NIH FORMAT BIOGRAPHICAL SKETCH

NAME Dr. Christopher W Connor	POSITION TITLE Assistant Professor Biomedical Engineering, (BU) Director of Research, Department of Anesthesiology, Boston Medical Center
eRA COMMONS USER NAME	

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Cambridge University, Cambridge, England.	BA	1997	Engineering
Cambridge University, Cambridge, England.	MEng	1998	Engineering
Cambridge University, Cambridge, England.	MA	2001	Honorary
Harvard Medical School/ Massachusetts Institute of Technology Health Sciences and Technology Program, Cambridge, MA	PhD	2005	Medical Engineering and Medical Physics
Harvard Medical School/ Massachusetts Institute of Technology Health Sciences and Technology Program, Cambridge, MA	MD	2005	Medicine

A. Personal Statement

I currently serve as an Assistant Professor of Biomedical Engineering and Anesthesiology at Boston Medical Center, Boston University. I practice clinical anesthesia at Boston Medical Center, New England Baptist Hospital and Mount Auburn Hospital. Through our provider practice group, Anaesthesia Associates of Massachusetts, I also provide consulting services pertaining to anesthesiology, biomedical research and medical device development. My own research deals with the application of the principles of minimally-invasive medical engineering to clinical issues in anesthesiology.

B. Positions and Honors

Positions and Employment

1996 NASA Jet Propulsion Laboratory, Researcher on Galileo probe of Jupiter and initial encounter observations.
1997 NASA Jet Propulsion Laboratory, Researcher on Mars Global Surveyor; atmospheric storm tracking.
2001 NASA Johnson Space Center, Medical Informatics and Health Care Systems group, Researcher/engineer working on inflight ultrasound.
2003 Harvard/MIT, Invited lecturer- HST.532 “Hyperthermia: Biology, Technology and Cancer Therapy” to discuss ultrasound applications.
2003 Harvard/MIT, Teaching Assistant- Introduction to Clinical Medicine.
2003 Kathmandu University Medical School, Nepal, Assistant Professor, Course Director of Renal Medicine.
2003 Harvard/ MIT, Invited lecturer- HST.532 “Hyperthermia: Biology, Technology and Cancer Therapy” to discuss ultrasound applications.
1998-05 Focused Ultrasound Laboratory at Brigham & Women’s Hospital, Harvard Medical School, Researcher/ Engineer focused on Non-invasive Transcranial Focused Ultrasound
2005-06 Internal Medicine Internship, Mount Auburn Hospital, Cambridge, MA.
2006-09 Resident in Anesthesia and Critical Care, Brigham & Women’s Hospital, Boston, MA.
2009- Attending Anesthesiologist, Boston Medical Center, Boston, MA.
Attending Anesthesiologist, New England Baptist Hospital, Boston, MA.
Attending Anesthesiologist, Mount Auburn Hospital, Cambridge, MA.

Honors

1994 British Gas (Exploration & Production) scholarship for Electrical Engineering.
1997 Frankl Memorial Scholarship and Bateman Scholar, Trinity Hall, Cambridge University.
1998 Ernst Frankl Prize for Engineering, Trinity Hall.
1998 Finalist – Daily Telegraph "Young Science Writer of the Year".
1998 Kennedy Memorial Scholarship to MIT/Harvard.
1999 AIAA fellowship to the International Space University Summer Session, Thailand.
1999 Martinos fellowship, Harvard-MIT Division of Health Sciences and Technology.
2004 Co-hosted a half-hour test episode for WGBH in Boston of a PBS engineering program for children.
2004 National Institute of General Medical Sciences fellowship in the Medical Scientist Training Program.
2009 Best Technical Abstract, American Society of Anesthesiologists Annual Meeting.
2011 Best Scientific Exhibit in Patient Safety, American Society of Anesthesiologists Annual Meeting.

C. Selected peer-reviewed publications (in chronological order)

1. Ferrigno, Tahir and Connor, "The feasibility of pharmacological mitigation of nitrogen narcosis during submarine escapes from depths down to 1000 fsw", Undersea and Hyperbaric Medicine 38(6):549-555, 2011.

2. Connor, "Anesthetic considerations during flight", Anesthesia Outside the Operating Room (1st edition), Oxford University Press, 2011. ISBN 0195396677.

3. Connor and Segal, "Computerized analysis to associate facial features with difficult intubation", Atlas of Airway Management: Techniques and Tools (2nd edition), Lippincott Williams & Wilkins, 2011. ISBN 1451103395.

4. Connor and Ferrigno, "Practical considerations for the anesthesiologist in flight", Essential Clinical Anesthesia (1st edition), Cambridge University Press, 2011. ISBN 0521720206.

5. Connor and Segal, "Accurate Classification of Difficult Intubation by Computerized Facial Analysis", Anesthesia & Analgesia 112(1):84-93, January 2011.

6. Connor and Segal, "The Intubation Information Gap: What does subjective facial appearance add to MP and TMD alone?", Annual Meeting of the American Society of Anesthesiologists, San Diego CA, October 16-20, 2010.

7. Connor, Tahir and Ferrigno, "Propanolol could delay Nitrogen Narcosis during submarine escapes from 600fsw to 1,000fsw", UHMS Annual Scientific Meeting, St.Petersburg FL, June 3-5, 2010.

8. Connor and Segal, "Computerized Facial Analysis To Predict Difficult Intubation", Annual Meeting of the American Society of Anesthesiologists, New Orleans LA, October 17-21, 2009.

9. Connor and Ferrigno, "Estimates of N2 narcosis and O2 toxicity during submarine escapes from 600 to 1000 fsw", Undersea and Hyperbaric Medicine 36(4):237-245, 2009.

10. Connor and Philip, "Closed-form solutions for the optimum equivalence of first-order compartmental models and their implications for classical models of closed-circuit anesthesia", Physiological Measurement 30(2): N11-N21, February 2009.

11. Connor, Gohil and Harrison, "Triggering of systolic arterial pressure alarms using statistics-based versus threshold alarms", Anaesthesia 64(2): 131-135, February 2009.

12. Connor and Philip, “The Severinghaus square root of time relationship for anesthetic uptake and its implications for the stability of compartmental pharmacokinetics”, Physiological Measurment 29(5):685-701, 2007.

13. Harrison and Connor, “Statistics-based alarms from sequential physiological measurements”, Anaesthesia 62(10): 1015-1023, October 2007.

14. Connor and Ferrigno, “Estimates of the risk of Nitrogen Narcosis and CNS Oxygen Toxicity During DISSUB Escapes from 600 to 1,000 ft”, 2007 Undersea Medicine Combined Progress Review of the US Navy, Mystic CT, July 2007.

15. Connor, “Genetic Algorithms And Biological Systems”, Medical Sciences Congress, Queenstown NZ, December 2005.

16. Connor, Clement & Hynynen, “Improved Physiological Modeling Through Genetic Algorithms: Acoustic Attenuation In Cranial Bone Based On Density And Frequency For Non-Invasive Treatment of Brain Lesions”, Medical Sciences Congress, Queenstown NZ, December 2005.

17. Balas and Connor, “Look Up And Scream: Analytical Difficulties in Improv Comedy”, Journal of Recreational Mathematics 33(1):32-38, 2005.

18. Connor and Hynynen, “Patterns of Thermal Deposition In The Skull During Transcranial Focused Ultrasound Surgery”, IEEE Transactions on Biomedical Engineering 51(10):1693-1706, October 2004.

19. Connor, Clement & Hynynen, “A Unified Model for the Speed of Sound in Cranial Bone based on Genetic Algorithm Optimization”, Physics in Medicine and Biology 47(22):3925-3944, 21 November 2002.

20. Connor and Hynynen, “Therapeutic Effect of Second Harmonic Focal Spots in High Intensity Focused Ultrasound Treatment of Tissues with Nonlinear Acoustic Properties”, ISNA16 Conference, Moscow State University, August 2002.

21. Connor and Hynynen, “Bio-acoustic thermal lensing and nonlinear propagation in focused ultrasound surgery using large focal spots: a parametric study”, Physics in Medicine and Biology 47(11):1191-1928, 7 June 2002.

22. Rawat and Connor, et al., “The Correlation between Aerobic Fitness and Motion Sickness Susceptibility.” Aviation, Space, and Environmental Medicine 73(3): 216-218, March 2002.

23. Contributing author, “SEADS: South East Asia Disaster Management System”, International Space University 1999.

24. Connor et al., “Design of an autostereoscopic endoscope for abdominal surgery”, Proc. SPIE (3595), pp. 130-137, 1999.

25. Orton et al, “Characterization of Jupiter's Atmosphere from Galileo and Earth-Based Observations during the Ganymede-1 and Ganymede-2 Orbit Encounters”, Bulletin of the American Astronomical Society 28:1137, September 1996.