

# EPINews Department of Epidemiology and Public Health Newsletter

May 2014

#### **WELCOME**

Dear Colleagues,

Welcome to this edition of EPINews. This issue is packed full with news, events and research updates from within the Department. Since the last issue, we have released the results from the Cork Children's Lifestyle Study (CCLaS) which investigated the wellbeing, diet and exercise levels of Cork children over 2012 and 2013. The study received strong support from children, parents and schools in Cork with over one thousand children from 3rd and 4th classes from primary schools in Cork city and Mitchelstown taking part. The study found that one quarter of participating children were carrying excess weight and the findings show over 50% of children have salt intakes well above healthy levels and 8% were considered as having high blood pressure. For more information visit CClaS on the Department website. I would encourage you to circulate EPINews among your colleagues and direct any queries or comments to me at emily.kelleher@ucc.ie

Ms. Emily Kelleher

#### **DEPARTMENT NEWS**

#### A new era for the Masters in Public Health (MPH)

The Department has entered a new era in e- learning. In January 2014, a 6-month online PG Cert in Health Protection commenced. Feedback so far has been excellent. We are launching an Online MPH from September 2014. The course is taught by professionals, experts in their fields supported by real-world experience and evidence-based best practice taught within a supportive online environment. The course will allow busy health professionals to undertake this degree while continuing to work. Students can major in specific areas of public health including epidemiology/biostatistics, health promotion or health protection/environmental health. When they graduate, they will be ready to undertake any challenge whether in a public, healthcare, NGO or international setting and in any area from epidemiology to addressing health inequalities. We are expecting great interest from health professionals both at home and abroad. This is an exciting time for the Department! For more information on the PG cert please contact M.Smiddy@ucc.ie and for information on the E-MPH please contact C.Cunningham@ucc.ie.

#### IN THIS ISSUE

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- Current Research Projects
- Meet...
- Events and Training
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#### **CORE TEACHING PROGRAMMES**

- BSc in Public Health
- (MPH) Masters in Public Health
- Postgraduate Certificate in Health Protection
- Postgraduate Certificate in Health Protection (Online)
- MSc in Occupational Health
- PhD Programmes



#### Irish Heart Foundation Research Bursary Awards 2014

New research into the prevention of cardiovascular disease (CVD) has been recognised by educational bursaries awarded by the Irish Heart Foundation (IHF) which included new stroke prevention bursaries supported by Daiichi Sankyo. The IHF established the bursaries to promote original innovative work in the area of CVD which is not easily funded by other sources. The national charity's newest research bursaries presented at the Royal College of Physicians on 16th April 2014, were particularly focused in the areas of hypertension, heart failure, childhood obesity, stroke prevention and atrial fibrillation.

Ms Fiona Geaney, PhD researcher with Professor Ivan Perry from the Department of Epidemiology and Public Health, UCC received an IHF Research Bursary for the project: The effectiveness of complex workplace dietary interventions on dietary behaviours and diet-related disease risk. The Food Choice at Work Study: a clustered controlled trial.

# Increasing interest in the use of latent class analysis methods in public health nutrition research

Using data from the 1998 baseline and 2008 follow-up of the Cork and Kerry Diabetes and Heart Disease Study, the investigators applied latent class analysis to food-frequency questionnaire data in order to explore dynamics in dietary patterns among Irish adults. They found that the sample's diets were best described by three patterns: Western, Healthy and Low-Energy. While most people remained 'stable' in their dietary class, those that did change tended to move to the healthier class. This transition was associated with higher education and higher CVD risk factors at baseline, while lower education levels were associated with a persistent, unhealthy dietary pattern.

This research reflects the department's growing interest in the use of latent variable and clustering methods aimed at measuring complex multi-dimensional constructs that are important for population health. These include dietary patterns, physical activity profiles, risky behaviours in students and pregnant women, and socioeconomic position. The work with latent variable approaches to capture dietary patterns, facilitated by an HRB funded Interdisciplinary Enhancement Award, is now being extended to other Irish cohorts, including SLAN and the Mitchelstown cohort. This work will be presented at the upcoming World Congress of Epidemiology (August 2014, Anchorage, Alaska).

#### Medications Optimisation in Multimorbidity

A knowledge exchange meeting around medications optimization in multimorbidity will take place on September 18-19<sup>th</sup> in University College Cork. The meeting is funded by New Foundations and speakers include Dr Martin Duerdan and Professor Stewart Mercer. Meeting details will be circulated over the coming weeks. For further information you can contact Dr. Carol Sinnott at csinnott@ucc.ie

#### Department welcomes TY students

The week of the 7th April saw three transition year students from the Presentation Brothers College, Cork join the Epi team to gain an insight into research. They were involved with two studies within the Department; the Food Choice at Work (FCW) study, led by Ms. Fiona Geaney and Cork Children's Lifestyle Study (CCLaS) led by Ms. Eimear Keane. The students were thrilled to work with the Department on a variety of tasks and they were surprised at the diversity of research ongoing in the Department.



# Congratulations to Ms. Sarah-Jo Sinnott on her recent poster award

Ms Sarah-Jo Sinnott, a 4th year PhD Scholar on the HRB Health Services Research Programme, received the first prize award for her poster entitled "The effect of reduced or removed copayments for prescription medicines on adherence - a systematic review' at the European Public Health (EPH) meeting held in Brussels in November 2013. This poster was presented at the Young Researcher's Forum and was organised by the Association of Schools of Public Health in the European Region at the EPH conference. The research presented in the poster has found that providing free access to medicines, or reducing the cost of medicines can improve adherence, although this improvement is moderate. This research is part of Sarah-Jo's overall PhD project which focuses on payment for medicines and how this affects the way in which people adhere to their medicines.

#### Follow Us

The Department is embracing social media and are posting and tweeting the latest in research, courses, events and news items. Come join the conversation on Facebook and Twitter.

#### **RESEARCH NEWS**



Left to right: Ms Maria Boyce, Ms Rebecca Dennehy and Dr Elsa Droog of the Department of Epidemiology and Public Health

## SIREN - Study of the Impact of Reconfiguration on Emergency and Urgent Care Networks

Emergency and urgent care in Ireland is changing under the Health Service Executive (HSE) Transformation Programme which aims to implement a 'systems-based' approach for discrete geographical regions. The aim of the SIREN project is to describe and evaluate the development and performance of different emergency and urgent care systems (EUCS) in Ireland and produce a framework for the future evaluation of EUCS in this country. This four year programme of research is funded by the Health Research Board and is led by Prof. John Browne from the Department of Epidemiology & Public Health at UCC. The research is being undertaken in collaboration with a number of co-applicants from Trinity College Dublin, Royal College of Surgeons in Ireland and the HSE. A number of national and international collaborators are involved in the research including the School of Health and Related Research at Sheffield University, College of Medicine and Health in UCC, Health Information Systems Research Centre in UCC, the Health Information Quality Authority and the National Directorate for Quality and Patient Safety in the HSE. The study will use mixed-methods, combining qualitative data with cross-sectional and longitudinal quantitative data. Data will be collected through interviews, documentary analysis, routinely available datasets and original quantitative surveys. Ultimately the research will facilitate the dissemination of quality improvement strategies across the country which will lead to population wide improvements in patient experience and health outcomes. If you would like further information on the SIREN project please visit the SIREN website. Follow SIREN on Twitter at @sirenstudy

#### **AUDGPI** Annual Scientific Meeting 2014

The Department of General Practice recently hosted the 2014 Annual Scientific Meeting of the Association of Departments of General Practice in Ireland. Research presented from the Department of Epidemiology & Public Health included 'Hypertension Prevalence, Awareness, Treatment and Control: The impact of Ambulatory Blood Pressure Monitoring', 'Engaging GPs in Clinical Trials: Barriers and Facilitators encountered in the TRUST Study', 'The prevalence of diabetes and related complications in a nationally representative sample

of adults aged 50 years and over in Ireland' and 'A Review of Potentially Inappropriate Prescribing in Over 65's in Livinghealth Clinic' which was awarded first poster prize.

#### International Research Visit

Dr Sheena McHugh is currently on a 2 month research visit at RAND Europe based in Cambridge, England and the Cambridge Centre for Health Services Research. Sheena is one of three postdoctoral researchers funded as part of the Health Research Board Interdisciplinary Capacity Enhancement (ICE) Award: Transitions through the Lifestyle Lifecourse, PI Prof. Patricia Kearney. The ICE award includes support for postdoctoral researchers to visit international research centres and policy institutes to gain exposure to new ways of thinking, working and disseminating research, and to develop international partnerships.

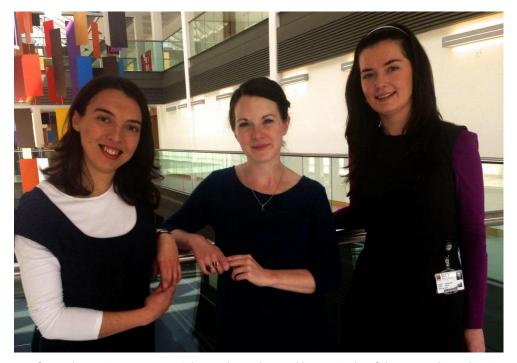
While at RAND, Sheena is working on an international comparison of health service use during pregnancy and the drivers of obstetric interventions in collaboration with Dr Ellen Nolte (Director, RAND Europe) and Dr Emma Pitchforth (Research Leader). Sheena is using data from the SCOPE study (Screening for Pregnancy Endpoints), a multicentre study conducted in Ireland, England, Australia and New Zealand. The Cork SCOPE centre is led by Professor Louise Kenny in Cork University Maternity Hospital, a co-principle investigator on the ICE project.

Sheena will also be based at the Cambridge Centre for Health Services Research (CCHSR), a collaboration between Healthcare Group at RAND Europe and the University of Cambridge Health Services Research Group at the Institute of Public Health. The focus of CCHSR is on measuring quality of health care, evaluating approaches and policies for improving health care delivery, and analysing population health outcomes. During her visit, Sheena is engaging with a number of research teams at CCHSR on areas of common interest including integrated care, mixed methods and multimorbidity research.

#### Study of suicidal behaviour and work-related factors kicks off

January 2014 marked the commencement of <u>SSIS-ACE</u>, an innovative study involving the <u>National Suicide Research Foundation</u> (NSRF) and the Departments of Epidemiology & Public Health and General Practice. This study will be funded by the Health Research Board for 3 years. Previous research shows increased risk of suicide within certain occupations. However, the association between work-related factors and suicide has yet to be examined systematically in an Irish context. Principal investigator Prof. Ella Arensman is leading the SSIS-ACE study, which will use a case-control study design to examine specific psychiatric, psychosocial and work-related factors associated with suicidal behaviour in the Cork area. Completed suicide and highly lethal self-harm cases will be compared to GP controls using multiple sources of data, such as coroners' records, self-report and family informant interviews.

SSIS-ACE follows on from the successful pilot Suicide Information and Support System study (2008-2012), which examined the characteristics of completed suicides using the psychological autopsy approach. Dr Birgit Greiner of the Department of Epidemiology & Public Health and Ms Eileen Williamson of the NSRF join Prof Arensman to make up the management team. A launch seminar for SSIS-ACE will be held in September to coincide with World Suicide Prevention Day. For further details, please email Celine Larkin at c.larkin@ucc.ie



Left to right: Ms Sara Leitao, Dr Celine Larkin and Ms Jacklyn McCarthy of the National Suicide Research Foundation

#### **Conference Presentation**

<u>Dr Sheena McHugh</u>, of the Department of Epidemiology and Public Health, will present at the upcoming Health Services Research Europe (HSR) conference entitled 'The international dimension in comparative health services research'. The meeting is taking place at the Netherlands Institute for Health Services Research, NIVEL, based in Utrecht. The aim of the meeting is to provide a forum to discuss the content and methodological issues related to international comparative health services research. Sheena's abstract on international variation in service use and obstetric interventions during pregnancy was one of ten abstracts selected for presentation at the meeting.

#### **RECENT PUBLICATIONS**

The experiences of professionals who use patient-reported outcome measures as quality improvement tools - a systematic review of qualitative research. Boyce M, Browne JP, Greenhalgh J. BMJ Quality and Safety (in press).

The effects of individual, family and environmental factors on physical activity levels in children: a cross-sectional study. Cadogan SL, Keane E, Kearney PM. BMC Pediatrics 2014;14(107)

Are the special educational needs of children in their first year in primary school in Ireland being identified: a cross-sectional study. Curtin M, Baker D, Staines A, Perry IV. BMC Pediatrics 2014;14(1):

The direct and indirect costs of both overweight and obesity: a systematic review. Dee A, Kearns K, O'Neill C, Sharp L, Staines A, O'Dwyer V, Fitzgerald S, Perry IJ. BMC Research Notes 2014, 7:242

Nutrigenetics: bridging two worlds to understand type 2 diabetes. Harrington JM, Phillips CM. Curr Diab Rep. 2014 Apr;14(4):477

Capturing changes in dietary patterns among older adults: a latent class analysis of an ageing Irish cohort. Harrington JM, Dahly DL, Fitzgerald AP, Gilthorpe MS, Perry IJ. *Public Health Nutr.* 2014 Feb 25:1-13. [Epub ahead of print] PubMed PMID: 24564930

Chronic disease burden associated with overweight and obesity in Ireland: the effects of a small BMI reduction at population level. Kearns K, Dee A, Fitzgerald AP, Doherty E, Perry IJ. BMC Public Health. 2014 Feb 10;14(1):143. doi:

The occupational health perspective in the context of marine science. Greiner BA. *J Marine Sci Res Dev* 2014, 4:1

Visit the department website for a full list of publications.

#### **RESEARCH NEWS**

# The Cork Children's Lifestyle Study

The Cork Children's Lifestyle Study (CCLaS) investigated the wellbeing, diet and exercise levels of Cork children. The study received strong support from children, parents and schools in Cork with over one thousand 3rd and 4th class children from 27 schools participating in the study.

The results of this study highlight areas of action for policymakers, planners and developers with responsibility for addressing childhood lifestyle and wellbeing problems and creating sustainable healthy environments. The finding that almost half of the children had salt intakes above the maximum recommended daily allowance of 5g/day is of particular concern and it



sustainable healthy environments. The finding Left to right: Ms Catherine Perry and Dr Janas Harrington of the Department of Epidemiology that almost half of the children had salt intakes and Public Health, Mrs Annette Walsh, Deputy Principle of Greenmount NS and Ms Eimear above the maximum recommended daily Keane of the Department of Epidemiology and Public Health, UCC

highlights the urgent need for government regulation of the salt content of processed food. Furthermore, 8% of children had high blood pressure based on an interpretation of British Hypertension Society guidelines.

CCLaS is funded by the <u>National Children's Research Centre</u> in Crumlin and is led by <u>Prof Ivan Perry</u>, <u>Dr Janas Harrington</u> and <u>Ms Eimear Keane</u> from the Department of Epidemiology and Public Health, UCC.

MEET...



### ... Dr Janas Harrington

Janas is a Lecturer in Public Health Nutrition in the Department of Epidemiology & Public Health, UCC, and co-ordinator of the Health Promotion Pathway on the Masters in Public Health. Her research is focused on nutrition epidemiology and is anchored in the HRB Centre for Health and Diet Research. She is the PI for the Irish Food and Physical Activity Network (IFPAN), one of two funded Irish consortia contributing to the DEDIPAC (DEterminants of Dlet and Physical ACtivity) Knowledge Hub which is the first Joint Action of the EU JPI Healthy Diet for a Healthy Life. This knowledge hub brings together EU researchers in the field of nutritional, health and physical activity sciences. The overall objective of DEDIPAC is to improve understanding of how individual, social, economic, and cultural, gender, biological, environmental and policy factors influence health-related to diet and to promote interdisciplinary approaches and integration of biological and social sciences. IFPAN's work will focus on dietary intake, and assessment and their determinants. Further, at the European level Janas has been nominated as a task leader to focus on describing the variation in dietary intake and dietary behaviour by demographic variables across Europe. Janas is also the PI for the Cork Children's Lifestyle Study (CCLaS) which explores the individual, family and environmental factors associated with childhood overweight and obesity.

**Did you know?** Janas is a qualified Irish Dancing Teacher, and teaches in Ballinhassig on a weekly basis

#### **EVENTS AND TRAINING OPPORTUNITIES**

#### May 2014

<u>HSR conference: The international</u> <u>dimension in comparative health services</u> <u>research.</u> 15-16<sup>th</sup> May, Utrecht, The Netherlands

<u>Vitamin D: Needs, Intake and Status – A</u>
<u>European Perspective</u>, 20<sup>th</sup> May, London,
UK

<u>ISBNPA: International Society of</u>
<u>Behaviour, Nutrition and Physical Activity</u>
<u>2014</u>: 21-24<sup>th</sup> May, San Diego, California

ECO(2014): European Congress on Obesity, 28-31<sup>st</sup> May, Sofia, Bulgaria

#### June 2014

24<sup>th</sup> European Meeting on Hypertension and Cardiovascular Protection, 13-16<sup>th</sup> June, Athens, Greece

Nutrition Society Irish Section Meeting 2014, Changing dietary behavior: physiology through to practice, 18-20<sup>th</sup> June, Coleraine, Northern Ireland

EPICOH 2014: Challenges for occupational epidemiology in the 21<sup>st</sup> century, 24-27<sup>th</sup> June, Chicago, US

#### **July 2014**

PRISM systematic review workshop, 1<sup>st</sup> July, Maynooth, Ireland

<u>Health Services Research: Evidence-based practice</u>, 1-3<sup>rd</sup> July, London, UK

Nutrition Society Summer Meeting, Carbohydrates in Health: friends or foes, 14-17<sup>th</sup> July, Glasgow, Scotland

<u>Food and Nutrition Security in Africa:</u>
<u>New Challenges for Sustainability</u>, 21-25<sup>th</sup>
July, Ghana, Africa

#### August 2014

20<sup>th</sup> World Congress on Epidemiology, Global Epidemiology in a Changing Environment: The circumpolar perspective, 17-21<sup>st</sup> August, Alaska, US XX World Congress on Safety and Health at Work 2014: Global Forum for Prevention. 24-27<sup>th</sup> August, Frankfurt, Germany

26th Annual International Society for Environmental Epidemiology Conference - From Local to Global: Advancing Science for Policy in Environmental Health, 24-28<sup>th</sup> August, Washington, US

#### September 2014

5<sup>th</sup> International Course in Nutritional Epidemiology, 1-12<sup>th</sup> September, London, UK

Obesity – A physiological perspective, 10-12<sup>th</sup> September, Newcastle Upon Tyne, UK

Overcoming Obesity – Diagnose, Personalize, Treat, 10-13<sup>th</sup> September, Texas, US

The UK Congress on Obesity 2014, 16-17<sup>th</sup> September, Birmingham, UK

Medications Optimisation in Multimorbidity, 18-19<sup>th</sup> September, Cork, Ireland

#### October 2014

Transitions and Youth Mental Health, 4th National One-Day Research Conference on Youth Mental Health, 10th October, Cork, Ireland

<u>Cardiometabolic Health Congress</u>, 22-25<sup>th</sup> October, Boston, US

<u>SCOPE Summer School 2014</u>, 27-28<sup>th</sup> October, London, UK

#### November 2014

<u>EUPHA</u>: 7<sup>th</sup> European Public Health Conference, 19-22<sup>nd</sup> November, Glasgow, Scotland

#### December 2014

3<sup>rd</sup> International Conference and Exhibition on Obesity and Weight Management, 1-3<sup>rd</sup> December, San Francisco, US

#### September 2015

9<sup>th</sup> International Conference on Diet and Activity Methods, 1-3<sup>rd</sup> September, Brisbane, Australia

#### CONGRATULATIONS

#### Dr. Vera McCarthy

In April 2014 we said goodbye to one of our most valued members of staff Dr. Vera McCarthy. Dr McCarthy had worked in the Department of Epidemiology and Public Health since 2002 as a research nurse and recently submitted and defended her PhD thesis entitled 'Health of the Older Worker in Ireland - Occupational Physical and Psychosocial Factors in the Autumn of Work Life' which investigated the physical and psychosocial factors of health for older workers. We wish Vera all the best in her future endeavours in the School of Nursing and Midwifery.

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