

Chukuka S. Enwemeka, PhD, FACSM

I. PUBLICATIONS

Authored more than 80 peer-reviewed papers, two book chapters, a video and books; *H-Index* = 34 (22 since 2012 alone); *g-Index* = 66; *i10-Index* = 51; number of citations = 4,939; 133 citations/year for the past 36 years; (see: <http://scholar.google.com/>.)

The following are Peer-reviewed original publications except as noted.

1. Aboualizadeh E, Bumah VV, Masson-Meyers DS, Eells JT, Hirschmugl CJ, **Enwemeka CS**: Infrared microspectroscopy study: understanding the antimicrobial activity of selected disinfectants against methicillin-resistant *Staphylococcus aureus* (MRSA): *PLOS One* (In press; Accepted for publication, September, 2017) **Corresponding Senior Author**.
2. Beiner G, Masson-Meyers D, Bumah V, Hussey G, Stoneman M, **Enwemeka CS**, Raicu V: Blue/violet laser inactivates methicillin-resistant *Staphylococcus aureus* by altering its transmembrane potential. *Journal of Photochemistry and Photobiology B* 170:118-124, May, 2017. <http://doi.org/10.1016/j.jphotobiol.2017.04.002>
3. Bumah VV, Aboualizadeh E, Masson-Meyers D, Eells J, **Enwemeka CS**, Hirschmugl C: Resistance of B-DNA to blue light induced damage in methicillin-resistant *Staphylococcus aureus*. *Journal of Photochemistry & Photobiology, B: Biology* 167:150-157, January 2017.
4. Masson-Meyers DS, Bumah VV, **Enwemeka CS**: Blue light does not impair wound healing *in vitro*. *Journal of Photochemistry and Photobiology B: Biology* 160:53-60, 2016 **[Corresponding Senior Author]**.
5. Masson-Meyers DS, Bumah VV, **Enwemeka CS**: A comparison of four methods for determining the viability of human dermal fibroblasts irradiated with blue light. *Journal of Pharmacological and Toxicological Methods* 79:15-22, 2016 **[Corresponding Senior Author]**.
6. Bumah VV, Masson-Meyers DS, **Enwemeka CS**: Blue 470 nm light suppresses the growth of *Salmonella enterica* and Methicillin-resistant *Staphylococcus aureus* (MRSA) *in vitro*. *Lasers in Medicine and Surgery* 47:595-601, 2015 **[Corresponding Senior Author]**.
7. Daum LT, Bumah VV, Masson-Meyers DS, Khubbar M, Rodriguez JD, Fischer GW, **Enwemeka CS**, Gradus S, Bhattacharyya S: Whole-Genome Sequence for Methicillin-Resistant *Staphylococcus aureus* Strain ATCC BAA-1680. *Genome-A* 3:1-2, 2015.
8. Bumah VV, Whelan HT, Masson-Meyers DS, Quirk B, Buchmann E, **Enwemeka CS**: The bactericidal effect of 470 nm light and hyperbaric oxygen on methicillin-resistant *Staphylococcus aureus* (MRSA). *Lasers in Medical Science* 30:1153-1159, 2015 **[Corresponding Senior Author]**.
9. Bumah VV, Masson-Meyers DS, Cashin S, **Enwemeka CS**: Optimization of the antimicrobial effect of blue light on Methicillin resistant *Staphylococcus aureus* (MRSA) *in vitro*. *Lasers in Surgery & Medicine*, published online ahead of print DOI 10.1002/lsm.22327, 2015. **[Corresponding Senior Author]**.
10. Leite SN, Adrade TAM, Masson-Meyers DS, Leite MN, **Enwemeka CS**, Frade MAC: Fototerapia acelera a cicatrização de úlceras cutâneas em ratos desnutridos (Phototherapy promotes healing of cutaneous wounds in undernourished rats). *Anal Bras de Dermatologia*, February, 2014.
11. Masson-Meyers D, **Enwemeka CS**, Bumah V, Andrade T, Frade MA: Topical treatment with *Copaifera langsdorffii* oleoresin improves wound healing in rats.

- International Journal of Phytomedicine* 5: 378-386, 2013. **[Corresponding Senior Author].**
12. **Enwemeka CS:** Antimicrobial Blue Light: An Emerging Alternative to Antibiotics. *Photomedicine and Laser Surgery* 31(11): 509-511, 2013.
 13. Bumah VV, Masson-Meyers DS, Cashin S, **Enwemeka CS:** Wavelength and bacterial density influence the bactericidal effect of blue light. *Photomedicine and Laser Surgery*; 31(11): 647-553, 2013 (**Corresponding Senior Author**).
 14. Masson-Meyers DS, **Enwemeka CS,** Bumah VV, Andrade TAM, Cashin S, Frade MAC: Antimicrobial effects of *Copaifera langsdorffii* oleoresin in infected rat wounds. *International Journal of Applied Microbiology* 2(3): 9 – 20, 2013 **[Corresponding senior author].**
 15. **Enwemeka CS:** The relevance of accurate comprehensive treatment parameters in photobiomodulation. (Editorial) *Photomedicine and Laser Surgery* 29:783-784, 2011.
 16. Fulop AM, Dhimmer S, Deluca JR, Johanson DD, Lenz RV, Patel KB, Douris PC, **Enwemeka CS:** A Meta-analysis of the Efficacy of Laser Phototherapy on Pain Relief. *Clinical Journal of Pain* 26(8):729-736, 2010 **[Corresponding senior author].**
 17. Caetano KS, Minatel DG, Santana LA, **Enwemeka CS,** Frade MAC: The efficacy of phototherapy associated with sulfadiazine in the treatment of chronic venous ulcers (Eficácia da fototerapia associada à sulfadiazine de prata no tratamento de úlceras venosas crônicas). *Fisioterapia Brasil* 10: 388-394, 2009.
 18. Fulop AM, Dhimmer S, Deluca JR, Johanson DD, Lenz RV, Patel KB, Douris PC, **Enwemeka CS:** A meta-analysis of the efficacy of phototherapy on tissue repair. *Photomedicine and Laser Surgery*, 27:695-702, 2009. **[Corresponding senior author].**
 19. **Enwemeka CS:** Intricacies of dose in laser phototherapy for tissue repair and pain relief [Review Paper]. *Photomedicine and Laser Surgery*, 27:387-393, 2009.
 20. Minatel DG, Frade MAC, Franca S, **Enwemeka CS:** Phototherapy Promotes Healing of Chronic Diabetic Leg Ulcers That Failed To Respond To Other Therapies. *Lasers in Surgery and Medicine*, 41(6):433-41, August, 2009. **[Corresponding Senior Author].**
 21. Minatel DG, **Enwemeka CS,** França SC, Frade MAC. Phototherapy (LEDs 660/890 nm) in the treatment of leg ulcers in diabetic patients: Case study. *Anals Brasileiros de Dermatologia* 84(3):279-283, 2009.
 22. **Enwemeka CS,** Williams D, Enwemeka SK, Hollosi S, Yens D: 470 nm Blue Light Kills Methicillin Resistant Staphylococcus aureus (MRSA) *In Vitro*. *Photomedicine and Laser Surgery*, 27:221-226, April 2009.
 23. Caetano KS, Frade MAC, Minatel DG, Santana LA, **Enwemeka CS:** Phototherapy improves healing of chronic venous ulcers. *Photomedicine and Laser Surgery* 27:111-118, February, 2009. **[Corresponding Senior Author].**
 24. **Enwemeka CS,** Williams D, Hollosi S, Yens D, Enwemeka SK: Visible Visible 405 nm SLD Photo-destroys Methicillin Resistant Staphylococcus aureus (MRSA) *In Vitro*. *Lasers in Surgery and Medicine* 40:734-737, December 2008.
 25. **Enwemeka CS,** Williams D, Hollosi S, Yens D: Blue Light Photo-destroys Methicillin Resistant Staphylococcus aureus (MRSA) *In Vitro*. In Waynant R, Tata D. (Eds.) *Lecture Notes in Electrical Engineering* 12:33-37, 2008; Springer Publishers, New York
 26. Minatel DG, Frade MAC, Franca SC, Almeida GL, **Enwemeka CS:** Combined 660nm and 880 nm light improves healing of recalcitrant diabetic ulcers. In Waynant R, Tata D. (Eds.) *Lecture Notes in Electrical Engineering* 12:23-32, 2008; Springer Publishers, New York. **[Corresponding Senior Author].**
 27. **Enwemeka CS:** Standard parameters in laser phototherapy (Editorial): *Photomed and*

- Laser Surgery* 26: 411, 2008.
28. **Enwemeka CS:** Therapeutic blue light: A different ray of light on an age-old problem. (Editorial). *Photomedicine and Laser Surgery* 24: 679, 2006.
 29. **Enwemeka CS:** The place of coherence in light induced tissue repair and pain modulation. *Photomedicine and Laser Surgery* (Editorial). 24: 457, 2006.
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 31. **Enwemeka CS:** Evidence-based photomedicine. (Editorial) *Photomedicine and Laser Surgery* 23:353, 2005.
 32. **Enwemeka CS:** Light is light. *Photomedicine and Laser Surgery* (Editorial) 23:159-160, 2005.
 33. **Enwemeka CS,** Parker JC, Dowdy DS, Harkness EE, Sanford LE, Woodruff LD: The Effect of Laser Phototherapy on Tissue Repair and Pain Control: A Meta-Analysis of the Literature. *Photomedicine and Laser Surgery* 22: 323-329, 2004.
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 35. Timberlake GT, **Enwemeka CS:** An Inexpensive, Automated Instrument for Laser Irradiation of Cultured Cells. *Photomedicine and Laser Surgery* 22:233-239, 2004
 36. Lanzafame RJ, **Enwemeka CS:** Opportunities and challenges (Editorial) *Photomedicine and Laser Surgery* 22:169, 2004
 37. **Enwemeka CS:** Therapeutic Light [Review Paper]. *Rehabilitation Management*, January, 2004.
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 39. Reddy GK, Stehno-Bittel L, **Enwemeka CS:** Glycation-induced Matrix Stability in the rabbit Achilles tendon. *Archives of Biochemistry & Biophysics* 399:174-180, 2002
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48. **Enwemeka CS:** Charting the Course of Laser Therapy Amidst Chattering Charlatans. *Laser Therapy* 11 (3) 110-111, 1999 (Editorial).
49. **Enwemeka CS:** Quantum Biology of Laser Phtostimulation (Editorial). *Laser Therapy:* 11 (2): 52-53, 1999.
50. **Enwemeka CS:** Lighting the Way Into the New Millenium (Editorial). *Laser Therapy* 11(1): 5-6, 1999.
51. Reddy GK, Stehno-Bittel L, **Enwemeka CS:** Laser photostimulation of collagen production in healing rabbit Achilles tendons. *Lasers in Surgery & Medicine* 22:281-287, 1998. [**Senior Author**].
52. Stehno-Bittel L, Reddy GK, Gum S, **Enwemeka CS:** Biochemistry and biomechanics of healing tendon Part I: Effects of rigid plaster casts and functional casts. *Medicine & Science in Sports and Exercise* 30:788-793, 1998. [**Corresponding Senior Author**].
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55. Reddy K, **Enwemeka CS:** A simplified method for the analysis of hydroxyproline in biological tissues. *Clinical Biochemistry* 29:225-229, 1996. [**Corresponding Senior Author**].
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59. Maxwell LC, Moody M, **Enwemeka CS:** Muscle atrophy continues during early return to Weight-Bearing after tendon repair. *The Anatomical Record* 233:376-386, 1992.
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70. **Enwemeka CS:** The effects of Therapeutic Ultrasound on Tendon Healing - A Biomechanical Study. *American Journal of Physical Medicine & Rehabilitation* 68:283-287, 1989.
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Book Chapters

81. **Enwemeka CS**, Spielholz NI: Modulation of Tendon Growth and Regeneration by Electrical Currents and Fields.(*Book Chapter*) In: Nelson R, Currier DP (Ed.): Dynamics of Human Biologic Tissues. F. A. Davis Publishers, 1992, pp 231-254.
82. **Enwemeka CS:** Laser Photostimulation in The United States. (*Book Chapter*) In: Oshiro T, Calderhead RG (Ed.): Progress in Laser Therapy. John Wiley & Sons Publishers, London, 1991; pp 102 -111.

Books and Video

83. **Enwemeka CS:** Light Therapy: A Handbook for Practitioners. (*Dynatronics Corporation;* August, 2012).
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Brief Reports, Peer-reviewed Conference Proceedings and Invited Papers)

88. Ventkateswaran V, Basham T, **Enwemeka CS:** *In vivo* utilization of the "Z" tendon transducer. Proceedings, 18th Annual Conference of the American Society for Biomechanics, Columbus, OH., 1994.
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Book In Preparation

97. **Enwemeka CS:** Clinical Phototherapy: Theory and Practice (Six of eight chapters written).

Manuals & Web Publication

98. **Enwemeka CS:** Aid to Gross Anatomy. University of Texas Health Science Center at San Antonio, 1987; Revised in 1988 and 1989.
99. **Enwemeka CS:** Gross Anatomy Dissection Guide. University of Texas Health Science Center at San Antonio, 1989.
100. **Enwemeka CS:** Research In Physical Therapy [Published on the Web).

