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**Human Nutrition
Research Centre**

PI Seminar Series

Speaker: Professor Glenn Gibson, Department of Food and Nutritional Sciences,
University of Reading
Venue: Baddiley Clark Seminar Room
Date: Monday 20th November 2017
Time: 13.00 – 14.00

Professor Glen Gibson will present:

***“FRIENDS IN LOW PLACES: PROBIOTICS AND PREBIOTICS TO MODULATE THE
GUT MICROBIOTA”***

Abstract

Driven by the increasing burden of gastrointestinal disease, the functional foods market has moved towards gut derived events. Specifically, these target the human gut to stimulate beneficial microbial genera either directly by providing growth substrates to selectively promote the growth of an individual's autochthonous "healthy microbiota" (prebiotics) or using live microbial additions (probiotics). Bifidobacteria and lactobacilli are the commonest targets *in vivo* within the large intestine for such fortification. The approach of both probiotics and prebiotics carries little to no risk for consumers, but holds promise for improved health and wellbeing. The main types and clinical applications of each approach will be discussed. Most interest in the development of prebiotics has been aimed at non-digestible oligosaccharides such as inulin type fructooligosaccharides (FOS) and *trans*-galactooligosaccharides (TOS). Both have been shown to be prebiotics, through numerous volunteer trials, as evidence by their ability to positively change the gut microbiota composition after a short feeding period. They have been tested in IBS, IBD, obesity, traveller's diarrhoea, infants, elderly persons. Trials that include a functional, as well as compositional, assessment of microbiota changes following prebiotic may be a useful way forward, as are further studies into clinical outcome.

Chair: Professor John Mathers