tcd.ie/neuropsychiatric-genetics/autism/>

<https://www.facebook.com/AutismTCD>

<https://twitter.com/AutismTCD>

### **Dr Brooke Ingersoll – MSU**

Dr Ingersoll is an Associate Professor of Psychology at Michigan State University. She was trained in experimental psychology and is a licensed psychologist and board certified behaviour analyst. Dr Ingersoll’s research has focused on the development, evaluation, and dissemination of social communication interventions for individuals with autism, as well as the impact of ASD on the family. A major emphasis of her current work has been on the development of community-focused, parent-mediated interventions for young children with ASD.

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### **Josh Plavnick – MSU**

Joshua Plavnick is an assistant professor of special education, director of the Graduate Certificate Programme in Applied Behaviour Analysis, and a Board Certified Behaviour Analyst – Doctoral (BCBA-D). His research focuses on applications of behavioural and observational learning theories to develop and evaluate instructional programming for students with developmental and intellectual disabilities. He is currently the Principal Investigator for a series of studies examining the effectiveness and utility of video-based instruction to teach social behaviour to individuals on the autism spectrum. He is also developing a comprehensive reading programme for school-aged children with autism that combines computer-based and small group instruction. His recent work includes examinations of video modelling to teach language to previously nonvocal children with autism and self-management strategies to improve implementation of behavioural programming by public educators.

### **Mitch Tomlinson – Peckham Inc.**

Mitchell Tomlinson has been with Peckham, Inc., since 1976, and has been the CEO since 1994. He earned a master's degree in Rehabilitation Counselling from the University of Wisconsin-Stout. His accomplishments include creating new partnerships with Michigan State University, participating in a Harvard Business Review case study of best practices in nonprofits and overseeing a growth of more than 1000 per cent in revenues. Mitchell has been awarded the Management Excellence award from the National Council of Work Centers, the Award of Excellence from the Michigan Rehabilitation Conference and named Business Man of the Year by the Southside Business Association. In 2010, he received the John G. Thodis Michigan Manufacturer of the Year Award, Special Achievement Award for Peckham's significant contributions to the industry and community. He is also a 2010 recipient of the Socially Responsible Entrepreneur of the Year Award from the 2010 Greater Lansing Business Monthly Entrepreneurial Awards. He is the Vice Chair of the State's Council on Labour and Economic Growth and is on the Rehabilitation Counseling Programme Advisory Committee at MSU. He serves as board member and past president of the 501 Alliance and is a member of Capital Area Transportation Authority (CATA) local advisory committee.

### **Dr Deirdra Murphy – UMASS Lowell**

Dr Murphy has held the position of Assistant Professor since September 2004. She had previously been affiliated with the physical therapy programme since 1996 as Adjunct Faculty and most recently in 2001 as the Academic Coordinator of Clinical Education. Dr Murphy received her undergraduate degree in physical therapy from Northeastern University. She completed an advanced master's degree from the University of Massachusetts Lowell in 2000. In addition, she received a Master in Health Administration from Suffolk University in 2001. In 2004, she received her Doctorate of Physical Therapy from the University of Massachusetts. Dr Murphy was a 2000–2001 recipient of the Leadership in Education of Neurodevelopment Disabilities Fellowship at the Eunice Kennedy Shriver Center, funded by Maternal and Child Health. She is an APTA Credentialed Clinical Trainer and teaches throughout the New England area credentialing clinical instructors. Deirdra's clinical work has focused on children in the school setting. Dr Murphy is a member of the American Physical Therapy Association, pediatrics, health policy and education sections. She has served as a member of the Therapeutic Riding Research Committee. She is currently active in the community as a board member for the On-line Developmental Disabilities Nursing Journal and the Lowell Area Citizen Advisory Board for the Department of Mental Retardation.

### **Dr David Polakoff – UMASS Shriver**

David Polakoff was named Chief Medical Officer for Commonwealth Medicine and Director for the Centre for Health Policy and Research in December, 2011. In this role, he provides oversight for all clinical programmes within Commonwealth Medicine and leads the varied research and policy activities and programmes of the Centre. Previously, as Director of the Office of Clinical Affairs and Chief Medical Officer of MassHealth, Dr. Polakoff was focused on improving health care access and quality for members of MassHealth, the Massachusetts Medicaid programme. He was responsible for proactively establishing and monitoring systems for clinical integrity at MassHealth to ensure ongoing quality improvement and cost containment. Prior to joining UMass Medical School's Office of Clinical Affairs, Dr. Polakoff served as Senior Vice President and Chief Medical Officer at Genesis HealthCare, one of the nation's largest long-term care and rehabilitation therapy providers. At Genesis HealthCare, he oversaw large scale health care operations, and also served as the President of Genesis Physician Services, a medical practice with over one hundred providers. Earlier in his career, he spent seven years as Senior Vice President and Chief Medical Officer at Mariner Healthcare, another national provider of integrated health services for the senior population.



## ACKNOWLEDGEMENTS

Our team at Abbey Conference & Corporate are honoured to have been involved in the planning of the DOCTRID III Conference. The organising Committee, Sr Zoë Killeen and her colleague Liam Walsh of RESPECT, have been an inspiration to all who came in contact with them during the last months and it was a pleasure to work with them.

I would like to offer our heartfelt thanks to the many people who were so supportive along the way and in particular a special thank you goes to the Castleknock Hotel, AVC Hire, Pat Beausang and Fáilte Ireland.

**Patricia McColgan**

Director, Abbey Conference & Corporate



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