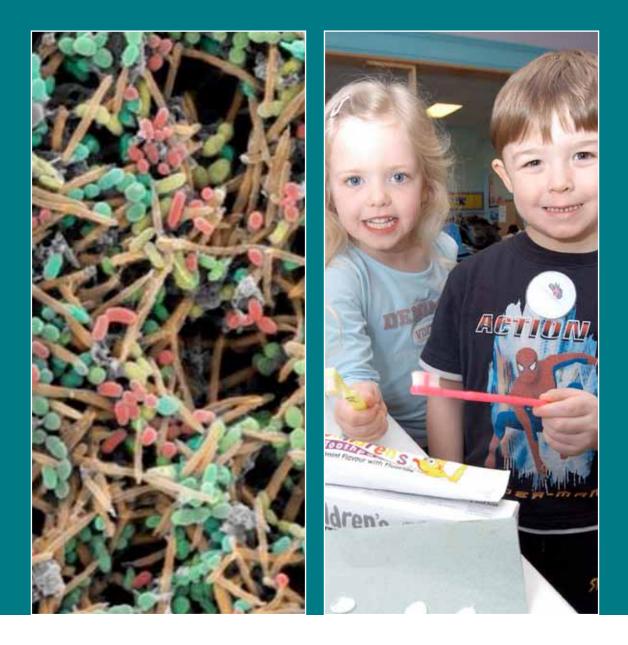


Dental School Research Strategy 2014

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- To improve oral health and tackle oral health inequalities across the life course through developing a better understanding of biological, social and behavioural determinants, in order to design, develop and evaluate appropriate interventions from bench to population level.
- To engage in knowledge exchange with policymakers, practitioners, researchers, industry and the public to ensure that policies and practices are based on evidence, and effectively translated into practice.
- To align work with the research priorities of the College of Medical, Veterinary and Life Sciences and the relevant Research Institutes.
- To contribute to the Internationalisation agenda through the development of global collaborations and recruitment of overseas postgraduate research students.
 - The Dental School research strategy and activity will be delivered by two subgroups:
- Community Oral Health
- Infection and Immunity

Community Oral Health Research Group



Strategy: To improve oral health and understand and tackle oral health inequalities through the life course.

Our work aligns with a number of the research themes of the Institute of Health and Wellbeing, College of Medical, Veterinary and Life Sciences, and the College of Social Sciences, namely:

- · perceptions and experiences of health and wellbeing
- inequalities in health and wellbeing
- trials of health service and community-based interventions, and using 'natural experiments' to assess the impact on health and wellbeing of social, environmental or policy changes
- capitalising on longitudinal studies and the use and linkage of routine NHS or other administrative data

Population Groups / Themes:

- Children
- Head & Neck Cancer in Adults
- Older People

Overall approach:

- · Measure and monitor trends in oral health and inequalities
- · Investigate determinants of health and health inequalities
- Develop, implement and evaluate interventions which aim to improve oral health and address health inequalities

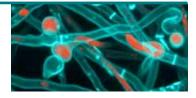
Methodologies:

- Utilise and further develop expertise in the following areas to address research questions common to all population groups within the strategy:
 - Epidemiology and statistical analyses: primary and secondary data collection and analysis, including data linkage
 - Study design: RCT, cohort, case control studies
 - Evidence synthesis: qualitative and quantitative
 - Implementation Science / Human Factors approach
- Link with I&I Group to explore underpinning biological determinants of health and health inequalities
- Public engagement, knowledge exchange and impact generation activities: informing / influencing policy, consulting & collaborating

Collaborations:

• Further develop collaborative links at School, College and national levels and contribute to the internationalisation agenda.

Infection and Immunity Research Group



Strategy: To improve oral and systemic health through understanding how biofilm communities interact with host immunity and host associated surfaces.

Themes:

- Chronic Infection & Inflammation
- Decontamination & Infection Control

Aim:

Using a 'bench-top to chair-side' approach to generate knowledge to facilitate translational studies that impact on the field of dentistry. Specifically:

- Oral disease and the systemic implications
- Informing / influencing policy
- Knowledge exchange with funders, industrial partners, patients and the public

Overall approach:

- To closely align our strategy with the Institute of Infection, Inflammation and Immunity, College of Medical, Veterinary and Life Sciences
- To understand the basic science of the immune system and microbiome within the oral cavity and how these interactions can in turn promote health and disease
- Develop and evaluate interventions based on understanding basic mechanisms to improve oral and systemic health
- To engage with industrial and NHS stakeholders to support translational dentistry

Methodologies:

- Utilise and further develop expertise in the following areas to address research questions common to all themes within the strategy:
 - Inflammation biology
 - Biofilm model development
 - Surface protein analyses
 - OMICs approaches
- Prospective clinical studies of relevant patient groups
- Link with COH Group to explore underpinning biological determinants of oral health and disease

Collaborations:

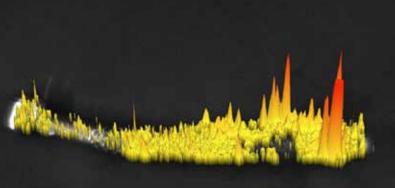
• Further develop collaborative links at School, College and national levels and contribute to the internationalisation agenda.

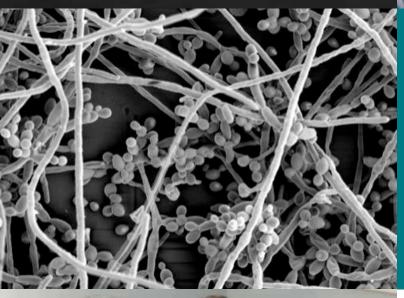
Knowledge Exchange and Public Engagement Strategy



Our aim is to engage in knowledge exchange (KE) and public engagement (PE) with policymakers, practitioners, researchers, industry and the public to ensure that policies and practices are based on evidence, and effectively translated into practice. KE and PE activities should be embedded in research from the outset, mutually benefitting both researchers and stakeholders, and will be focussed and tailored to the particular needs of any one project. This will ensure that a wide range of approaches and activities will be supported from within the Dental School.

We will align our strategy (and its delivery) to that of the Institute of Health and Wellbeing (http://www.gla.ac.uk/researchinstitutes/healthwellbeing/knowledgeexchange/), and through leadership, skill development and shared communication, enable effective implementation across the Dental School.











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