
BIOGRAPHICAL SKETCH

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NAME John G. Thomas	POSITION TITLE Professor		
eRA COMMONS USER NAME (credential, e.g., agency login) jgthomas	Department of Pathology, School of Medicine West Virginia University		
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
Norwich University, Vermont	BS	1964	Biology
Syracuse University, New York	MS	1967	Virology
Syracuse University, New York	PhD	1969	Molecular Biology
Cardiff University, Wales, UK	Sabbatical	2007	Biofilms

A. Personal Statement

Certified (American Board of Bioanalysis, ABB) Clinical microbiologist for 45 yrs with hospital laboratory direction (WVUH) and global teaching experience (emphasizing UK/Europe and Asia Pacific), highlighted by Sabbatical at Cardiff University, Wales, UK, updating microbial molecular detection and tissue engineering methods, focusing on biofilms, VAP and chronic wounds. Full Professor 21 years at West Virginia University Medical Center, integrating simultaneously four academic appointments in Pathology, School of Medicine, Periodontics, School of Dentistry, School of Pharmacy and Graduate School, Dept of Microbiology, Cell biology and Immunology, receiving highest award for teaching excellence in 2006; have international academic appointments at Cardiff Univ. and Univ. of Singapore and nationally at Rutgers University. Developed in 2000, The International Translational Research Lab for Biofilm Associated Diseases, focusing on Pre-Clinical Modeling and testing for VAP, chronic wounds, and oral care with the application of probiotics. Created an international web network for distance learning (www.hsc.wvu.edu/som/pathology/thomas), utilizing the John G Thomas Fall Microbiology Symposium (22st Annual) as spring-board for student involvement.

B. Positions and Honors

Positions and Employment

1969-1971 Captain, U.S. Army Medical Service Corp., Sixth U.S. Army Medical Lab
Presidio of San Francisco, CA

1971-1990 Director, Laboratory Division of Infectious Diseases and Epidemiology
Department of Pathology, Aultman Hospital, 2600 - 6th St. SW, Canton, OH 44710

1990- 2005 Director, West Virginia University Hospital, Microbiology/Virology Laboratory

1997- Director, International Translational Research Lab for Biofilm Associated Diseases

Academic Appointments

1977-1990 Northeastern Ohio Universities College of Medicine (NEOUCOM), Department of
Microbiology and Immunology, Assistant, Associate Professor

1997- Clinical Professor, Department of Endodontics, West Virginia University, School of
Dentistry

2001-2013 Adjunct Professor, West Virginia University, School of Pharmacy

2001-2013 Adjunct Professor, Department of Microbiology, Immunology and Cell Biology, West Virginia
University, School of Medicine

2007- Visiting Professor, (Honorary) Department of Oral Microbiology, School of Dental Medicine,
Cardiff University, Cardiff, Wales, UK

2008- Academic Visitor, Department of Restorative Dentistry, School of Dental Medicine, National
University of Singapore, Singapore.

2013- Professor Emeritus, WVU School of Medicine
2014- Consulting Microbiologist, Dept of Pathology, Core Laboratory, Allegheny Health Network
2014- Visiting Professor, Center of Excellence in Biofilm Research, Allegheny Singer Research Institute, Allegheny Health Network

Honors

1964 Norwich University - Graduated fourth in a class of 210; received Faculty Scholarship for last three years; received Senior Gold Medal for Academic Achievement
1985 & 1988 Teacher of Year Award/"Hooder" at College of Medicine Graduation (4 selected annually), NEOUCOM
1988 Election to the National Honorary Dental Society, Omicron Kappa Upsilon, Alpha Beta Chapter, West Virginia University School of Dentistry
1998, 2006, 2009 West Virginia University School of Dentistry, Student Research Development Award for developing student researchers as selected by the Student Research Group of the American Association of Dental Research, School of Dentistry, West Virginia University Alumni Association Achievement Award, West Virginia University School of Dentistry
2006 West Virginia University Award for Distinguished Faculty
2007 Appointed to the Scientific Advisory Council, American Dental Association
2008 Laboratory Research Abstract Award, 1st Place, SAWC Fall Meeting

Professional Memberships

1966- Member, American Society for Microbiology (45 Year Member)
1987- Member, American Board of Bioanalysis (ABB)
1998- Member, American Association for Dental Research
2008- Member, American Dental Association, Scientific Advisory Committee

C. Selected Peer-reviewed Publications

1. Prenshaw P, Novac M, Mellonig J, Magnusson I, Polson A, Giannobile W, Rowland R, Thomas J, Walker C, Dawson D, Sharkey D, and Bradshaw M. Modified-Reclose Subantimicrobial Dose Doxycycline Enhances Sealing and Roof Planning in Subjects with Periodontal Disease. *J. Periodontol.* Feb 2008; 79(3); 440-452.
2. Polk DE, Weyant RJ, Crout RJ, McNeil DW, Tarter RE, Thomas JG, Marazita ML. Study Protocol of the Center for Oral Health Research in Appalachia (COHRA) Etiology Study. *BMC Oral Health.* June 2008; 8;18
3. Editorial: Wise MP, Williams DW, Lewis MA, Thomas JG and Frost PJ. Impact of Poor Dental Health on Pneumonia. Editorial to Article Entitled "New Evidence of Risk Factors for Community-Acquired Pneumonia: a Population-based Study". *Eur Respir J.* 2008 Oct;32(4):1123-4. PMID: 18827163
4. Thomas JG, Posey SB. Emergence of Oral/Dental Microbiology: The mouth is the most diverse and least understood reservoir of microbiology. *Advance for Administrators of the Laboratory.* June 2009;18(6);35-38.
5. Percival SL, Thomas JG. Transmission of *Helicobacter pylori* and the role of water and biofilms. *J Water Health.* Sept 2009;7(3):469-77.
6. Wilson A, Gray D, and Thomas J. Increases in Endotracheal Tube Resistance Are Unpredictable Relative to Duration of Intubation. *Chest.* Oct 2009;136(4):1006-13.
7. Percival S, Thomas JG, and Williams DW. Biofilms in Bacterial Imbalances in Chronic Wounds: Anti-Koch. *Int Wound J.* 2010 Jun;7(3):169-75.

8. Slone W, Linton S, Okel T, Corum L, Thomas JG, Percival SL. The Effect of pH on the Antimicrobial Efficiency of Silver Alginate on Chronic Wound Isolates. *J Am Col Certif Wound Spec.* 2011 Jan 31;2(4):86-90.
9. Williams DW, Thomas JG, Hooper SJ, et al. Molecular analysis of microbial communities in endotracheal tube biofilms. *PLoS One.* 2011 Mar 14;6(3):e14759.
10. Olson J, Cauf C, Lukomski S, Thomas JG, Marazita M, et al. Use of 16S ribosomal RNA gene analyses to characterize the bacterial signature associated with poor oral health in West Virginia. *BMC Oral Health.* 2011 Mar 1;11:7.
11. Percival SL, Slone W, Linton S, Okel T, Corum L, Thomas JG. Use of flow cytometry to compare the antimicrobial efficacy of silver-containing wound dressings against planktonic *Staphylococcus aureus* and *Pseudomonas aeruginosa*. *Wound Repair Regen.* 2011;19(3):436-41.
12. Slain D, Sarwari AR, Petros KO, et al. Impact of a Multimodal Antimicrobial Stewardship Program on *Pseudomonas aeruginosa* Susceptibility and Antimicrobial Use in the Intensive Care Unit Setting. *Critical Care Research and Practice.* Vol 2011, Article ID 416426, 5 p.
13. Thomas JG, Litton S, Corum L, Sloan W, Brundage K, and Percival S. *Use of Flow Cytometry (FC) to Compare the Efficacy of Silver Containing Wound Dressings Against Staphylococcus aureus and Pseudomonas aeruginosa.* *Wound Regeneration.* 2011 May;19(3):436-41.
14. Percival SL, Slone W, Linton S, Okel T, Corum L, Thomas JG. The antimicrobial efficacy of a silver alginate dressing against a broad spectrum of clinically relevant wound isolates. *Int Wound J.* 2011 Jun;8(3):237-243.
15. John G Thomas and Khaled S Seifelnasr. Maximizing Clinical Benefits of Probiotics: Matching Metagenomics, Patient age and Microbial Composition. *Oralhealth.* 2013 December.

Selected Book Chapters

1. Thomas JG, Nakaishi L, Corum L. Ch 14. Consequences of Biofilms on Indwelling Medical Devices: Cost and Prevention. In: Manivannan G, ed. *Disinfection and Decontamination: Principles, Applications, and Related Issues.* Boca Raton, FL: CRC Press; 2008:289-338.
2. Thomas JG, Posey SP, Namsupak A. *Probiotics: The Link Between Beneficial Oral Bacteria and Total Health.* Sherman Oaks, CA. Health Pointe Press; 2009.
3. Thomas JG, Posey SP. Biofilms. In: *APIC Text of Infection Control and Epidemiology - 3rd Edition.* Washington, DC: APIC; 2009;94,94-1.
4. The Role of Biofilms in Device-Related Infections. Shirliff M and Leid J. Edited by J. William Costerton and John G. Thomas. "Biofilm Ventilation" Life Sciences. Springer Series on Biofilms. Jan 3, 2009.
5. JG Thomas, H Motlagh, SB Posey, SL Percival. The role of micro-organisms and biofilms in dysfunctional wound healing. Ch 2 in *Advanced Wound Repair Therapies.* Sawston, Cambridge, UK. Woodhead Publishing LTD. In Press. 2011.

D. Research Support

Completed Research Support

- 1-R01-DE14899 NIH/NIDCR Marazita (PI) 9/01/02 - 05/31/09
"Genetic Factors contributing to oral health disparities in Appalachia"
The aim of this grant is to perform longitudinal, population-based, oral health assessments of children and their care-givers in West Virginia in order to identify factors contributing to the poor oral health seen in this population. Genetic factors will be the particular focus of this project.
Role: Co-I
- 1-R01-DE014899-02S1 NIDCR Marazita (PI) 12/01/04 - 05/31/09
"Psychosocial influences on rural children's Oral Health"
The aim of this supplement is to delineate the co-variation between community, family, and individual factors associated with orodental disease and tooth loss in rural Appalachian youth 9-12 years of age.
Role: Co-I
- 1-R01-DE 014899-04S1 NIH/NIDCR Marazita (PI) 05/09/06 - 05/31/09
"Oral Microbiology Studies in Appalachia"
The purpose of this study is to use high-throughput genetic methods to characterize the oral microbiology of high- and low-carries-risk families from Appalachia.
Role: Co-I
- Tyco Health Group LP Thomas (PI) 12/11/09 - 12/11/10
"Development of In-Vitro Models in Unmasking the Pathophysiology of Hemodialysis Catheter Colonization"
The aim of this grant was to examine antimicrobial activities of hemodialysis catheters and study bacterial adherence to specially coated catheter tubes.
Role: PI
- Covidien Thomas (PI) 01/10/08 - 30/09/10
"In-Vitro Ventilator-Endotracheal Tube-Lung/Mechanical (VEL) Study to Evaluate the Efficacy of Silver Tracheotomy Tube in Ventilator Associated Pneumonia"
An industry based study investigating biofilms on a silver anti-biofilm endotracheal tube (ETT) and prevention of VAP (ventilator associated pneumonia).
Role: PI
- Advanced Medical Solutions Ltd Thomas (PI) 3/01/10 - 3/31/11
"The Efficacy of Silver Alginate"
The efficacy of Silver Alginate (II) will be evaluated against a range of antibiotic-sensitive and resistant bacteria found commonly in chronic wounds using in-vitro planktonic and biofilm models.
Role: PI
- 2-R01-DE014899-08 NIH Crout (PI) 4/10/2010 – 3/31/2011
"Factors Contributing to Oral Health Care in Appalachia"
The aim of this grant is to perform longitudinal, population-based, oral health assessments of children and their care-givers in West Virginia in order to identify factors contributing to the poor oral health seen in this population.
Role: Co-I
- ARRA Sub-award 4102-38140 NIH Robinson (PI) 8/2/10 – 7/30/11
"Use of BARDOT: Rapid Label-free Identification of Pathogens by Laser Light Scatter."
Partnerships for the Next Generation Bio-Defense Diagnostics.
Role: Co-PI

Advanced Medical Solutions Ltd Thomas (PI)
"The Efficacy of Silver Alginate"

4/1/11 – 4/1/2012

The efficacy of Silver Alginate (II) will be evaluated against a range of antibiotic-sensitive and resistant bacteria found commonly in chronic wounds using in-vitro planktonic and biofilm models.

Role: PI

2-R01-DE014899-08 NIH Crout (PI)

5/10/2011 – 5/31/2012

"Factors Contributing to Oral Health Care in Appalachia"

The aim of this grant is to perform longitudinal, population-based, oral health assessments of children and their care-givers in West Virginia in order to identify factors contributing to the poor oral health seen in this population.

Role: Co-I