

## John T. Stubbs III, Ph.D.

### Publications:

1. Gehron Robey, P., Fisher, L.W., Stubbs, J.T., and Termine, J.D. (1987) Biosynthesis of Osteonectin and a Small Proteoglycan (PG-II) By Connective Tissues Cells In Vitro. In UCLA Symposia on Molecular and Cellular Biology, New Series, (Sen, A. and Thornhill, T. eds) vol. 46, pp. 115-125, Alan R. Liss Inc. New York
2. Fisher, L.W., Stubbs III, J.T. and Young, M.F. (1995) Antisera and cDNA probes to human and animal model noncollagenous proteins of bone matrix. Acta. Orthop. Scand. (Suppl 266), 66:61-65\_ <http://www.tandfonline.com/doi/pdf/10.3109/17453679509157649>
3. Stubbs III, J.T. (1996) The generation and use of recombinant human bone sialoprotein and osteopontin for hydroxyapatite studies Connect. Tiss. Res. 35: 393-399\_ <http://www.tandfonline.com/doi/abs/10.3109/03008209609029217>
4. Stubbs III, J.T., Mintz, K.P., Eanes, E.D., Torchia, D.A., and Fisher, L.W. (1997) Characterization of native and recombinant bone sialoprotein: delineation of the mineral-binding and cell adhesion domains and structural analysis of the RGD domain. J. Bone Min. Res. 12:1210-1222\_ <http://onlinelibrary.wiley.com/doi/10.1359/jbmr.1997.12.8.1210/full>
5. Sung, V., Stubbs, J., Fisher, L., Aaron, A., and Thompson, E. (1998) Bone sialoprotein supports breast cancer adhesion proliferation and migration through differential usage of the avb3 and avb5 integrins. J. Cell. Physiol. 176:482-494 [http://onlinelibrary.wiley.com/doi/10.1002/\(SICI\)1097-4652\(199809\)176:3%3C482::AID-JCP5%3E3.0.CO;2-K/pdf](http://onlinelibrary.wiley.com/doi/10.1002/(SICI)1097-4652(199809)176:3%3C482::AID-JCP5%3E3.0.CO;2-K/pdf)
6. Tesema, Y., Raghavan, D., and Stubbs III, J. (2004) A comparative Study of Bone Cell Viability on Collagen Immobilized Porous and Non-porous Poly (hydroxy) Butyrate Valerate Films. Mat. Res. Soc. Symp. Proc. Vol. EXL-1 pp. F5.15.1-F5.15.3
7. Tesema, Y., Raghavan, D., and Stubbs III, J. (2004) Bone Cell Viability on Collagen Immobilized Poly (hydroxyl) Butyrate Valerate. J. App. Polymer Sci. 93: 2445-2453
8. Tesema, Y., Raghavan, D., and Stubbs III, J. (2005) Bone Cell Viability on Methacrylic Acid Grafted and Collagen Immobilized Porous Poly (3-hydroxybutyrate-co-3-hydroxyvalerate). J. App. Polymer Sci. 98:1916-1921
9. Raghavan D., Liu H, and Stubbs III, J. (2007) Evaluation of Biological Response of UMR-106 Cells to Porous PHBV Matrix. Mat. Res. Soc. Symp. Proc. Vol. 950. 0950-D15-06
10. Liu H., Raghavan D, and Stubbs III, J. (2007) Evaluation of Biological Response of Osteoblast-like UMR-106 Cells to Porous PHBV Matrix. J. Biomed. Mater. Res. A. 81A:669-677\_ <http://onlinelibrary.wiley.com/doi/10.1002/jbm.a.31101/full>
11. Hui L, Raghavan D, Melaku S, Stubbs III, J (2010) Biological response of osteoblast-like UMR-106 cells to the modified PHBV matrix - Effects of porosity and collagen dip coating. J. Biomed. Mater. Res. A. 92A:922-930\_ <http://onlinelibrary.wiley.com/doi/10.1002/jbm.a.32427/full>

## Publications (Cont.):

12. Hui Liu, M. Pancholi, J Stubbs III, D. Raghavan. (2010) Influence of hydroxyvalerate composition of Polyhydroxy butyrate valerate (PHBV) copolymer on bone cell viability and in vitro degradation. *J. App. Polymer Sci.* 116:3225-3231  
<http://onlinelibrary.wiley.com/doi/10.1002/app.31915/full>
13. Peters SM., Yancy H., Bremer E., Monroe J., Paul D., Stubbs III JT, Myers MJ. (2011) *In vitro* identification and verification of inflammatory biomarkers in swine. *Veterinary Immunology and Immunopathology*. Volume 139, Issue 1, Pages 67–72.  
<http://www.sciencedirect.com/science/article/pii/S0165242710002795>
14. Sharla M. Peters<sup>a, c</sup>, Haile Yancy<sup>a</sup>, Christine Deaver<sup>a</sup>, Yolanda L. Jones<sup>a</sup>, Elizabeth Kenyon<sup>a</sup>, Oscar A. Chiesa<sup>a</sup>, Juan Esparza<sup>a</sup>, Rudell Screven<sup>a</sup>, Vicki Lancaster<sup>b</sup>, John T. Stubbs III<sup>c</sup>, Maocheng Yang<sup>a</sup>, Paddy L. Wiesenfeld<sup>d</sup>, and Michael J. Myers<sup>a</sup> (2012) *In Vivo* Characterization of Inflammatory Biomarkers in Swine and the Impact of Flunixin Meglumine Administration. *Veterinary Immunology and Immunopathology*. Volume 148, Issues 3–4, Pages 236–242  
<http://www.sciencedirect.com/science/article/pii/S0165242712001365>
15. Rotimi Bakare, Samantha Hawthorne, Carmen Vails<sup>++</sup>, Ayele Gugssa<sup>++</sup>, Alamagir Karim<sup>\*\*\*\*</sup>, John Stubbs III<sup>+</sup>, and Dharmaraj Raghavan\* (2016) Antimicrobial and Cell Viability Measurement of Bovine Serum Albumin Capped Silver Nanoparticles (Ag/BSA) Loaded Collagen Immobilized Poly (3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV) Film. *Journal of Colloid & Interface Science*. Volume 465, Pages 140-148  
<http://www.sciencedirect.com/science/article/pii/S0021979715303519>
16. Zewde B, Ambaye A, Stubbs J III, Dharmara R (2016) A Review of Stabilized Silver Nanoparticles – Synthesis, Biological Properties, Characterization, and Potential Areas of Applications. *JSM Nanotechnol Nanomed* 4(2): 1043.  
<https://www.jscimedcentral.com/Nanotechnology/nanotechnology-4-1043.pdf>
17. Rotimi Bakare, Lauren Wells, Negene McLennon, Manisha Singh, Ayele Gugssa, John Stubbs III Berhanu Zewde, Dharmaraj Raghavan. (2017) Formulation of silver chloride/poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (AgCl/PHBV) films for potential use in bone tissue engineering. *Journal of Applied Polymer Science* Volume 134, Issue 31:45162 <https://onlinelibrary.wiley.com/doi/full/10.1002/app.45162>

## Abstracts:

1. Gehron Robey, P., Findlay, D.M., Young, M.F., Beresford, J.N., Stubbs, J.T., Fisher, L.W., and Termine, J.D. (1986) Regulation of Osteonectin Production By 1,25 Dihydroxy Vitamin D3 in Human Bone Cells. *J. Bone Min. Res.* 1 (Suppl. 1), 228
2. Stubbs, J.T., Mintz, K.P., Eanes, E.D., Torchia, D.A., and Fisher, L.W. (1994) Structure-function studies on native and recombinant bone sialoprotein fragments. *J. Bone Min. Res.* 9 (Suppl. 1), S315
3. Stubbs III, J.T., Eanes, E.D., and Fisher, L.W. (1995) The use of native and recombinant fragments to delineate non-RGD cell attachment domains and mineral-binding domains of bone sialoprotein. *J. Bone Min. Res.* 10 (Suppl. 1), S432
4. Stubbs, J.T., Eanes, E.D., Mintz, K.P., and Fisher, L.W. (1995) The hydroxyapatite crystal growth inhibition properties of bone sialoprotein (and possibly osteopontin) are due to post-translational modifications. (5 th International Conference on the Chemistry and Biology of Mineralized Tissues - Kohler, Wisconsin)
5. Stubbs, J.T. and Fisher, L.W. (1995) BSP contains several RGD-independent cell attachment domains, one of which may delineate a larger "binding pocket" in the integrin-binding region. (5 th International Conference on the Chemistry and Biology of Mineralized Tissues - Kohler, Wisconsin)

6. Benayahu, D., Fisher, L.W., Stubbs, J.T., and Gehron Robey, P. (1996) A novel protein expressed by marrow stromal cells. *J. Bone Min. Res.* 11 (Suppl. 1), S392
7. Sung, V., Stubbs, J., Aaron, A., and Thompson, E. (1996) The role of bone sialoprotein in proliferation of MDA-MB-231 human breast cancer cells. (88 th Annual Meeting of the American Association for Cancer Research)
8. Sung, V., Stubbs, J., Fisher, L., Aaron, A., and Thompson, E. (1996) The role of bone sialoprotein in proliferation of MDA-MB-231 human breast cancer cells. (43 rd. Annual Meeting, Orthopaedic Research Society)
9. Young, M., Mankani, M., Kutznetsov, S., Majolagbe, A., Fisher, L., Sommer, B., Wallace, J., Liang, J., Stubbs, J., Gehron Robey, P., and O'Connell, B. (1998) Over-expression of human bone sialoprotein leads to changes in cell shape. *Matrix* 98. East Coast Connective Tissue Society Meeting.
10. Stubbs III, J.T. (1998) The two RGD-independent cell attachment domains in bone sialoprotein are encoded by two conserved tyrosine rich domains. Howard University Medical Center Scientific Forum
11. Wiggins, L. and Stubbs, J. (1999) Examination of bone sialoprotein -*Escherichia coli* adhesion. McNair Summer Research Program. Howard University Graduate School
12. Wiggins, L. and Stubbs, J. (2000) Examination of bone sialoprotein -*Escherichia coli* adhesion. Graduate Research Symposium. Howard University.
13. Stubbs, J.T., Rankin, M., and Alam, Z. (2000) Human prostate cancer cells adhere to bone sialoprotein. *J. Bone Min. Res.* 15 (Suppl. 1), S106
14. J. Stubbs, M. Rankin, Z. Alam. (2003) Bone sialoprotein facilitates the adhesion of human prostate cancer cells. *Proceedings of The American Association for Cancer Research* Vol. 44, 936
15. Berkeley, L., Kassim, O., Day, A., Kittles, R., Austin, W., Frederick, L., Stubbs, J. (2004) Phenotypic, Biochemical and Phylogenetic Characterization of HU-Biol-1 an Antifungal Producing Bacterium. 104 th General Meeting of the American Society for Microbiology. New Orleans, Louisiana
16. Stubbs III, J. (2004) Effects of bone sialoprotein upon human prostate cancer cells. 2004 Annual Meeting of the American Society for Biochemistry and Molecular Biology. Boston, Massachusetts
17. Stubbs III, J and Kifle B (2005) Bone sialoprotein interactions with prostate cancer cells. The Gordon Research Conference on Small Integrin Binding Proteins, Big Sky, Montana.
18. H. Liu, Y. T. Tesema, J. Stubbs III, D. Raghavan (2005) In vitro degradation of porous PHBV film. Number 611. *Polymers for Bioactive Surfaces*. Co-sponsored by The Division of Polymer Chemistry (POLY) and The Division of Biological Chemistry (BIOL). American Chemical Society National Meeting. Washington, DC
19. K. Ayikoe, L. Moore, J. Stubbs III, O. Wilson, D. Raghavan (2008) Nanoparticle Encapsulated Biodegradable PHBV for Bone Tissue Engineering. Howard Nanotechnology Symposium 2008 November 20-21, 2008
20. RS Brown, RL Bernor, J Stubbs III, T Feimster. (2010) Howard University College of Dentistry CCI Project Howard University College of Dentistry, Washington, DC. 2010 American Dental Education Association Annual Meeting, National Harbor, MD *Journal of Dental Education* Feb. 2010 199-200
21. Tadasha E. Culbreath, and John Stubbs III (2010) Antibacterial Potential of an Amorphous Calcium Phosphate Orthodontic Adhesive. 2010 Annual Meeting of The American Association of Dental Research, Washington, DC

22. Almaz A. Gebregeorgis<sup>1</sup>, Kouassi Ayikoe<sup>1</sup>, John Stubbs III<sup>2</sup> and Dharmaraj Raghavan<sup>1</sup> (2011) <sup>1</sup>Chemistry, Howard University, Washington, DC, District of Columbia; <sup>2</sup>Microbiology, Howard University, Washington DC, District of Columbia. Efficacy of Silver Nanoparticles against Microbial Pathogens. Symposium GG: Safety and Toxicity Control of Nanomaterials. Abstract GG4.16. 2011, Materials Research Society Fall Meeting & Exhibit November 28 - December 2, 2011, Hynes Convention Center, Boston, MA
23. C. A. Knight (1), L. Frederick (2), L. Austin (1), R. Michelin (3), J. Stubbs (1), A. Day (1), J. Davidson (2)(1) Howard University, Washington, DC, U.S.A.; (2) Tuskegee University, Tuskegee, AL, U.S.A.; (3) Morgan State University, Baltimore, MD, U.S.A. (2013) Black-pigmented strain of *Bacillus* with potential biocontrol capabilities. *Phytopathology* 103\_(Suppl. 2): S2.74  
[https://www.apsnet.org/meetings/Documents/2013\\_Meeting\\_Abstracts/aps2013abP150.htm](https://www.apsnet.org/meetings/Documents/2013_Meeting_Abstracts/aps2013abP150.htm)
24. Almaz Gebregeorgis<sup>1</sup>, John Stubbs<sup>2</sup> and Dharmaraj Raghavan<sup>1</sup>; <sup>1</sup>Department of Chemistry, Howard University, Washington, District of Columbia; <sup>2</sup>Department of Microbiology, Howard University College of Medicine, Washington, District of Columbia. MTS Assay for Evaluating the Antimicrobial Efficacy of Ag/BSA Nanoparticles. Abstract F3.18 2013, Materials Research Society Fall Meeting & Exhibit, December 1-6, 2013, Boston, MA
25. Rotimi Bakare<sup>1</sup>, Chandra Bhan<sup>1</sup>, John Stubbs<sup>2</sup> and Dharmaraj Raghavan<sup>1</sup>; <sup>1</sup>Department of Chemistry, Howard University, Washington, District of Columbia; <sup>2</sup>Department of Microbiology, Howard University College of Medicine, Washington, District of Columbia. Formulation of Ag/BSA Nanoparticles Adsorbed Collagen Grafted PHBV Scaffold for Potential Use in Joint Arthroplasty. Abstract H5.05 2013, Materials Research Society Fall Meeting & Exhibit, December 1-6, 2013, Boston, MA
26. R. Bakare, L. Wells, N. McLennon, M. Singh, J. Stubbs III\*, and D. Raghavan. Study of Antimicrobial Properties of Silver Chloride/ Poly (3-hydroxybutyrate-co-3-hydroxyvalerate) (AgCl/PHBV) Composite: A Potential Scaffold for Bone Tissue Regeneration. 2015 249th American Chemical Society National Meeting & Exposition, March 22-26, 2015, • Denver, CO • Chemistry of Natural Resources
27. Rotimi Bakare, John Stubbs III, Dharmaraj Raghavan. Ag/BSA Nanoparticles Loaded Collagen Grafted PHBV Scaffold: Antimicrobial and Cytotoxicity Evaluation. Oral presentation. 2015 Howard University Research Symposium.
28. Marai Hayes, Rotimi Bakare, Lauren Wells, Negene McLennon, Manisha Singh, John Stubbs III, Dharmaraj Raghavan Antimicrobial and Cytotoxicity study of Silver Chloride/Poly (3-hydroxybutyrate-co-3-hydroxyvalerate) (AgCl/PHBV) Film: A Potential Scaffold for Bone Tissue Regeneration. Oral Presentation. 2015 Howard University Research Symposium.
29. Kathryn Miller, Olufolasade Atoyebi, Almaz Ambaye, John Stubbs III, Dharmaraj Raghavan. Antimicrobial effects of BSA capped Silver (Ag/BSA) Nanoparticles and Poly (3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV) Encapsulated Ag/BSA Nanoparticles. Poster presentation. 2019 Howard University Research Symposium.

Genomic Database Submissions (GenBank):

Accession No. AY775778 (2004)

*Bacillus subtilis* strain BFAS 16S ribosomal RNA gene, partial sequence

