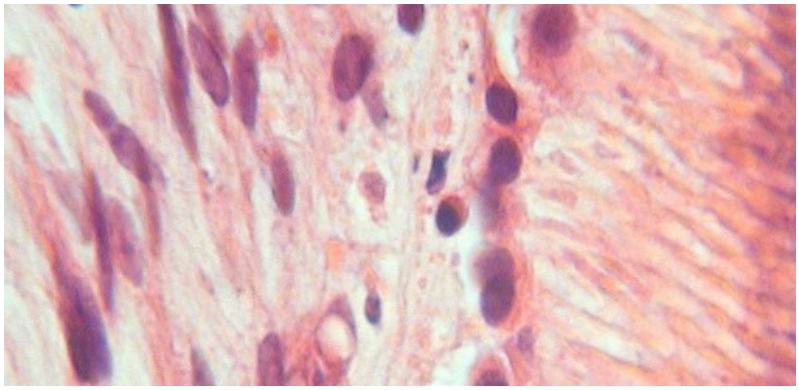
Dentistry research



Oral infectious and inflammatory diseases are the most common human diseases. They cause significant morbidity, impacting upon general health, wellbeing and mortality rates. Their impact on the economy is also substantial.

Oral cancer is the 6th most common form of cancer with survival rates of only 60%. We intend to impact significantly upon these statistics through our research activities.

Our research programmes have a strong translational focus, being driven by clinical questions, and aim to provide novel diagnostic and therapeutic solutions to the most common oral and general health problems.

We employ cutting-edge technologies within state-of-the-art laboratories to explore disease mechanisms, improve our understanding of pathogenic processes, and formulate new healthcare solutions based upon this new knowledge.

Our clinician-basic science partnerships provide broad expertise and allow us to exploit our findings through clinical trials of novel diagnostic and therapeutic approaches in collaboration with our NHS partners.

The strengths of our internationally-leading teams centre on developing a sound understanding of disease mechanisms to underpin novel diagnostic, tissue regenerative and engineering therapeutic strategies for caries, periodontal diseases and oral cancer; and are enhanced by strong national and international (Europe, North/South America, Far-East, Asia) collaborations and contribute locally to the **MRC Centre for Immune Regulation (/research/activity/mds/centres/mrc-immune/index.aspx)** (Immunesenescence), the **Medawar Centre for Healthy Ageing Research (/research/activity/mds/centres/healthy-ageing/index.aspx)** and the **Birmingham University Stem Cell Centre (/research/activity/mds/centres/stemcells/index.aspx)** (BUSCC).

Our focus on the scientific basis of oral and dental disease is providing innovative solutions to problems affecting much of the population and is helping us to deliver our vision for improving health and quality of life.

Research themes...

Biomaterials (/research/activity/mds/domains/dentistry/biomaterials/index.aspx)
Tissue Injury, Inflammation & Repair (/research/activity/mds/domains/dentistry/tissue-injury-and-regeneration/index.aspx)
Public Health and Clinical Epidemiology (/research/activity/mds/domains/dentistry/primary-dental-care/index.aspx)

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