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**EMBARGOED UNTIL THE FOLLOWING TIME:**

**Seattle | London | Nairobi Thursday May 26, 2016 10:30 am PT | 6:30 pm BST | 8:30 pm EAT**

**APC Microbiome Institute University College Cork  
Receives Grand Challenges Explorations Grant  
For Groundbreaking Research in Global Health and Development**

**Cork, Ireland - University College Cork** announced today that it is a [Grand Challenges Explorations](#) winner, an initiative funded by the [Bill & Melinda Gates Foundation](#). **Dr Jennifer Mahony and Prof Douwe Van Sinderen** will pursue an innovative global health and development research project, titled **“Assessment of the role of phages in changes in the infant gut microbiome landscape”**.

Grand Challenges Explorations (GCE) funds individuals worldwide to explore ideas that can break the mold in how we solve persistent global health and development challenges. **Dr Jennifer Mahony’s** project is one of more than 40 Grand Challenges Explorations grants announced today by the Bill & Melinda Gates Foundation.

To receive funding, **Dr Jennifer Mahony, Prof. Douwe van Sinderen and Dr. Marco Ventura** and other Grand Challenges Explorations winners demonstrated in a two-page online application a bold idea in one of five critical global health and development topic areas.

The foundation will be accepting applications for the next GCE round in September 2016.

The World Health Organization advocates exclusive breast-feeding in the first 6 months of an infant’s life so as to increase optimal infant development and growth and prevent/reduce an estimated 0.8 million infant deaths annually. After weaning, the human gut microbial composition is affected by dietary, sanitation and environmental factors. In addition, bacterial viruses, called bacteriophages, or phages, are known to affect the gut microbiota (gut bacterial and phage composition). In this project Mahony & van Sinderen will analyse faecal stool samples from infants in developing countries in order to understand their microbiota. In particular they will examine how the phage present influence the balance of good bacteria like bifidobacteria and harmful/pathogenic bacteria such as enterotoxigenic E.coli (ETEC) and

Shigella. “We will determine if phages can be used to destroy these pathogens and improve the gut health of infants in developing countries” said Dr Jennifer Mahony, leader of the project.

The funding was awarded to Prof. Douwe van Sinderen and Dr. Jennifer Mahony of the APC Microbiome Institute & School of Microbiology.

The funding is for a Phase I pilot scale project for 18 months (\$100,000) and will be performed in collaboration with Dr. Marco Ventura of the University of Parma, Italy.

#### **About Grand Challenges Explorations**

[Grand Challenges Explorations](#) is a US\$100 million initiative funded by the [Bill & Melinda Gates Foundation](#). Launched in 2008, over 1186 projects in more than 61 countries have received Grand Challenges Explorations grants. The grant program is open to anyone from any discipline and from any organization. The initiative uses an agile, accelerated grant-making process with short two-page online applications and no preliminary data required. Initial grants of US\$100,000 are awarded two times a year. Successful projects have the opportunity to receive a follow-on grant of up to US\$1 million.

#### **About APC Microbiome Institute**

The APC Microbiome Institute (APC; <http://apc.ucc.ie>) was formed in 2003 with funding from Science Foundation Ireland and in conjunction with key industry partners. It represents a seamless collaboration between University College Cork, Teagasc (the Irish Agriculture and Food Development Authority) and Cork Institute of Technology. It is widely recognised that the gut microbiota plays an important role in human health and has become one of the most dynamic, complex and exciting areas of research in both food and pharmaceutical arenas. Over the last decade the APC has established itself as one of the leading global centres in gut microbiota research. The APC has made several landmark discoveries and has published over 1000 research articles in peer-reviewed journals, generating many journal covers and associated editorials. The APC comprises over 250 individuals, from the scientific PI's (the APC Faculty) funded by the partner Institutions, the management team, and a dedicated group of research scientists, research assistants and postgraduates students.

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