

NAME: Simon Malpas

Affiliation:	Professor in Physiology and Bioengineering , University of Auckland
Title:	Professor
Specialty:	Cardiovascular and neurophysiology, medical instrumentation development
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Education:

- ◆ 1990, PhD, Physiology, University of Otago
- ◆ 1986, BSc Hons, Physiology, Victoria University

Experience:

- ◆ 2013 - present, Professor, University of Auckland
- ◆ 2012- present, Chief Scientific Officer, Millar Inc
- ◆ 2004-2012, CEO, Telemetry Research Ltd
- ◆ 1996-2012, Associate Professor, University of Auckland
- ◆ 1993-1996, Senior Research Officer, Baker Heart Research Institute, Prahran, Victoria, Australia
- ◆ 1992-93; Postdoctoral Research Fellow, Department of Physiology, University of Birmingham, UK
- ◆ 1990-91; Japanese Science and Technology Agency Postdoctoral Fellowship. National Cardiovascular Research Institute in Osaka, Japan

Selected Publications and Patents:

Publications

- ◆ Chen, F. Y. B., Budgett, D. M., Sun, Y., Malpas, S., McCormick, D., & Freestone, P. S. (2017). Pulse-width modulation of optogenetic photo-stimulation intensity for application to full-implantable light sources. *IEEE Transactions on Biomedical Circuits and Systems*, 11 (1), 28-34.
- ◆ McBryde, F., Malpas, S., & Paton, J. (2017). Intra-cranial mechanisms for preserving brain blood flow in health and disease. *Acta Physiologica*, 219 (1), 274-287.
- ◆ Emans, T. W., Janssen, B. J., Pinkham, M. I., Ow, C. P., Evans, R. G., Joles, J. A., ... Koeners, M. P. (2016). Exogenous and endogenous angiotensin-II decrease renal cortical oxygen tension in conscious rats by limiting renal blood flow. *The Journal of Physiology*, 594 (21), 6287-6300.
- ◆ Stehlin, E. F., McCormick, D., Malpas, S. C., Pontré BP, Heppner, P. A., & Budgett, D. M. (2015).

MRI interactions of a fully implantable pressure monitoring device. *Journal of Magnetic Resonance Imaging*, 42 (5), 1441-1449.

- ◆ Clark, T. M., Malpas, S. C., McCormick, D., Heppner, P., & Budgett, D. M. (2015). Implantable multi-modal sensor to improve outcomes in hydrocephalus management. *IEEE Sensors Journal*, 15 (10), 6027-6035.
- ◆ Guild, S. J., McBryde, F. D., & Malpas, S. C. (2015). Recording of intracranial pressure in conscious rats via telemetry. *Journal of Applied Physiology*, 119 (5), 576-581.
- ◆ Clark, T. M., Malpas, S. C., McCormick, D., Guild, S.-J., & Budgett, D. M. (2015). New multimodal data obtained in-vivo from a single ultra-miniature transducer. *Biomed Microdevices*, 17 (4)

Patents

- ◆ Navakatikyan M & Malpas S.C. Apparatus and method for detection and quantification of oscillatory signals. Patent no. US 7353127, 2002
- ◆ Hu, A, Budgett, DM. & Malpas SC. Inductively coupled power transfer apparatus and methods, WO2006031133, NZ 526115/526116/529869. Also published as US20070296393 Priority date Sep 16, 2004.
- ◆ Malpas, Hu, Budgett GB2433656 Inductively powered mobile sensor system, priority date 16.09.2004
- ◆ Budgett DM, Stehlin EF, Taberner AJ, Nielsen PMF, Malpas SC. Catheter and shunt system including the catheter. WIPO Patent Application WO/2012/033420
- ◆ Budgett DM Clark T, Malpas SC. Methods, devices and systems for sensing flow, temperature and pressure. US Application Number 61929915, 2014.

Social Activity and Honors:

- ◆ Pickering award for commercialisation of technology, Royal Society of New Zealand, 2014
- ◆ Finalist Science and Health section, Bayer Innovators Awards, 2009
- ◆ 2006 Innovation of the year. NZ Incubators
- ◆ 2003 Young Investigator Award in Regulatory and Integrative Physiology, American Physiological Society.
- ◆ 2002 Arthur C. Guyton Award for Excellence in Integrative Physiology and Medicine, American Physiological Society
- ◆ 2002 Butland Distinguished Teaching Award, University of Auckland
- ◆ 1999 Butland Distinguished Research Award in Medical Science, University of Auckland.