



Don't Forget Prevention

One 400 microgram tablet of folic acid taken every day by all women who are capable of becoming pregnant will prevent many cases of neural tube defects. Folic acid may also help prevent miscarriages.

Cycling Event in Italy for Childhood and Adolescence Cancer Survivors



Ian Hanrahan and Karen O'Neill

On the 5th / 6th May, 2012 Dr Julianne Byrne of the Boyne Research Institute, along with two young Irish cancer survivors Ian Hanrahan and Karen O'Neill, travelled to Marostica, Italy, to take part in a cycle event for survivors of cancer during childhood and adolescence.

The event, named 'The Race of Brave Bikers', sponsored by PanCareSurFup, Seventh Framework Programme, NEAR,

the MBBM Foundation from Monza, Italy and Barilla Foods, saw 30 young cancer survivors from across Europe and their supporters line up together and undertake a special 10K route through the ancient town of Marostica, Vicenza, Italy.

Dr Julianne Byrne of the Boyne Research Institute is a participant in the EU funded Seventh Framework Programme (FP7) consortium - PanCareSurFup. The cycling event was held as part of the consortium's dissemination activities that aim to raise awareness of the increasing number of paediatric cancer survivors in Europe. The race involved young people who have been able to overcome cancer and, today, live a full life. The event demonstrated not only their immense bravery, but also the importance of optimum quality-of-life for the survivors, and the need for research studies into the late effects of their complex paediatric cancer treatment.



Staff

Rosaire Kelly joined the Boyne Research Institute as a volunteer in September 2011. Rosaire is a chartered physiotherapist and has worked in Ireland, Canada and the UK. She has also completed a degree in IT and Computing from the Open University. Rosaire assists the Director and the Administrator with the various projects of the Boyne Research Institute, e.g. the first Irish Conference for Survivors of Cancer during Childhood and Adolescence (www.ccs2011.ie) and the Summer Student Programme. More recently she has been liaising with PanCareSurFup

translators to produce information leaflets in Italian, German and French, on the activities of PanCareSurFup, for dissemination around Europe to raise awareness of this project. These leaflets can be downloaded from:

<http://www.boyneresearch.ie/pancaresurfup.html>

or <http://www.ccs2012.ie/publications.html>.

When not in the office Rosaire enjoys playing tennis and reading thrillers.

Boyne Research Institute collaborates with CDC scientists

Scientists at the Boyne Research Institute have extended their collaboration in 2012 with the Centers for Disease Control & Prevention (CDC) in Atlanta, GA, USA. Our study, carried out in 2007, of folate levels, dietary folate and lifestyle factors in members of Irish families with neural tube defects, was supported by CDC whose scientists evaluated a number of molecular markers related to folic acid in the blood samples provided by the relatives. We evaluated the way that levels of folic acid in blood vary with different factors; this report is on the BRI website



http://boyneresearch.ie/resources/Fort_MS_28May11.pdf. In 2012, we are working with CDC to complete a manuscript that relates changes in the molecular markers to relationships within families, including maternal and paternal relationships. Collaborators include Dr. RJ Berry of the National Center on Birth Defects and Developmental Disabilities, and others from the National Center for Environmental Health of CDC. Our previous studies have shown that relatives on the maternal side (in Irish families with neural tube defects) are more likely than relatives on the paternal side to have birth defects, including neural tube defects. These publications are on the BRI website http://boyneresearch.ie/resources/Byrne_ThreeGen_IJMS_11.pdf. This report will be the first time that distant relatives have been evaluated for changes in molecular markers; we hope that our work will open new avenues of investigation to clarify how children develop neural tube defects.

Thank You

We thank Drogheda Rotary Club and Drogheda Credit Union for their kind and generous donations to the Summer Student Programme. Without these donations we would be unable to run this programme to allow students to gain experience in a research environment.

Mission The Boyne Research Institute is a community-based research facility that conducts research directed towards a better understanding of the origins and prevention of birth defects and the long term consequences of cancer during childhood. www.boyneresearch.ie

2012 Staff of the Boyne Research Institute

Dr. Julianne Byrne, director.

Rebecca Lawler, administrator/researcher.

Rosaire Kelly, volunteer.

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2012 Summer Student Programme, July - August

Each year the Boyne Research Institute offers a summer training programme to two Leaving Certificate students in Drogheda - area schools. Each student identifies a different topic, carries out a research project, and prepares a formal PowerPoint presentation. They present their work at a reception for an invited audience, including the Mayor of Drogheda and board members. This year the reception will be on 8th August.



Peter Moloney says: I attended St. Oliver's Community College. I plan to study engineering in UCD in the coming year. The work in the Boyne Research Institute is different from anything I have done before

and it has been a steep learning curve. It seems like I am learning new skills and honing old ones on a daily basis. For example, I am learning about statistical analysis, creating presentations and discovering how to use databases. When I'm not at work I like to go to the gym with my friends and playing Gaelic. The work in the Boyne Research Institute is very interesting, as part of my project I am researching 'Radioactivity in the Irish Sea'.



Aurelija Rocyte says: I am from Lithuania and I came to Ireland with my mother and brother just two years ago. School experience in Ireland was very different from that in Lithuania. It was more practical as I did a lot of

experiments in science classes. Also I have never worn a school uniform before. I completed my Leaving Cert in June and in the coming year I plan to study Nanoscience in Trinity College, Dublin. The BRI summer student programme is a great opportunity to improve my presentation, writing and language skills. I got experience on article writing, searching for information and presentation of a research project which will definitely be useful in college.

The Boyne 10K

On 6th May 2012 five runners from Drogheda ran in the Boyne 10k to raise much needed funds for our organisation. Rebecca Lawler, Administrator for the Boyne Research Institute, and her husband Mark, together with Edward McGuirk, Conor Kelly, Caitriona Kelly and Damien Kavanagh all ran the race. We



L - R: Conor Kelly, Caitriona Kelly, Mark Lawler & Rebecca Lawler

would like to thank them for their support and we are most grateful to all those who kindly sponsored them. Team Boyne Research put in a huge amount of effort and raised €1136.76 for the Boyne Research Institute Summer Student Programme.

BRI Projects, Publications & Presentations

Irish Families with Neural Tube Defects: a long-term investigation into the epidemiological and molecular factors that are linked to the occurrence of neural tube defects.

PanCare: pan-European network of professionals and survivors dedicated to ensuring that all survivors of childhood and adolescent cancer in Europe receive optimal long-term care (www.pancare.eu).

PanCareSurFup: an EU-funded consortium of 16 institutions carrying out long-term follow-up studies of survivors of childhood and adolescent cancer (especially on late mortality, cardiac disease and second malignancies), creation of guidelines and dissemination of results to the wider public (www.pancaresurfup.eu).

- Byrne J. Three generations of matrilineal excess of birth defects in Irish families with neural tube defects. Irish Journal of Medical Science (2011) 180:69-72.
- Byrne J. Periconceptional folic acid prevents miscarriage in Irish families with neural tube defects. Irish Journal of Medical Science, (2011) 180:59-62.
- Walsh PM, Byrne J, Capra M, Comber M. Childhood cancer survival in Ireland: temporal, regional and deprivation-related patterns. European Journal of Cancer (2011) 47(12):1852-1862.
- Walsh P, Byrne J, Capra M, Comber H. Childhood cancer survival in Ireland: temporal, regional and deprivation-related patterns. Poster presentation at the 11th International Conference on Complications of Treatment for Childhood Cancer, Williamsburg, VA, USA, June 2012.
- Walsh PM, Byrne J, Kelly M, McDevitt J. Influence of deprivation on breast cancer survival in Ireland. Poster presentation at the 34th Annual Meeting of the International Association of Cancer Registries (IACR2012), Cork, Ireland, 17-19 September 2012.

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