

CV Professor John Greenman

Professor John Greenman
Professor of Microbiology



 Zoom

Research Group

Centre for Research in Biomedicine (CRIB)

Research Interests

- Growth, ecology & physiology of microbes: biofilm and planktonic continuous culture
- In vitro biofilms: The use of perfusion biofilm as a model to study oral conditions (caries, periodontal disease) and oral malodour. This general theme also supports research in related areas such as screening methods for anti-odour or antimicrobial compounds and effects of exogenous substrates on caries and malodour processes
- Oral Malodour (microbial aetiology and treatment)
- Odour research: The relationship between microbial generation rates in situ, partitioning of VC's between gas and liquid phase, sensitivity and specificity of detector system (including the human nose) and finally "the perception" and other effects of smell on the perceiver.
- Role of oral and skin microbes in health and disease and microbiology of exfoliative surfaces. As part of this, interests include methods for testing antimicrobial efficacy of wound dressings or other active surfaces, antimicrobial photodynamic treatment, effects of antimicrobial compounds (including ECAS) on bacteria, and in vitro models.
- Constantly monitored in vitro biofilm models

Research Supervisions

	Director of Studies	2nd Supervisor
Completed Supervision	15	16
Current Internal (UWE)	3	4
Current External (non-UWE)		

Professional Memberships

Society for General Microbiology
 International Association of Dental Research
 British Society for Dental Research
 Oral Microbiology & Immunology Group
 Associate of the Royal College of Pathologists
 President - International Society for Breath Odor Research (ISBOR) 2007-2009

External Committees

ISBOR Conference organizer and chairman, London Meeting
 ISBOR Conference Proceedings editor, London Meeting
 ISBOR Conference Editorial Board, Chicago Meeting
 Member of the Advisory Editorial Board of Oral Diseases

Qualifications

1972 BSc General Degree in Life Sciences, University of Liverpool
 1973 BSc Honours Degree, 2(i) Microbiology, University of Liverpool
 1976 PhD Research Degree, Oral Microbiology, University of Liverpool

Reviewing

1997 to 1998 National Health Service Member of peer-review panel, NHS National R&D programme in primary dental care
 1998 QAA SPR reviewer in Molecular/Organismal Biosciences
 2000 Journal Referee: Microbial Ecology in Health and Disease, Archives of Oral Biology, Microbiology, Anaerobe, Journal of Dental Research, Enzyme & Microbial Technology (vii.) Journal of Photochemistry and Photobiology B: Biology (viii.) Gerodontology
 2000 Grant Referee: Medical Research Council (MRC), The Wellcome Trust, Agricultural and Food Research Council (AFRC), Biotechnology & Biological Sciences Research Council (BBSRC), British Diabetic Association

- 2000 to 2007 Journal Referee: Journal Applied Microbiol, Archives of Oral Biology, Microbiology, Anaerobe, Journal of Dental Research, Enzyme & Microbial Technology, Journal of Photochemistry and Photobiology B: Biology (viii.) Gerodontology, Oral Diseases
- 2000 to 2007 Grant Referee: Medical Research Council (MRC), The Wellcome Trust, Agricultural and Food Research Council (AFRC), Biotechnology & Biological Sciences Research Council (BBSRC), British Diabetic Association, Skin Research Foundation, Wellcome Trust.

Teaching

- BSc (Hons) Applied Biological Sciences (FT & PT)
BSc (Hons) Biomedical Sciences (FT and Block Release PT)
BSc Biomedical Sciences (PT)
BSc (Hons) Medical Microbiology (PT)
Antimicrobial Agents (L3); Microbial Ecology; Medical microbiology; Oral & Dental bacteriology; Anaerobic microbiology; Continuous culture techniques (chemostats and biofilms); microbial physiology and nutrition; Perfusion biofilms for testing antimicrobial compounds
Microbial Fuel Cells and Ecobot;
Contribute to BSc ABS, MSc Med Bact and higher degree programs

Recent Publications

- Hess, J., Greenman, J. and Duffield, J.R. (2008), Modelling oral malodour from a tongue biofilm, *Journal of Breath Research*, 2: 017003 (6pp) doi: 10.1088/1752-7155/2/1/017003
- J Greenman, C McKenzie, S Saad, B Wiegand and JC Zguris (2008), Effects of chlorhexidine on a tongue-flora microcosm and VSC production using an in vitro biofilm perfusion model, *Journal of Breath Research*, 2 046005 (7pp) doi: 10.1088/1752-7155/2/4/046005
- Scully, C. and Greenman, J. (2008), Halitosis (breath odor), *Periodontology* 2000, 48: 66-75
- Spencer P, Greenman J, McKenzie C, Gafan G, Spratt D and Flanagan A. (2007), In vitro biofilm model for studying tongue flora and malodour, *Journal of Applied Microbiology*, 103: 985-992.
- Thorn, R.M.S, Nelson, S.M., and Greenman, J. (2007), Use of a Bioluminescent *Pseudomonas aeruginosa* Strain within an In Vitro Microbiological System, as a Model of Wound Infection, To Assess the Antimicrobial Efficacy of Wound Dressings by Monitoring Light Production, *Antimicrobial Agents and Chemotherapy*, ISSN: 0066-4804, 3217-3224.
- Greenman J, Thorn RMS, Saad S and Austin AJ. (2006), In vitro diffusion bed, 3-day repeat challenge 'capacity' test for antimicrobial wound dressings, *International Wound Journal*, 3: 322-329
- Thorn RMS, J. Greenman, A. Austin (2006), An in vitro study of antimicrobial activity and

efficacy of iodine-generating hydrogel dressings, *Journal of Wound Care*, 15: 305-310

Thorn RMS, J. Greenman and A.J. Austin. (2005), 'In vitro method to assess the antimicrobial activity and potential efficacy of novel types of wound dressings', *Journal of Appl. Microbiol*, 99: 895-901.

Greenman, J., El-Maaytah, M., Duffield, J., Spencer, P., Rosenberg, M., Corry, D., Saad, S., Lenton, P., Majerus, G., and Nachnani, S. (2005), Assessing the relationship between concentrations of malodor compounds and odor scores from judges, *JADA*, 136: 749-757

Greenman, J., Spencer, P., McKenzie, C., Saad, S. & Duffield, J. (2005), Review: In vitro models for oral malodour., *Oral Diseases*, 11 (suppl.1): 14-23

Saad, S., Greenman, J., Duffield, J., Sudlow, K. (2005), Use of n-butanol as an odourant to standardize the organoleptic scale of breath odour judges, *Oral Diseases* 11 (suppl.1): 45-47.

Marques, C.N.H., Salisbury, V.C., Greenman, J., Bowker, K.E. and nelson, S.M. (2005), Discrepancy between viable counts and light output as viability measurements, following ciprofloxacin challenge of self-bioluminescent *Pseudomonas aeruginosa* biofilms, *Journal of Antimicrobial Chemotherapy* 56: 665-671.

Greenman, J., Duffield, J., Spencer, P., Rosenberg, M., Corry, D., Saad, S., Lenton, P., Majerus, G., Nachnani, S. and El-Maaytah, M. (2004), Study on the organoleptic intensity scale for measuring oral malodour, *Journal of Dental Research* 83: 81-85.

Zeina, B., Greenman, J., Corry, D., & Purcell, W.M. (2003), Antimicrobial photodynamic therapy: assessment of genotoxic effects on keratinocytes in vitro., *Br J Dermatol* 148, Pages: 229-232.

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