

## Peer reviewed and scientific publications

### Book chapter

Chapter 8: Bubble arterialization, PFO and pulmonary shunt, found in: *The Science of Diving: Things your instructor never told you*. Lap Lambert Academic Publishing, 2014 Dec.

### Peer-reviewed publications

Stembridge M, Hoiland RL, Bain AR, Barak OF, Drvis I, MacLeod DB, MacLeod DM, **Madden D**, Batinic T, Shave R, Dujic Z, Ainslie PN. Influence Of Lung Volume On Circulatory Function And Arterial Blood Gases During Prolonged Breath Holding In Elite Apnea Divers: 2443 June 3, 11: 00 AM - 11: 15 AM. *Med Sci Sports Exerc*. 2016 May;48(5 Suppl 1):670-1.

Foster GE, Bain AR, Tremblay JC, Boulet LM, Lemaitre F, **Madden D**, Dujic Z, Barak O, Boussuges A, Gavarry O, Duke JW, Elliott JE, Laurie SS, Lovering AT, Balestra C, Eichhorn L, Vagula MC, Fitz-Clarke JR, Muth CM. Commentaries on Viewpoint: Why predominantly neurological DCS in breath-hold divers? *J Appl Physiol* (1985). 2016 Jun 15;120(12):1478-82. doi: 10.1152/japplphysiol.00242.2016.

Barak OF, Caljkusic K, **Madden D**, Ainslie PN, Slavic D, Buca A, Dujic Z. Elevations in Intra-cranial blood flow velocities following a SCUBA Dive and the Influence of Post-dive Exercise. *Int J Sports Med*. 2016 Jul;37(8):591-7. doi: 10.1055/s-0042-103589. Epub 2016 May 13.

**Madden D**, Thom SR, Dujic Z. Exercise before and after SCUBA diving and the role of cellular microparticles in decompression stress. *Med Hypotheses*. 2016 Jan;86:80-4. doi: 10.1016/j.mehy.2015.12.006. Epub 2015 Dec 15.

Bain AR, Dujic Z, Hoiland RL, Barak OF, **Madden D**, Drvis I, Stembridge M, Macleod DB, MacLeod DM, Ainslie PN. Peripheral chemoreflex inhibition with low-dose dopamine; new insight into mechanisms of extreme apnea. *Am J Physiol Regul Integr Comp Physiol*. 2015 Aug 19:ajpregu.00271.2015. doi: 10.1152/ajpregu.00271.2015. [Epub ahead of print]

Winklewski PJ, Barak O, **Madden D**, Gruszecka A, Gruszecki M, Guminski W, Kot J, Frydrychowski AF, Drvis I, Dujic Z. Effect of Maximal Apnoea Easy-Going and Struggle Phases on Subarachnoid Width and Pial Artery Pulsation in Elite Breath-Hold Divers. *PLoS One*. 2015 Aug 18;10(8):e0135429. doi: 10.1371/journal.pone.0135429. eCollection 2015.

Thom SR, Bennett M, Banham ND, Chin W, Blake DF, Rosen A, Pollock NW, **Madden D**, Barak OF, Marroni A, Balestra C, Germonpre P, Pieri M, Cialoni D, Le PJ, Logue C, Lambert D, Hardy KR, Sward D, Yang M, Bhopale VM, Dujic Z. Association of microparticles and neutrophil activation with decompression sickness. *J Appl Physiol* (1985). 2015 Jul 2 [Epub ahead of print]

Yang M, Barak OF, Dujic Z, **Madden D**, Bhopale VM, Bhullar J, Thom SR. Ascorbic acid supplementation diminishes microparticle elevations and neutrophil activation following SCUBA diving. *Am J Physiol Regul Integr Comp Physiol*. 2015 Aug 15;309(4):R338-44. doi: 10.1152/ajpregu.00155.2015. Epub 2015 Jun 17.

Barak OF, **Madden D**, Lovering AT, Lambrechts K, Ljubkovic M, Dujic Z. Very Few Exercise-Induced Arterialized Gas Bubbles Reach the Cerebral Vasculature. *Med Sci Sports Exerc*. 2015 Jan 26. [Epub ahead of print]

Willie C, Ainslie P, Drvis I, MacLeod D, Bain A, **Madden D**, Zubin Maslov P, Dujic Z. Regulation of brain blood flow and oxygen delivery in elite breath-hold divers. *J Cereb Blood Flow Metab*. 2014 Nov [Epub ahead of print].

**Madden D**, Barak O, Thom SR, Yang M, Bhopale VM, Ljubkovic M, Dujic Z. The impact of pre-dive exercise on repetitive SCUBA diving. *Clin Physiol Funct Imaging*. 2014 Oct [Epub ahead of print].

**Madden D**, Ljubkovic M, Dujic Z. Intra-pulmonary shunt and SCUBA diving: Another risk factor? *Echocardiography*. 2014 Sep [In press]

**Madden D**, Thom SR, Yang M, Bhopale VM, Ljubkovic M, Dujic Z. High intensity cycling before SCUBA diving reduces post-decompression microparticle production and neutrophil activation. *Eur J Appl Physiol*. 2014 Sep;114(9):1955-61.

Lozo M, Lojpur M, **Madden D**, Lozo P, Banic I, Dujic Z. The effects of nitroglycerin, norepinephrine and aminophylline on intrapulmonary arteriovenous anastomoses in healthy humans at rest. *Respir Physiol Neurobiol*. 2014 Aug 1;199:19-23

**Madden D**, Thom SR, Milovanova TN, Yang M, Bhopale VM, Ljubkovic M, Dujic Z. Exercise before SCUBA Diving Ameliorates Decompression-Induced Neutrophil Activation. *Med Sci Sports Exerc*. 2014 Oct;46(10):1928-35.

Lozo M, **Madden D**, Gunjaca G, Ljubkovic M, Marinovic J, Dujic Z. The impact of consecutive freshwater trimix dives at altitude on human cardiovascular function. *Clin Physiol Funct Imaging*. 2014 Feb 16 [Epub ahead of print]

Sieber A, Schuster A, Reif S, **Madden D**, Enoksson P. Head-up display system for closed circuit rebreathers with antimagnetic wireless data transmission. *Marine Technology Society Journal*. 2013 Dec; 47(6):42-51

**Madden D**, Lozo M, Dujic Z, Ljubkovic M. Exercise after SCUBA diving increases the incidence of arterial gas embolism. *J Appl Physiol* (1985). 2013 Sep 1;115(5):716-22

Thom SR, Milovanova TN, Bogush M, Yang M, Bhopale VM, Pollock NW, Ljubkovic M, Denoble P, **Madden D**, Lozo M, Dujic Z. Bubbles, microparticles, and neutrophil activation: changes with exercise level and breathing gas during open-water SCUBA diving. *J Appl Physiol* (1985). 2013 May 15;114(10):1396-405