



# EPINews

## Department of Epidemiology and Public Health Newsletter

November 2015

### WELCOME

Dear Colleagues,

Welcome to this issue of EPINews. Another summer has come and gone and colleagues here in the Department are settling back into their routines after another eventful season. Milan was the hotspot this year as three of our PhD scholars visited the Italian city to present their research. Ms Sarah Fitzgerald travelled in June to present her work on absenteeism in the workplace at the International Health Economics Association Congress while Ms Marsha Treacy and Ms Shelly Chakraborty flew in last week to present at the 8th European Public Health Conference. Since the last issue the Society for Social Medicine has also held their Annual Scientific Meeting in Dublin and the Department was well represented at this major international meeting with 8 oral and 6 poster presentations and a workshop led by HRB Centre for health and Diet Research. As always, I would encourage you to circulate EPINews among your colleagues and direct any queries or comments to me at [emily.kelleher@ucc.ie](mailto:emily.kelleher@ucc.ie)

Ms. Emily Kelleher

### DEPARTMENT NEWS

#### 2015 Annual Scientific Meeting of the Irish Association for Emergency Medicine

This year's IAEM meeting was held from 15th-17th October in the Cork County Hall and members of the [SIREN](#) team were present to showcase their research in this field. SIREN, the Study of the Impact of Reconfiguration on Emergency and Urgent Care Networks, describes and evaluates the development and performance of different emergency and urgent care systems in Ireland. The first phase of preliminary data from this study compares patient admission and outcome figures for two periods, 2000-2006, and 2007 to the end of 2012. It found that patient survival rates for emergency cases such as heart attack and stroke have improved across the country. Some of these initial findings were outlined at the [IAEM conference](#) by Siren principal investigator, [Prof John Browne](#). [Dr Conor Foley](#), [Ms Siobhan Boyle](#) and [Ms Brenda Lynch](#) were also in attendance to present their research on systems reconfiguration plans, performance indicators and regional variation in in-hospital fatality from emergency conditions respectively.

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### CORE TEACHING PROGRAMMES

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- [Postgraduate Certificate in Health Protection \(Online\)](#)
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## Diabetes and Heart-Disease Screening Study in Mitchelstown

Academics and researchers from University College Cork's [Department of Epidemiology and Public Health](#) have announced details of the Mitchelstown follow up study. The study seeks to understand the causes and underlying trends of heart disease and diabetes in middle aged men and women.

The study, which is funded by a research grant from the Irish Health Research Board, will rescreen 2000 men and women aged between 55 and 75 who attended the last screening in 2010/2011. The research team will examine a range of factors such as changes in diet, obesity, physical activity, blood pressure and blood lipids.

[Professor Ivan Perry](#), Head of the Department, and principle investigator of the Mitchelstown study states that *"Over the past 30 years we have had more than a 50% fall in death rates from heart disease and stroke in Ireland, while at the same time there is a steady increase in obesity and diabetes. We need to get a deeper understanding of the factors driving these trends. This is the core objective of the Mitchelstown study. We look forward to sharing these results with the scientific community and the general public"*.

With increasing numbers of undetected diabetes in our communities, the research team are grateful to the men and women who participated in 2010, and it is hoped that as many as possible will re-attend in 2015. The health checks will be carried out in the Living Health Centre, Mitchelstown, Co. Cork. A [new website](#) has been launched for all participants which contains results from previous studies.



Dr Elma Gaffney, Living Health Clinic, and Prof Ivan Perry, Head of Department of Epidemiology & Public Health, UCC.

## Society for Social Medicine (SSM) Meeting 2015

The Department was well represented at this year's Annual SSM meeting. During the three days, various colleagues showcased their work in the areas of public policy, health promotion and clinical practice on the prevention and management of obesity, diabetes and related metabolic disorders. [Mr. Martin Davoren](#) and [Mr. Seán Millar](#) were present on Day 1 to highlight their work in the areas of alcohol consumption and cardiometabolic risk, respectively. During the second day [Prof Patricia Kearney](#) and [Ms Marsha Treacy](#) presented their research which focuses on diabetes while [Ms Shelly Chakraborty](#) presented her research entitled the 'Burden of selected noncommunicable diseases and related risk factors in the Republic of Ireland'. Finally, on Day 3, [Dr Fiona Geaney](#) and [Ms Clare Kelly](#) highlighted their research on the [Food Choice at Work Study](#) while [Dr Sheena McHugh](#) presented her research on adverse childhood experience and health service utilisation. In addition to these oral presentations, numerous staff presented posters highlighting other research projects related to this field. The [HRB Centre for Health and Diet Research](#) also hosted a workshop focusing on the 'Optimal timing of interventions to tackle childhood overweight and obesity' which generated interesting discussion around population based community intervention for obesity.



Staff of the Department of Epidemiology and Public Health who presented at the recent Society of Social Medicine Annual Conference held in Dublin

## Cambridge Diabetes Seminar 2015

In August this year, [Dr Sheena McHugh](#) attended the prestigious Cambridge Diabetes Seminar organised by the MRC Epidemiology Unit at the University of Cambridge. The Seminar, established in 1981, is a truly international experience and was attended by 42 participants from 27 countries. The group included PhD and post-doctoral researchers from a variety of backgrounds including clinical endocrinology, general practice, public health, health economics, epidemiology and psychology. The week-long event comprised of lectures on developments in diabetes epidemiology and prevention, research design and methods, and debates on prominent issues such as pre-diabetes screening and changes in diagnostic criteria. The sessions were led by eminent experts in diabetes epidemiology and prevention including [Dr Peter Bennett](#) and [Prof Jaakko Tuomilehto](#). Over the course of the week participants presented their ongoing research to faculty and fellow participants; Sheena presented her proposal to examine the rate and risk of falls among older people with diabetes and study the implementation of effective strategies to reduce risk in this group. The seminar is a unique opportunity to learn with and from other diabetes researchers from around the world.



Participants of the 2015 Cambridge Diabetes Seminar

## Accurate obesity assessment may help clinicians identify high-risk subjects

Researchers at the Department of Epidemiology & Public Health, UCC have shown that accurate obesity measurement may help detect subjects at risk of type 2 diabetes. Although BMI is the most commonly used method for assessing adiposity, we have found that central obesity is a better predictor of diabetes related cardiometabolic risk factors. In a [cross-sectional analysis](#) of 2,047 middle-aged adults, which examined cardiometabolic risk factor relationships with adiposity indices and diagnostic criteria for type 2 diabetes and pre-diabetes, we found that central obesity measures such as the waist circumference, waist-hip ratio or waist-height ratio provide additional prognostic information when compared to BMI. However, it was also noted that the utility of these additional measures was significantly influenced by measurement protocol. In further [work](#) published in the BMC journal *Diabetology & Metabolic Syndrome* we have shown that a composite index using BMI and waist-height ratio together may be a better discriminator of obesity related risk than when either anthropometric parameter are used alone. "Just as we would not necessarily use one assay for diagnosing a chronic disease such as type 2 diabetes, nor do we have to rely on one adiposity measurement to define obesity" said lead author [Seán Millar](#). [Recent research](#) has indicated that between one-third and almost 50% of diabetes cases are undiagnosed, so there is a clear need for better detection methods within clinical practice. Earlier identification of patients at risk could enable earlier targeted interventions or therapies, thus attenuating development of type 2 diabetes and related complications.

## RECENT PUBLICATIONS

[Optimal Central Obesity Measurement Site for Assessing Cardiometabolic and Type 2 Diabetes Risk in Middle-Aged Adults](#). Millar SR, Perry IJ, den Broeck JV, Phillips CM. PLoS ONE. 2015;10(6)DOI:10.1371/journal.pone.0129088

[HbA1c Alone Is a Poor Indicator of Cardiometabolic Risk in Middle-Aged Subjects with Pre-Diabetes but Is Suitable for Type 2 Diabetes Diagnosis: A Cross-Sectional Study](#). Millar SR, Perry IJ, Phillips CM. PLoS One. 2015;10(8).DOI: 10.1371/journal.pone.0134154.

[Assessing cardiometabolic risk in middle-aged adults using body mass index and waist-height ratio: are two indices better than one? A cross-sectional study](#). Millar SR, Perry IJ, Phillips CM. Diabetology & Metabolic Syndrome. 2015, 7:73. DOI: 10.1186/s13098-015-0069-5

[Smoking as an independent risk factor for macrocytosis in middle-aged adults: A population-based observational study](#). O'Reilly MA, Millar SR, Buckley CM, Harrington JM, Perry IJ, Cahill MR. Am. J. Hematol. 2015, 90: E196-E197. DOI: 10.1002/ajh.24085.

[Modelling Future Coronary Heart Disease Mortality to 2030 in the British Isles](#). Hughes J, Kabir Z, Bennett K, Hotchkiss JW, Kee F, Leyland AH, et al. PLoS ONE 2015;10(9): e0138044. doi:10.1371/journal.pone.0138044

[Socioeconomic inequalities of cardiovascular risk factors among manufacturing employees in the Republic of Ireland: A cross-sectional study](#). Tracey ML, Fitzgerald S, Geaney F, Perry IJ, Greiner B. Preventive Medicine Reports. 2015;2:699-703.

[Night-time blood pressure and target organ damage: a comparative analysis of absolute blood pressure and dipping status](#). O'Flynn AM, Dolan E, Curtin RJ, O'Brien E, Perry IJ, Kearney PM. J Hypertens. 2015 Nov;33(11):2257-64.

Visit the department website for a full list of [publications](#)

## Follow Us

Come join the conversation on Facebook and Twitter





*Ms Marion Murphy and Mr Seán Whelan, recipients of HRB Summer Studentships*  
Longitudinal Study on Ageing (TILDA), Seán is investigating how diabetes effects overall cognition in people over 50, as well as looking at specific domains of cognitive functioning - memory, executive function, processing speed etc. Seán will be undertaking an Intercalated BSc in Neuroscience in September.

## Marion Murphy and Seán Whelan awarded Summer Studentships from the HRB

Marion Murphy, 4th year medical student, and Seán Whelan, 3rd year medical student, were recently awarded Summer Studentships from the Health Research Board to work on projects in the Department under the supervision of [Dr Sheena McHugh](#) and [Professor Patricia Kearney](#). Marion examined the impact of timing and quality of antenatal care on health behaviours during pregnancy, in collaboration with the National Perinatal Epidemiology Centre, CUMH. Marion recently had an oral presentation at the Society for Social Medicine Annual Meeting having been awarded a student bursary. Seán's project entitled '*Diabetes and Cognitive Impairment in the Older Population - Exploring Patterns of Impairment*' investigates the association between type 2 diabetes and cognitive impairment. Using data from The Irish

Longitudinal Study on Ageing (TILDA), Seán is investigating how diabetes effects overall cognition in people over 50, as well as looking at specific domains of cognitive functioning - memory, executive function, processing speed etc. Seán will be undertaking an Intercalated BSc in Neuroscience in September.

## International Visiting Student

Seyhmus Aksoy, a third year Occupational Health and Safety student from Turkey, joined the Department for a summer internship as part of his degree programme. Under the supervision of [Dr Birgit Greiner](#), Seyhmus worked on a number of projects which included looking at the ergonomics of online students, the occupational health of truck drivers, and examining policy and cultural differences in occupational health in Ireland and Turkey. Due to Turkish Health and Safety Acts, his degree, the first of its kind in Turkey, focuses primarily on the engineering aspects of health and safety. Mr Aksoys focus however has turned towards interventions to avoid workplace stress, bullying and conflict, all of which are elements embodied in the [MSc in Occupational Health](#) run by the Department of Epidemiology and Public Health and so informed his decision to seek a placement here. Seyhmus said of his placement experience, "I gained more than just an academic and professional experience on my placement but also personal experiences". We would like to extend our best wishes to Seyhmus for his future career.



*Mr Seyhmus Aksoy, 3<sup>rd</sup> year Occupational Health & Safety student*

"I gained more than just an academic and professional experience on my placement but also personal experiences". We would like to extend our best wishes to Seyhmus for his future career.

## The Wiley Faculty Fellows Initiative

[Ms Colette Cunningham](#), Deputy Director of Online Learning in the Department, was recently invited to join the Wiley Faculty Fellows programme. The Faculty Fellows Initiative, aims to foster a community of practice among Wiley partners focused on innovative teaching and learning. Fellows share a distinguished record of accomplishment in their profession as well as an enthusiasm for new pedagogical and technological approaches to their instruction. Colette has overseen the development and implementation of online education in the department since its inception in 2013, and particularly that of the Online Masters of Public Health. She has a desire to see online education grow in the Department and to evolve into a top-class technology enhanced learning environment that will offer students flexibility to study public health anywhere, anytime. The two-year fellowship will involve implementation of an initiative to benefit online learning and teaching in UCC and the Department, as well as attending several annual teaching conferences and participating in ongoing virtual meetings and discussions. Colette, recently joined other Fellows at the Online Learning Consortium Conference (OLC) and Fellows meeting in Orlando (October 14-16) where a rich programme of best practices in online learning were showcased.



*Participants of the Online Learning Consortium Conference, Florida, 2015*  
public health anywhere, anytime. The two-year fellowship will involve implementation of an initiative to benefit online learning and teaching in UCC and the Department, as well as attending several annual teaching conferences and participating in ongoing virtual meetings and discussions. Colette, recently joined other Fellows at the Online Learning Consortium Conference (OLC) and Fellows meeting in Orlando (October 14-16) where a rich programme of best practices in online learning were showcased.

## BSc Public Health Students go Global

The first BSc in Public Health students ventured out on Work Placements in 2007, some travelling further afield to developing countries. Indeed the current editor of EPINews was a trailblazer in this respect, spending two months in Mombassa, Kenya in 2007! Students have also gone to other parts of Africa including Uganda, Zambia and Tanzania. Some have spent time in India and this year three students went to Vietnam working with children with disabilities, as well as carrying out a project on the long term effects of Agent Orange. Students also volunteer in their holidays. Three current 4<sup>th</sup> Year



students spent 6 weeks of the summer 2014 working on an HIV/AIDS project in Uganda. This year, a 2<sup>nd</sup> Year student won an EIL Travel Award and spent 8 weeks in Guatemala working on a sustainable agriculture project. Students agree that the experience of working in a developing country is very rewarding and they are willing to invest a lot, both financially and personally, in such opportunities. The BSc itself also benefits from students returning and 'telling their story' to their peers, bringing developing country public health issues 'to life'. Last but not least, these globetrotting students are flag bearers for the BSc as they demonstrate their public health knowledge and skills in far flung locations!

*Dr Fiona MacLeod, BSc in Public Health Course Co-Ordinator*



### MEET...



## Dr Fiona MacLeod

Dr Fiona MacLeod qualified in medicine at Saint George's Hospital Medical School, London, and completed postgraduate training in clinical hospital medicine and general practice in the United Kingdom. In 1995 she obtained a Masters degree, with distinction, in Health Services Management at the London School of Hygiene and Tropical Medicine.

Fiona has been employed in both hospital and general practice posts in the United Kingdom, and in General Practice in Ireland. She has worked in developing and transitional countries including Peru, Angola and the Republic of Macedonia, in her clinical capacity as well as in the fields of health service development and research.

In terms of research and teaching interests, Fiona's interests lie in 'interdisciplinarity', especially First Year engagement in interdisciplinary learning and enhancing the quality of complex learning environments for undergraduate and postgraduate public health.

**Did you know?** Dr MacLeod does Pilates regularly and recently took up golf again after a lapse of more years than she cares to remember!

## UPCOMING EVENTS

### November 2015

[European Scientific Conference on Applied Infectious Disease Epidemiology \(ESCAIDE\)](#), 11-13<sup>th</sup> November, Stockholm, Sweden

[3<sup>rd</sup> Annual Technology for Wellbeing International Conference](#), 12<sup>th</sup> November, Dublin

### December 2015

[Roles of sleep and circadian rhythms in the origin and nutritional management of obesity and metabolic disease conference](#), 8-9<sup>th</sup> December, Royal Society of Medicine, London

[The New Horizons Research Conference](#), 10<sup>th</sup> December, Western Gateway Building, UCC.

[Winter Scientific Meeting of the Faculty of Public Health Medicine](#), 9<sup>th</sup> December, Royal College of Physicians Ireland, Dublin, Ireland

### February 2016

[SPHeRE Network 2nd Annual Conference](#), 29<sup>th</sup> February, Dublin

[2nd Behaviour Change Conference: Digital Health and Wellbeing](#), 24-25<sup>th</sup> February, UCL, London, UK

### March 2016

[ICOHS 2016: International Conference on Occupational Health and Safety](#), 24-25<sup>th</sup> March, Miami, US

### April 2016

[International Society for Pharmacoepidemiology \(ISPE\)](#), 2015 Mid-Year Meeting, April 10-12<sup>th</sup>, Baltimore, US

[International Forum on Quality and Safety in healthcare](#), 12-14<sup>th</sup> April, Gothenberg, Sweden

### May 2016

[The XIII International Congress on Obesity \(ICO\)](#), 1-4<sup>th</sup> May, Vancouver, Canada

### June 2016

[European Obesity Summit](#), 1-4<sup>th</sup> June, Gothenburg, Sweden

[Epidemiology Congress of the Americas](#), 21-24 June, Miami, US

[14<sup>th</sup> Meeting of International Society for Behavioral Nutrition and Physical Activity \(ISBNPA\)](#), Advancing Behaviour Change Science, 8-11<sup>th</sup> June, Cape Town, South Africa

### May 2016

[International Congress on Obesity \(ICO\)](#) 2016, 1-4<sup>th</sup> May, Vancouver, Canada

### June 2016

[World Congress on Cardiology and Cardiovascular Health](#), 4-7<sup>th</sup> June, Mexico City, Mexico

### August 2016

[32<sup>nd</sup> International Congress on Pharmacoepidemiology & Therapeutic Risk Management \(ICPE\)](#), 25-28 August, Dublin, Ireland

### September 2016

[Society of Social Medicine Annual Meeting 2016](#), York

[Twenty-Eighth Conference of the International Society for Environmental Epidemiology](#), Old risks and new challenges for environmental epidemiology, 1-4<sup>th</sup> September, Rome, Italy

[UK Congress on Obesity \(UKCO\)](#), 9-11<sup>th</sup> September, Glasgow, Scotland

### November 2016

[9<sup>th</sup> European Public Health Conference](#), 9-12<sup>th</sup> November, Vienna, Austria

### Ongoing

[Stata courses](#)

[Stata training](#)

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