

## Prof. Dr. Peter Shellis



### Akademische Qualifikationen

- 1966 BSc (Hons Class 2.1) Zoologie und Vergleichende Physiologie, University of Birmingham
- 1967 MSc (Strahlenbiologie), University of Birmingham
- 1975 PhD (Anatomie), University of London

### Berufliche Positionen

- 1968-1972 Forschungsassistent unter Prof. A. E. W. Miles, Abteilung Oralpathologie, London Hospital Medical College
- 1972-1984 Nicht-klinischer Wissenschaftler, Dentalabteilung des Medical Research Council (MRC), Bristol
- 1984-1988 Nicht-klinischer Wissenschaftler (Externer wissenschaftlicher Mitarbeiter), MRC Dental Group, Bristol
- 1988-1998 Nicht-klinischer leitender Wissenschaftler (Externer wissenschaftlicher Mitarbeiter), MRC Dental Group, Bristol
- 1993-1998 Teamleiter, MRC Dental Group, Bristol
- 1998-heute Promovierter wissenschaftlicher Forschungsmitarbeiter, Abteilung Oral- und Dentalwissenschaften, University of Bristol
- 2000-heute Chefredakteur, Caries Research Redakteur, ORCA
- 2007-heute Redaktionsmitglied, The Open Anthropology Journal

### Publikationen

84 referierte Artikel und Rezensionen, über 85 veröffentlichte Abstracts und andere Kurzpublikationen.

## **Auszeichnungen**

1981 Colgate Prize, British Society for Dental Research

## **Forschungsinteressen**

- Kalziumphosphatchemie
- Chemie und Struktur dentaler Hartgewebe
- Interaktion der chemischen Prozesse und strukturellen Veränderungen bei Dentalerosion und Karies

## **Ausgewählte Artikel (Kalziumphosphatchemie und Zahnerosion)**

Shellis RP, Wahab FK, Heywood BR: The hydroxyapatite ion activity product in acid solutions equilibrated with human enamel at 37°C. *Caries Res* 1993;27:365-372

Shellis RP, Heywood BR, Wahab FK: Formation of brushite, monetite and whitlockite during equilibration of human enamel with acid solutions at 37°C. *Caries Res* 1997;31:71-78.

Shellis RP, Lee AR, Wilson RM: Observations on the apparent solubilities of carbonated apatites. *J Coll Interf Sci* 1999;218:351-358.

Shellis RP, Dibdin GH: Microporosity of enamel and its functional implications. In 'Teeth: development, evolution and function', Ed Teaford MF, Smith MM, Ferguson MJ. Cambridge University Press, 2000, pp.242-251.

Eisenburger M, Hughes JA, West NX, Shellis RP, Addy M: The use of ultrasonication to study remineralisation of eroded enamel. *Caries Res* 2001;35:61-66.

Eisenburger M, Addy M, Hughes JA, Shellis RP: Effect of time on the remineralisation of enamel after citric acid erosion. *Caries Res* 2001;35: 211-215.

Eisenburger M, Shellis RP, Addy M: Comparative study of wear of enamel induced by alternating and simultaneous combinations of abrasion and erosion in vitro. *Caries Res* 2003;37:450-456.

Eisenburger M, Shellis RP, Addy M: Scanning electron microscopy of softened enamel. *Caries Res* 2004;38:67-74.

Shellis RP, Wilson RM: Apparent solubility distributions of hydroxyapatite and enamel apatite. *J Coll Interf Sci* 2004;278:325-332.

Shellis RP, Finke M, Eisenburger M, Parker DM, Addy M: Relationship between enamel erosion and flow rate. *Eur J Oral*

Sci 2005;113:232-238.

Barbour ME, Shellis RP, Parker DM, Allen GC, Addy M: An investigation of some food-approved polymers as agents to inhibit hydroxyapatite dissolution. *Eur J Oral Sci* 2005;113:457-61.

Addy M, Shellis RP: Interactions between attrition, abrasion and erosion in tooth wear. In *Dental Erosion (Monographs in Oral Science 20)* Ed. A Lussi. Basel: Karger, 2006, pp. 17-31.

Barbour ME, Shellis RP: An investigation using atomic force microscopy nanoindentation of dental enamel demineralisation as a function of undissociated acid concentration and differential buffer capacity. *Phys Med Biol* 2007;52:899-910.

Hemingway CA, Shellis RP, Parker DM, Addy M, Barbour ME: Inhibition of hydroxyapatite dissolution by ovalbumin as a function of pH, calcium concentration, protein concentration and acid type. *Caries Res* 2008;42:348-353.

Barbour ME, Shellis RP, Parker DM, Allen GC, Addy M: Inhibition of hydroxyapatite dissolution by whole casein: the effects of pH, protein concentration, calcium, and ionic strength. *Eur J Oral Sci* 2008;116:473-478.