

CURRICULUM VITAE:

Nigel A.S. Taylor, *Ph.D.*

Centre for Human and Applied Physiology
<http://smah.uow.edu.au/chp/index.html>
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University of Wollongong
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SECTION 1: PERSONAL DETAILS

Nigel Anthony Southworth Taylor

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Dapto
NSW 2530
Australia.

Business Address:

Centre for Human and Applied Physiology (retired)
School of Medicine
University of Wollongong
Northfields Avenue
Wollongong, NSW 2522
Australia.

Phone: 61-2-4262-2045

Electronic mail: nigelastaylor@gmail.com

Date of Birth:

19/4/1953

Marital Status:

Married with two children.

Nationality:

Dual nationality: British and Australian (2002).

Most Recent Academic Appointment:

Environmental and Exercise Physiologist

Centre for Human and Applied Physiology (retired Jan 2018)
School of Medicine
Faculty of Science, Medicine and Health
University of Wollongong
Wollongong
NSW 2522
Australia.

SECTION 2: TERTIARY EDUCATION

2.1 Tertiary Qualifications:

- 2.1.1 1971-1973: **North Brisbane College of Advanced Education**, Brisbane, Australia.
Diploma of Teaching.
Awarded: 10/12/73.
- 2.1.2 1971-1982: **University of Queensland**, Brisbane, Australia.
(a) *Bachelor of Human Movement Studies.*
Awarded: 21/4/77.
(b) *Bachelor of Human Movement Studies with Honours.*
Awarded: 14/12/83.
Research Area: Human thermoregulation.
- 2.1.3 1983-1984: **King's College London, University of London**, England.
Department of Physiology, Faculty of Medical Science.
Master of Science (Human and Applied Physiology).
Awarded: 12/12/84.
Research Area: Metabolic correlates of intramuscular fatigue.
- 2.1.4 1984-1987: **Simon Fraser University**, Burnaby, B.C., Canada.
School of Kinesiology, Faculty of Applied Science.
Doctor of Philosophy (Environmental Physiology).
Awarded: 5/6/87.
Research Area: Respiratory mechanics during breathing pressure changes.

2.2 Scholarships and Training Awards:

- 2.2.1 Teacher Training Scholarship. Department of Education, Brisbane, Australia, 1971-1973. North Brisbane College of Advanced Education.
- 2.2.2 Physical Education Scholarship. Department of Education, Brisbane, 1971-1973. University of Queensland.
- 2.2.3 President's Research Grant Stipend. Simon Fraser University (Canada), 1985.
- 2.2.4 Simon Fraser University (Canada) Open Graduate Scholarship.
Awarded twice: September 1985 - August 1986, September 1986 - April 1987.
- 2.2.5 National Research Council Resident Research Associateship. Naval Medical Research Institute (U.S.A.). 1990.

SECTION 3: TEACHING AND EDUCATIONAL EXPERIENCE

Nine years of full-time secondary school teaching experience before commencing full-time tertiary research and teaching in 1987, with a one-year, Post-Doctoral Research Fellowship during 1990. Retired from full-time position in 2018.

3.1 Secondary School Teaching Experience:

- 3.1.1 1974-1976: Physical Education and Science Teacher:
St. Columban's Boys College, Brisbane, Australia.
- 3.1.2 1977-1980: Senior Biology and Junior Science Teacher:
Hendra State High School, Brisbane, Australia.
- 3.1.3 1981-1982: Senior Biology Teacher and Junior Science Co-ordinator:
St. Laurence's College, Brisbane, Australia.

3.2 Tertiary Institution Teaching Experience:

- 3.2.1 1984-1986: Faculty of Applied Science, Simon Fraser University, Canada.
(a) Sessional Instructor
(b) Teaching Assistant.
- 3.2.2 1987-1989: Division of Sciences, University of Otago, New Zealand.
Tenured Lecturer.
- 3.2.3 1989: Department of Physiology, University of New England, Australia.
External Lecturer (Ergonomics).
- 3.2.4 1991-2018: Faculty Science, Medicine and Health,
University of Wollongong, Australia.
(a) Tenured Lecturer.
(b) Tenured Senior Lecturer (promoted: 1993; accelerated progression: 1995).
(c) Tenured Associate Professor (promoted: 2000).

3.3 Leadership in Tertiary Institutions: Course Development and Administration:

3.3.1 Subject Planning and Implementation:

Exercise Prescription and Fitness Management (1987-1989). University of Otago, New Zealand.

Ergonomics (1989). University of New England, Australia. Planning and implementation of second and third year external studies subject.

Environmental Physiology (1991-1994). Planning and implementation of new subject at the postgraduate level. University of Wollongong, Australia.

Human Physiology II: Control Mechanism Physiology (1991-2014). Responsible for developing subject to service the University of Wollongong, Australia.

Cardiorespiratory physiology. Responsible for the initial planning and development of the subject, then assisting its implementation. University of Wollongong, Australia.

Advanced Exercise Physiology (1998-2017). University of Wollongong, Australia.

3.3.2 Subject Co-ordination:

Principles of Exercise (1987-1989): University of Otago, New Zealand.

Exercise Prescription and Fitness Management (1988-1989): University of Otago, New Zealand.

Postgraduate Exercise Physiology (1991-1994): University of Wollongong, Australia.

Postgraduate Environmental Physiology (1991-1994): University of Wollongong, Australia.

Human Physiology II: Control Mechanism Physiology (1991-2013): University of Wollongong, Australia.

Advanced Exercise Physiology (1998-2017). University of Wollongong, Australia.

3.3.3 Undergraduate and Postgraduate Planning and Administration:

Member of **Faculty Executive Committee** (1988): Division of Sciences, University of Otago, New Zealand.

Member of Departmental **Postgraduate Committee** (1988-1989): University of Otago, New Zealand.

Undergraduate adviser (1988-1989), University of Otago, New Zealand.

Member of **Honours Degree Planning Committee** (1989): Honours Programme in Kinesiology, Division of Sciences, University of Otago, New Zealand.

Department/School **Library Liaison Officer** (1991-2017): University of Wollongong, Australia.

Chair Faculty Library Committee (1993-1999): University of Wollongong, Australia.

Member of the **University Library Committee** (1993-1999): University of Wollongong, Australia.

Member of Departmental **Postgraduate Committee** (1991-1993): University of Wollongong, Australia (Chairperson 1992-1993).

Member of the **Graduate Faculty** [now the **University Research Committee**] (1992-1994): Representative of the Faculty of Health and Behavioural Sciences, University of Wollongong, Australia.

Member of **Faculty Research Committee** (1992-1995): University of Wollongong, Australia (Deputy Chairperson 1993).

Undergraduate adviser (1993-2000), University of Wollongong, Australia.

Member of **Faculty Education Committee** (1998-2001): University of Wollongong, Australia.

Member of **Faculty Internationalisation Committee** (2005-2009): University of Wollongong, Australia.

Member of **Faculty Investigative Committee** and School **Primary Investigation Officer** (2007-2010): University of Wollongong, Australia.

School **Seminar Co-ordinator** (2007-2012): University of Wollongong, Australia.

3.4 External Reviewer of Academic Programme:

Taylor, N.A.S., Groeller, H., McLennan, P.L., and Steele, J.R. (2002). Academic programme review: College of Sports Science and Technology (Mahidol University, Thailand). College of Sports Science and Technology, Mahidol University, Salaya, Thailand.

3.5 Teaching-related Publications:

3.5.1 Taylor, N.A.S. (1978). *The Good Life: Health and Physical Education*. Book 1. McGraw-Hill. Sydney, Australia.

ISBN: 0-07-093446-0.

3.5.2 Taylor, N.A.S. (1979). *Come Alive: Health and Physical Education*. Book 2. McGraw-Hill. Sydney, Australia.

ISBN: 0-07-093517-3.

3.5.3 Taylor, N.A.S. (2005). *Heat stress: understanding normal physiological responses*. Educational module. Human Performance Laboratories and the Centre for Educational Development and Interactive Resources, University of Wollongong. For: NSW Fire Brigades, Sydney, Australia. Pp. 1-35.

3.5.4 Taylor, N.A.S. (2005). *The physiological impact of thermal protective equipment and clothing on firefighters*. Educational module. Human Performance Laboratories and the Centre for Educational Development and Interactive Resources, University of Wollongong. For: NSW Fire Brigades, Sydney, Australia. Pp. 1-23.

- 3.5.5 Taylor, N.A.S. (2005). *The recognition and prevention of heat illness*. Educational module. Human Performance Laboratories and the Centre for Educational Development and Interactive Resources, University of Wollongong. For: NSW Fire Brigades, Sydney, Australia. Pp. 1-34.
- 3.5.6 Taylor, N.A.S., and Groeller, H. (Editors). (2008). *Physiological bases of human performance during work and exercise*. Churchill Livingstone Elsevier, Edinburgh. Pp. 1-616. **Edited monograph.**
ISBN: 0-443-10271-4.

3.6 Teaching-related Grants:

- 3.6.1 Taylor, N.A.S., and Pennel, R. (2004). Three multi-media Educational Modules for firefighter training (NSW Fire Brigades, Sydney, Australia). \$47,430:
Heat stress: understanding normal physiological responses.
The physiological impact of thermal protective equipment and clothing on firefighters.
The recognition and prevention of heat illness.
- 3.6.2 Taylor, N.A.S., and Olbrechtova, P. (2012). *Flexible delivery of laboratory-based teaching for integrated human physiology*. Project Number: 01495. Funding Type: FSA2012. Support Type: Video production.

3.7 Supervision of Postgraduate Research Students:

Summary:

- Total number of Research Students supervised: 39
 - Honours: 5
 - Masters: 16
 - Doctoral: 18
- Postgraduate completions: 38

- 3.7.1 Smith, T.B.R.J. *Respiratory performance during rowing, running and cycle ergometry*. Master of Physical Education, University of Otago, New Zealand. 1988-1990.
- 3.7.2 Stanley, S.N. *Isokinematic contractile properties of skeletal muscle in young, post-menopausal and osteoporotic women*. Master of Physical Education, University of Otago, New Zealand. 1988-1991.
- 3.7.3 Cotter, J.D. *Hypothermia: an epidemiology and an assessment of a garment for preventing immersion hypothermia*. Master of Physical Education, University of Otago, New Zealand. 1988-1991.
- 3.7.4 Solomon, C. *The effects of exercise duration on respiratory gas exchange, ventilation and heart rate dynamics*. Bachelor of Applied Science (Honours), University of Wollongong. 1991.
- 3.7.5 Maw, G.J. *Body fluid balance: the influence of hot and cold stress*. Doctor of Philosophy, University of Wollongong. 1991-1994.
- 3.7.6 Osborne, M.A. *The effect of altered oxygen transport on respiratory gas exchange dynamics*. Master of Science (Research), University of Wollongong. 1991-1994.
- 3.7.7 Regan (Stocks), J.M. *Adaptation to heat: differences induced by isothermal strain accompanying exercise in hot and neutral environments*. Master of Science (Research), University of Wollongong. 1993-1994.
- 3.7.8 Mark, A.J. *Environmental stress: the effects of ageing upon thermal control*. Bachelor of Science (Honours), University of Wollongong. 1993-1994.
- 3.7.9 Patterson, M.J. *The influence of upper body skin temperatures in the control of sweat secretion in man*. Master of Science (Research), University of Wollongong. 1993-1994.
- 3.7.10 Wilsmore, B.R. *Human heat storage and sweating: a re-assessment of determining factors*. Bachelor of Science (Honours), University of Wollongong. 1996.

- 3.7.11 Cotter, J.D. *The role of regional skin temperatures in thermoregulatory control during heat stress*. Doctor of Philosophy, University of Wollongong. 1993-1998.
- 3.7.12 Regan (Stocks), J.M. *Human physiological responses to cold-water immersion: acute and repeated exposures*. Doctor of Philosophy, University of Wollongong. 1995-1998.
- 3.7.13 Patterson, M.J. *The regulation of human body fluids during heat adaptation*. Doctor of Philosophy, University of Wollongong. 1995-1999.
- 3.7.14 Chaunchaiyakul, R. *Thoraco-pulmonary mechanics: the interaction of age and physical activity*. Doctor of Philosophy, University of Wollongong. 1995-1999.
- 3.7.15 Russell, G. *In search of evidence for the existence of intramuscular thermoreceptors*. Bachelor of Science (Honours), University of Wollongong. 1999.
- 3.7.16 Booth, J.D. *Metabolic and thermal consequence of heat exposure following pre-exposure, whole-body cooling*. Doctor of Philosophy, University of Wollongong. 1996-2001.
- 3.7.17 Gordon, C.J. (Secondary supervisor). *Plasma volume changes during whole-body immersion: differential venous and arterial compartments*. Master of Science (Research), Australian Catholic University. 1999-2001.
- 3.7.18 Fogarty, A.L. *Effects of protective clothing on cardiovascular and thermal responses to heat stress*. Master of Science (Research), University of Wollongong. 1999-2002.
- 3.7.19 Hosie, A. *Differentiating thermal from non-thermal eccrine sweating during exercise and heat stress*. Master of Science (Research), University of Wollongong. 1994-2003.
- 3.7.20 Zeyl, A. (Secondary supervisor). *Temperature effects on human leptin physiology: possible implications for the regulation of body composition*. Doctor of Philosophy, University of Wollongong. 1998-2005.
- 3.7.21 Armstrong, K.A. *Theoretical bases for the development of a personal heat strain monitor*. Master of Science (Research), University of Wollongong. 1999-2006.
- 3.7.22 Caldwell, J.N. *The interaction of the thermal environment, clothing and auxiliary body cooling in the workplace*. Master of Science (Research), University of Wollongong. 2004-2008.
- 3.7.23 Haley, C.D. (Secondary supervisor). *Investigating high-amplitude oscillations in skin blood flow*. Doctor of Philosophy, University of Wollongong. 2002-2008.
- 3.7.24 Wilsmore, B.R. *Thermoregulation in people with spinal-cord injury*. Doctor of Philosophy, University of Wollongong. 1997-2008.
- 3.7.25 Gordon, C.J. *Non-thermoregulatory factors in humans during exercise and rest: influences on thermoeffector function*. Doctor of Philosophy, University of Wollongong. 2001-2010.
- 3.7.26 Machado-Moreira, C.A. *The regional distribution of human sudomotor function and its neuropharmacological control*. Doctor of Philosophy, University of Wollongong. 2006-2011.
- 3.7.27 Sampson, J.A. (Secondary supervisor). *Muscle adaptation to resistance training*. Doctor of Philosophy, University of Wollongong. 2005-2012.
- 3.7.28 Hoban, B. *Cognitive function during thermal loading*. Bachelor of Science (Honours), University of Wollongong. 2011-2012.
- 3.7.29 Notley, S.R. *The utility of cardiorespiratory variables as surrogate measures for approximating energy expenditure*. Master of Science (Research), University of Wollongong. 2010-2012.
- 3.7.30 Lee, D.S. (Secondary supervisor). *The effect of loaded work at varying intensities on acceptable work time and cardiopulmonary function*. Master of Science (Research), University of Wollongong. 2010-2013.
- 3.7.31 Fullagar, H.H.K. *Establishing bona fide physiological employment standards for Fire & Rescue NSW*. Master of Science (Research), University of Wollongong. 2011-2013.
- 3.7.32 Haberley, B.J. *Human trials to evaluate the thermal performance specifications for private bushfire shelters*. Master of Science (Research), University of Wollongong. 2012-2013.
- 3.7.33 Caldwell, J.N. *Exploring thermal interactions with vasomotion, sudomotion and thermogenesis*. Doctor of Philosophy, University of Wollongong. 2008-2014.

- 3.7.34 van den Heuvel, A.M.J. *The separate and combined influences of heat strain and dehydration upon physiological regulation and cognitive function*. Doctor of Philosophy, University of Wollongong. 2009-2015.
- 3.7.35 Notley, S.R. *An examination of the inter-dependence of heat exchange pathways and morphology in humans during acute and chronic thermal loading*. Doctor of Philosophy, University of Wollongong. 2012-2016.
- 3.7.36 Kerry, P. (Secondary supervisor). *The influence of basic military training upon muscular strength, power and cardiovascular endurance in Australian Defence Force recruits*. Master of Science (Research), University of Wollongong. 2012-2017.
- 3.7.37 Bowes, H.M. *Human metabolic allometry from basal to maximal ambulatory states, including load carriage and its distribution*. Doctor of Philosophy, University of Wollongong. 2014-2018.
- 3.7.38 Hingley, L. (Secondary supervisor). *Impact of load carriage on the respiratory system*. Doctor of Philosophy, University of Wollongong. 2014-2018.
- 3.7.39 Schwarck, J.B. *The longitudinal progression of physiological adaptation and maladaptation to high-intensity physical training*. Doctor of Philosophy, University of Wollongong. 2018-present.

3.8 Supervision of International Research Fellows:

Summary:

- Total number of Research Fellows: 47
 - Brazil 1
 - Germany 1
 - The Netherlands 36
 - Sweden 1
 - Switzerland 2
 - Thailand 4
 - United Kingdom 1
 - U.S.A. 1

- 3.8.1 Zeyl, A. (1995). *Thermal sensitivity of different skin regions*. Vrije Universiteit, Amsterdam, The Netherlands.
- 3.8.2 Keizer, E. (1995). *Thermal sensitivity of different skin regions*. Vrije Universiteit, Amsterdam, The Netherlands.
- 3.8.3 de Hon, O. (1996). *Effects of repeated cold-water immersions upon thermal responses to cold*. Vrije Universiteit, Amsterdam, The Netherlands.
- 3.8.4 Hofland, L. (1996). *Effects of repeated cold-water immersions upon thermal responses to cold*. Vrije Universiteit, Amsterdam, The Netherlands.
- 3.8.5 Takken, T. (1997). *Surrogate indices for human body core temperature*. Vrije Universiteit, Amsterdam, The Netherlands.
- 3.8.6 Komen, T. (1997). *Surrogate indices for human body core temperature*. Vrije Universiteit, Amsterdam, The Netherlands.
- 3.8.7 Koonen, D. (1999). *In search of intramuscular thermoreceptors*. Maastricht University, Maastricht, The Netherlands.
- 3.8.8 Heemskerk, T. (1999). *In search of intramuscular thermoreceptors*. Maastricht University, Maastricht, The Netherlands.
- 3.8.9 Hennekens, D. (1999). *In search of intramuscular thermoreceptors*. Maastricht University, Maastricht, The Netherlands.
- 3.8.10 Thoicharoen, P. (2000). *Research training for academic staff member in cardiorespiratory and thermal physiology*. Rangsit University, Thailand.
- 3.8.11 Pavilas, C. (2000). *Research training for sports scientist in cardiorespiratory and thermal*

- physiology*. Sports Science Centre, Sports Authority of Thailand, Thailand.
- 3.8.12 Welschen, L.M.C. (2001). *The role of beta-adrenoceptors on thermal and cardiovascular responses during cold-water immersion*. Maastricht University, Maastricht, The Netherlands.
- 3.8.13 Sinnema, N. (2001). *The role of beta-adrenoceptors on thermal and cardiovascular responses during cold-water immersion*. Maastricht University, Maastricht, The Netherlands.
- 3.8.14 Pierik, B. (2001). *Determination of the reliability and theoretical validity of the Clearance Diver barrier test*. Maastricht University, Maastricht, The Netherlands.
- 3.8.15 Senakham, T. (2002). *Physiological and manikin-based assessment of firefighter helmets*. Srinakharinwirot University, Thailand.
- 3.8.16 Jansen, A. (2003). *The effect of heat acclimation on physiological strain and cutaneous blood flow*. Maastricht University, Maastricht, The Netherlands.
- 3.8.17 Hoeve, G.J. (2003). *A comparison of short- and long-term heat exposures in eliciting heat adaptation*. Maastricht University, Maastricht, The Netherlands.
- 3.8.18 Pelkman, K.E. (2003). *Human heat adaptation: dynamics of the sweating response*. Maastricht University, Maastricht, The Netherlands.
- 3.8.19 van den Linden, M. (2003). *Human heat adaptation*. Maastricht University, Maastricht, The Netherlands.
- 3.8.20 Dekker, F. (2003). *Human heat adaptation*. Maastricht University, Maastricht, The Netherlands.
- 3.8.21 van den Broek, S. (2004). *Non-thermal factors in sweating*. Maastricht University, Maastricht, The Netherlands.
- 3.8.22 van Wegberg, V. (2004). *Non-thermal factors in sweating*. Maastricht University, Maastricht, The Netherlands.
- 3.8.23 van den Wijngaart, L.S. (2005). *The development of a prediction model for hydration and electrolyte supplementation*. Maastricht University, Maastricht, The Netherlands.
- 3.8.24 van den Heuvel, A.M.J. (2005). *The development of a hydration and electrolyte supplementation quadrant diagram for women*. Maastricht University, Maastricht, The Netherlands.
- 3.8.25 Engelen, L. (2005). *The physiological impact of wearing military body armour in the heat*. Maastricht University, Maastricht, The Netherlands.
- 3.8.26 van der Henst, C. (2005). *The psychophysical impact of wearing military body armour in the heat*. Maastricht University, Maastricht, The Netherlands.
- 3.8.27 Wilink, F. (2006). *Intra-segmental difference in the distribution of thermal sweating: the head and hands*. Vrije Universiteit, Amsterdam, The Netherlands.
- 3.8.28 Meijer, A. (2006). *Intra-segmental difference in the distribution of thermal sweating: the head and hands*. Maastricht University, Maastricht, The Netherlands.
- 3.8.29 Williams, Y. (2006). *Physiological evaluation of chemical and biological protective clothing*. Maastricht University, Maastricht, The Netherlands.
- 3.8.30 Machado-Moreira, C.A. (2006). *Pharmacological control of sweating*. Federal University of Minas Gerais, Belo Horizonte, Brazil.
- 3.8.31 Assink, M. (2006). *Non-thermal sweating on the upper limbs*. Maastricht University, Maastricht, The Netherlands.
- 3.8.32 van den Heuvel, A.M.J. (2007). *Metabolic heat strain in thermal protective clothing*. Maastricht University, Maastricht, The Netherlands.
- 3.8.33 Smith, F.M. (2007). *The sweating torso: regional variations in sweat secretion during exercise*. Maastricht University, Maastricht, The Netherlands.
- 3.8.34 Verhagen, S. (2007). *Thermal protective clothing and industrial health: the physiological impact of clothing during exercise in the heat*. Maastricht University, Maastricht, The Netherlands.
- 3.8.35 Plant, G. (2007). *Thermal and non-thermal influences on sweat secretion from the foot*. Maastricht University, Maastricht, The Netherlands.

- 3.8.36 Ruest, R.M. (2008). *Differentiating the thermal and psychological control of human eccrine sweating*. Swiss Federal Institute of Technology Zurich, Zurich, Switzerland.
- 3.8.37 van der Velde, J. (2008). *The effect of clothing layers and textile composition on physiological and perceived strain during work in protective clothing in a hot environment*. Maastricht University, Maastricht, The Netherlands.
- 3.8.38 Vosselman, M.J. (2008). *The relationship between cutaneous conductance and sweat secretion in response to thermal loading*. Maastricht University, Maastricht, The Netherlands.
- 3.8.39 van Dijk, M. (2008). *Metabolic heat loading when wearing thermal protective clothing during work in the heat*. Maastricht University, Maastricht, The Netherlands.
- 3.8.40 Wichitsranoija, J (2009). *Research training in cardiovascular and thermal physiology*. Khon Kaen University, Thailand.
- 3.8.41 van Dijk, W. (2010). *The neural control of sweating*. Maastricht University, Maastricht, The Netherlands.
- 3.8.42 Nykvist, Å. (2010). *The effect of prior heating and cooling upon thermoeffector thresholds*. Karolinska University, Stockholm, Sweden.
- 3.8.43 Powers, N. (2010). *Thermoeffector threshold displacements accompanying pre-exposure heating and cooling*. Grand Valley State University, Allendale, Michigan, U.S.A.
- 3.8.44 Tysoe, N. (2011). *Human dehydration: development of a research protocol to dehydrate and sustain hydration status for 24 hours*. Faculty of Biological Sciences, University of Leeds, Leeds, United Kingdom.
- 3.8.45 Frei, R. (2015). *Pressure-dependent sweating responses*. Swiss Federal Institute of Technology Zurich, Zurich, Switzerland.
- 3.8.46 Janssen, M. (2016). *Scaling of peak oxygen consumption in a homogeneous sample*. Maastricht University, Maastricht, The Netherlands.
- 3.8.47 Schwarck, J.B. (2016-2017). *Thermogenic and non-thermal recruitment of human eccrine sweat glands*. Kiel University, Kiel, Germany.

SECTION 4: RESEARCH FUNDING**Summary:**

- Research grants and contracts (1987-2018): 79
- Total research income (1987-2018): \$15,198,692
- Average income per grant (1987-2018): \$192,389
- Average annual research income at UOW: \$583,411

4.1 Research Grants (excluding GST):

- 4.1.1 1987-1988: **University of Otago Research Grant.** (New Zealand) \$7,000
Principal: N.A.S. Taylor
- 4.1.2 1988-1989: **University of Otago Research Grant.** (New Zealand) \$5,000
Principal: N.A.S. Taylor
- 4.1.3 1988-1989: **Roche Research Grant** (New Zealand) \$18,000
Principal: R.N. Marshall
Position: Co-investigator.
- 4.1.4 1992: **Australian Research Council.** (Small Grant Scheme) \$8,620
Principal: N.A.S. Taylor
- 4.1.5 1992: **Australian Sports Commission.**
Applied Sports Commission Research Program \$10,000
Principal: N.A.S. Taylor
- 4.1.6 1992-1994: **University of Wollongong Group Research Grant.** \$64,000
Group co-ordinator: N.A.S. Taylor
- 4.1.7 1993: **Australian Research Council.** (Small Grant Scheme) \$8,000
Principal: N.A.S. Taylor
- 4.1.8 1993: **Australian Institute of Nuclear Science and Engineering.**
(AINSE Grant 93/115) \$2,250
Principals: N.A.S. Taylor and I.L. Mackenzie
- 4.1.9 1994: **Australian Research Council.** (Small Grant Scheme) \$7,930
Principal: N.A.S. Taylor
- 4.1.10 1995: **Australian Research Council.** (Small Grant Scheme) \$12,373
Principal: N.A.S. Taylor
- 4.1.11 1995: **University of Wollongong Group Research Grant.** \$13,000
Group co-ordinator: S.B. Boutcher
Position: Co-investigator.
- 4.1.12 1995-1997: **Sandoz Foundation for Gerontological Research.** \$12,150
Principal: N.A.S. Taylor
- 4.1.13 1995-1996: **Defence Science and Technology Organisation.**
Aeronautical and Maritime Research Laboratory. \$22,480
Principal: N.A.S. Taylor
- 4.1.14 1995-1997: **Naval Medical Research Institute (USA).**
Environmental Physiology Department. \$18,000 (US\$10,000)
Principal: N.A.S. Taylor
- 4.1.15 1996: **Australian Institute of Nuclear Science and Engineering.**
(AINSE Grant 96/129) \$7,540
Principal: N.A.S. Taylor
- 4.1.16 1996: **Australian Research Council.** (Small Grant Scheme) \$8,000
Principal: N.A.S. Taylor
- 4.1.17 1996: **University of Wollongong Project Grant.** \$4,530
Principal: N.A.S. Taylor
- 4.1.18 1997: **Defence Science and Technology Organisation.**

	Aeronautical and Maritime Research Laboratory. Principal: N.A.S. Taylor	\$21,150
4.1.19	1997: Australian Institute of Nuclear Science and Engineering. (AINSE Grant 97/125) Principal: N.A.S. Taylor	\$2,500
4.1.20	1997-1998: Defence Science and Technology Organisation. Aeronautical and Maritime Research Laboratory. Principal: N.A.S. Taylor	\$36,000
4.1.21	1999-2001: Australian Research Council. Strategic Partnerships with Industry: Research and Training. Principals: J.R. Steele and N.A.S. Taylor	\$61,500
4.1.22	2000: Australian Research Council. (Small Grant Scheme) Principals: J.M. Stocks, N.A.S. Taylor and J. Greenleaf	\$5,000
4.1.23	2000: Department of Defence. Directorate of Health Policy. Principals: N.A.S. Taylor and H. Groeller	\$48,550
4.1.24	2000: NSW Fire Brigades. Principal: N.A.S. Taylor	\$36,418
4.1.25	2000: Melbourne Metropolitan Fire Brigade. Principal: N.A.S. Taylor	\$7,678
4.1.26	2001: Department of Defence. Directorate of Health Policy. Principals: N.A.S. Taylor, H. Groeller and P.L. McLennan	\$27,269
4.1.27	2001-2002: Department of Defence. Directorate of Health Policy. Principals: N.A.S. Taylor and H. Groeller	\$55,040
4.1.28	2001: Department of Defence. Directorate of Health Policy. Principals: N.A.S. Taylor, H. Groeller and P.L. McLennan	\$26,907
4.1.29	2001: Australian Mines and Metals Association. Principal: N.A.S. Taylor	\$4,950
4.1.30	2002: Australian Mines and Metals Association. Principal: N.A.S. Taylor	\$5,430
4.1.31	2002: Australian Protective Services. Principals: N.A.S. Taylor, H. Groeller and P.L. McLennan	\$4,850
4.1.32	2002: Department of Defence. Directorate of Health Policy. Principals: N.A.S. Taylor, H. Groeller and P.L. McLennan	\$17,200
4.1.33	2002: NSW Fire Brigades. Principal: N.A.S. Taylor	\$17,500
4.1.34	2002: Australian Protective Services. Principals: N.A.S. Taylor and H. Groeller	\$9,850
4.1.35	2002-03: Metropolitan Fire and Emergency Services Board. Principal: N.A.S. Taylor	\$68,180
4.1.36	2003-2004: NSW Ambulance Service. Principals: H. Groeller and N.A.S. Taylor	\$40,000
4.1.37	2003: Department of Defence. HMAS Waterhen, Sydney. Principals: H. Groeller and N.A.S. Taylor	\$50,853
4.1.38	2003: Defence Science and Technology Organisation. Aeronautical and Maritime Research Laboratory.	\$5,000

Principal: N.A.S. Taylor	
4.1.39 2004: NSW Fire Brigades.	\$6,000
Principal: N.A.S. Taylor	
4.1.40 2004: Defence Science and Technology Organisation.	
Aeronautical and Maritime Research Laboratory.	\$8,000
Principal: N.A.S. Taylor	
4.1.41 2004-2005: NSW Fire Brigades.	\$47,430
Principals: N.A.S. Taylor and R. Pennell (<i>Centre for Educational Development and Interactive Resources</i>)	
4.1.42 2005: Defence Science and Technology Organisation.	
Human Protection and Performance Division.	\$23,000
Principal: N.A.S. Taylor	
4.1.43 2005: Defence Science and Technology Organisation.	
Human Protection and Performance Division.	\$10,000
Principal: N.A.S. Taylor	
4.1.44 2005: NSW Fire Brigades.	\$27,174
Principals: H. Groeller and N.A.S. Taylor	
4.1.45 2005: NSW Fire Brigades.	\$13,270
Principals: H. Groeller and N.A.S. Taylor	
4.1.46 2006: Defence Science and Technology Organisation.	
Human Protection and Performance Division.	\$47,454
Principal: N.A.S. Taylor	
4.1.47 2006-2007: University Internationalisation Committee.	
University of Wollongong.	\$6,500
Principal: N.A.S. Taylor	
4.1.48 2006-2007: Meat and Livestock Australia.	
Meat and Livestock Australia and Cooperative Research Centre for Australian Weed Management.	\$103,000
Principal: N.A.S. Taylor	
4.1.49 2006-2007: Metropolitan Fire and Emergency Services Board.	\$82,368
Principal: N.A.S. Taylor	
4.1.50 2006-2009: Department of Defence.	
HMAS Waterhen, Sydney.	\$436,733
Principals: H. Groeller and N.A.S. Taylor	
4.1.51 2007: Defence Science and Technology Organisation.	
Human Protection and Performance Division.	\$31,024
Principal: N.A.S. Taylor	
4.1.52 2007: Defence Science and Technology Organisation.	
Human Protection and Performance Division.	\$32,040
Principal: N.A.S. Taylor	
4.1.53 2007: Defence Science and Technology Organisation.	
Human Protection and Performance Division.	\$30,263
Principal: N.A.S. Taylor	
4.1.54 2008: South Coast Equipment.	
Electrical safety (welding): sweat accumulation in clothing.	\$15,000
Principals: J. Norrish and N.A.S. Taylor	
4.1.55 2008: Defence Science and Technology Organisation.	
Human Protection and Performance Division.	\$52,005
Principals: N.A.S. Taylor, G.E. Peoples and M.A. Brown	
4.1.56 2008: W.L. Gore and Associates, GmbH	
Feldkirchen-Westerham, Germany.	\$26,880 (US\$25,000)

- Principals: N.A.S. Taylor and I.B. Mekjavic
- 4.1.57 2008: **NSW Fire Brigades.** \$101,760
Principals: N.A.S. Taylor, G.E. Peoples and M.A. Brown
- 4.1.58 2008: **Emergency Management Australia.** \$100,192
The Attorney-General's Department, Canberra.
Supplementary input \$14,008
Principal: N.A.S. Taylor
- 4.1.59 2009-2012: **Defence Science and Technology Organisation.** \$1,675,500
Human Protection and Performance Division.
Principals: N.A.S. Taylor, H. Groeller, P.L. McLennan, G.E. Peoples and D.E. McGhee
- 4.1.60 2009-2010: **NSW Fire Brigades.** \$46,009
Principals: N.A.S. Taylor, G.E. Peoples and H. Groeller
- 4.1.61 2009-2010: **Defence Science and Technology Organisation.** \$64,143
Human Protection and Performance Division.
Principal: N.A.S. Taylor
- 4.1.62 2009-2010: **Defence Science and Technology Organisation.** \$22,215
Human Protection and Performance Division.
Principals: G.E. Peoples and N.A.S. Taylor
- 4.1.63 2010: **Department of Environment, Climate Change and Water (NSW).** \$70,211
Contract for Professional Services.
Principals: J.A. Sampson, G.E. Peoples and N.A.S. Taylor
- 4.1.64 2011-2012: **NSW Fire Brigades.** \$134,262
Principals: N.A.S. Taylor, H. Groeller and J.A. Sampson
- 4.1.65 2011-2014: **Defence Science and Technology Organisation.** \$75,000
Human Protection and Performance Division.
Principals: N.A.S. Taylor and H. Groeller
- 4.1.66 2011-2012: **Australian Building Code Board.** \$57,360
Major Projects and Research.
Principal: N.A.S. Taylor
- 4.1.67 2012-2016: **Defence Science and Technology Organisation.** \$2,039,925
Human Protection and Performance Division.
Principals: N.A.S. Taylor, H. Groeller, G.E. Peoples, M.A. Brown and J.A. Sampson
- 4.1.68 2012: **Australian Building Code Board.** \$41,414
Major Projects and Research.
Principal: N.A.S. Taylor
- 4.1.69 2012: **Australian Building Code Board.** \$34,642
Major Projects and Research.
Principal: N.A.S. Taylor
- 4.1.70 2013-2017: **National Health and Medical Research Council.** \$2,498,842
Centres of Research Excellence.
Electromagnetic Bioeffects Research (1042464)
Australian Centre for Electromagnetic Bioeffect Research
Principals: R.J. Croft (UOW), J.W. Finnie, A.W. Wood, I. Yarovsky, P. Blumbergs, B. Martinac, E. Ivanova, R. Vink, N.A.S. Taylor (UOW) and M. Elwood
- 4.1.71 2014: **Hyogo Overseas Research Network.** \$6,104
International Fellowship Programme
Principals: N. Kondo (Kobe University) and N.A.S. Taylor
- 4.1.72 2014-2016: **Australian Research Council.**

- Discovery Project (DP140102866). \$510,000
Principals: J. Brown (University of NSW), N.A.S. Taylor (UOW) and M. Fitzharris (Monash University)
- 4.1.73 2014-2015: **NRMA (National Roads and Motorists' Association).**
Community Grants Programme. \$117,735
Principals: L. de Rome (University of NSW), J. Brown (University of NSW), N.A.S. Taylor (UOW), O. Troynikov (RMIT University) and R.J. Croft (UOW)
- 4.1.74 2015: **University of Wollongong - Research Infrastructure Block Grant.**
Hot Science: thermography for ecology, human physiology and bio-mimicry engineering. \$75,000
Principals: A. Davis, R. Bradstock, A. Munn, S. Robinson, D. Ayre, N.A.S. Taylor, B. Stappenbelt, J. Foroughi, K. French, P. Byrne and J. Wallman
- 4.1.75 2015: **University of Wollongong - Research Infrastructure Block Grant.**
Laser-Speckle Imaging Camera. \$80,256
Principals: I. Wright, P. McLennan, G. Peoples, H. Groeller, N.A.S. Taylor, T. Okley, D. Cliff and R. Dyson
- 4.1.76 2015-2016: **Coal Services Health and Safety Trust.**
Establishing a *bona fide* physical assessment and performance standard for emergency egress from underground coal mines. \$100,202
Principals: H. Groeller and N.A.S. Taylor
- 4.1.77 2018-2021: **Defence Science and Technology Group.**
Human Protection and Performance Division. \$2,982,400
Principals: H. Groeller, N.A.S. Taylor, J.A. Sampson, P.L. McLennan and G.E. Peoples
- 4.1.78 2017: **University of Wollongong - Research Online Requirement scheme.**
Equipment purchase (2017/REG-S/01): *Vivid iq* BT12 premium ultrasound system plus EchoPAC 201 software. \$75,000
Principals: P.L. McLennan, G.E. Peoples, H. Groeller, I Wright, M. Brown and N.A.S. Taylor
- 4.1.79 2018-2022: **National Health and Medical Research Council.**
Centres of Research Excellence. \$2,499,672
Electromagnetic Bioeffects Research (1135076)
Australian Centre for Electromagnetic Bioeffect Research
Principals: R.J. Croft (UOW), A.W Wood, J.W. Finnie, B. Martinac, P. Wiedermann, I. Yarovsky, E. Ivanova, S. Loughran (UOW), N.A.S. Taylor (UOW).

4.2 Research Fellowships:

- 4.2.1 1990: **National Research Council Resident Research Associateship.**
Naval Medical Research Institute (U.S.A.). \$US38,800
Resident Research Associate: N.A.S. Taylor

4.3 Research Travel Grants:

- 4.3.1 1988: **University of Otago Travel Grant** \$3,000
Attendance at the July Physiological Society Meeting (Cambridge, England), and the Third International Environmental Ergonomics Conference (Helsinki, Finland).
- 4.3.2 1989: **University of Otago Travel Grant** \$1,000
Attendance at the Undersea Hyperbaric Medical Society Workshop: Physiological and bioengineering aspects of underwater breathing apparatus (Buffalo, U.S.A.).
- 4.3.3 1989: **Undersea Hyperbaric Medical Society** \$3,100

Invited speaker: Physiological and bioengineering aspects of underwater breathing apparatus. Buffalo, U.S.A.

- 4.3.4 1990: **National Research Council (U.S.A.)** \$US2,440
1990 Joint Meeting on Diving and Hyperbaric Medicine (Undersea Hyperbaric Medical Society, European Undersea Biomedical Society, and International Hyperbaric Congress), Amsterdam, Netherlands.
- 4.3.5 2014: **Hyogo Overseas Research Network.**
International Fellowship Programme \$6,104

SECTION 5: PUBLICATION HISTORY**Table 1: Publication Summary.**

Publication category	Format	Count
Refereed Journal Publications	Peer-reviewed manuscripts	125
Editorials in Refereed Journals	Editorials	6
Monographs	Monographs	7
Contributions to Monographs	Book chapters	37
International and National Conference presentations	Full conference papers	63
International and National Conference presentations	Abstracts in refereed journals	87
International and National Conference presentations	Abstracts in proceedings	101
Governmental and Commercial Reports	Technical reports	68
Professional, Industry-Based and Lay Publications	Professional and media reports	7
International Workshops	Lecture and laboratory series	5
TOTAL		506

Table 2: Citation Summary.

Google scholar: <http://scholar.google.com.au/citations?hl=en&user=GFnL3OsAAAAJ>

Category	All citations (1986 onwards)	Last 5 years
Citations	4752	2551
H-index	39	27
i10-index	96	67

Table 3: Summary of Invited Presentations and Publications.

Category	Format	Count
Refereed Journal Publications	Peer-reviewed manuscripts	20
Contributions to Monographs	Books and book chapters	12
International and National Conferences	Keynote presentations	19
International and National Conferences	Full papers and abstracts	29
International Workshops	Lecture and laboratory series	5
TOTAL		85

5.1 Research Dissertations:

5.1.1 Taylor, N.A.S. (1983). *Physiological responses to thermal stress: a comparative study of male and female subjects at rest under conditions of dry and moist heat*. Honours Thesis. University of Queensland, Brisbane, Australia.

5.1.2 Taylor, N.A.S. (1984). *Metabolic changes and perceived pain in human muscle during*

ischaemic, isometric exercise. Masters Project. Faculty of Medical Science, King's College, London, University of London, London, England.

- 5.1.3 Taylor, N.A.S. (1987). *Effect of breathing gas pressure on respiratory mechanics of immersed man*. Doctoral Dissertation. Faculty of Applied Science, Simon Fraser University, Vancouver, Canada.

5.2 Editorials in Refereed Journals:

- 5.2.1 Taylor, N.A.S. (2001). Foreword. *Journal of Thermal Biology*. 26(4-5):247.
- 5.2.2 Mekjavic, I.B., Taylor, N.A.S., and Di Prampero, P.E. (2008). Foreword to the special issue on Environmental Ergonomics. *European Journal of Applied Physiology*. 104(2):127-129.
DOI: 10.1007/s00421-008-0781-z
- 5.2.3 Shido, O., Watanabe, T., Taylor, N.A.S., Havenith, G. (2010). Introduction. *European Journal of Applied Physiology*. 109:1-3.
DOI: 10.1007/s00421-010-1425-7
- 5.2.4 Taylor, N.A.S. (2013). Thematic Reviews: Series I: Space physiology. *European Journal of Applied Physiology*. 113(7):1643.
DOI: 10.1007/s00421-012-2549-8
- 5.2.5 Taylor, N.A.S. (2013). Thematic Reviews: Series II: Physiological employment standards. *European Journal of Applied Physiology*. 113(10):2433.
DOI: 10.1007/s00421-013-2643-6
- 5.2.6 George, K.P., Fadel, P.J., and Taylor, N.A.S. (2013). Thematic Reviews: Series III: Blood pressure regulation outside the comfort zone. *European Journal of Applied Physiology*. 114(3):443-444.
DOI 10.1007/s00421-013-2796-3

5.3 Refereed Journal Publications:

- 5.3.1 Taylor, N.A.S., and Wilkinson, J.G. (1986). Exercise-induced skeletal muscle growth: hypertrophy or hyperplasia? *Sports Medicine*. 3(3):190-200.
DOI: 10.2165/00007256-198603030-00003 PubMed ID: 3520748
- 5.3.2 Taylor, N.A.S. (1986). Eccrine sweat glands: adaptations to physical training and heat acclimation. *Sports Medicine*. 3(6):387-397.
DOI: 10.2165/00007256-198603060-00001 PubMed ID: 3538269
- 5.3.3 Taylor, N.A.S., and Morrison, J.B. (1989). Lung centroid pressure in immersed man. *Undersea Biomedical Research*. 16(1):3-17.
PubMed ID: 2929053
- 5.3.4 Marshall, R.N., and Taylor, N.A.S. (1990). The skeletal muscle force velocity relationship: 1. Its significance and its measurement. *New Zealand Journal of Sports Medicine*. 18(1):8-10.
- 5.3.5 Taylor, N.A.S. (1990). Computer integrated measurement of pulmonary compliance. *Computers in Biology and Medicine*. 20(1):55-64.
DOI: 10.1016/0010-4825(90)90044-P PubMed ID: 2328578
- 5.3.6 Taylor, N.A.S., Stanley, S.N., Cotter, J.D., McNair, P.J., and Marshall, R.N. (1990). The skeletal muscle force velocity relationship: 2. Its application to functional assessment for training and rehabilitation. *New Zealand Journal of Sports Medicine*. 18(2):28-33.
- 5.3.7 Taylor, N.A.S., and Morrison, J.B. (1990). Effects of breathing gas pressure on pulmonary function and work capacity during immersion. *Undersea Biomedical Research*. 17(5):413-428.
PubMed ID: 2219550
- 5.3.8 Morrison, J.B., and Taylor, N.A.S. (1990). Measurement of static and dynamic pulmonary work during pressure breathing. *Undersea Biomedical Research*. 17(5):453-467.

PubMed ID: 2219553

- 5.3.9 Marshall, R.N., Mazur, S.M., and Taylor, N.A.S. (1990). Three-dimensional surfaces for human muscle kinetics. *European Journal of Applied Physiology*. 61(3-4):263-270.
DOI: 10.1007/BF00357610 PubMed ID: 2282911
- 5.3.10 Taylor, N.A.S. (1990). Prediction of aerobic power in sedentary and endurance-trained subjects. *Journal of Physical Education and Sports Sciences*. 2(2):12-22. **Invited Paper**.
- 5.3.11 Taylor, N.A.S., Cotter, J.D., Stanley, S.N., and Marshall, R.N. (1991). Functional torque-velocity and power-velocity characteristics of elite athletes. *European Journal of Applied Physiology*. 62(2):116-121.
DOI: 10.1007/BF00626766 PubMed ID: 2022199
- 5.3.12 Taylor, N.A.S., and Morrison, J.B. (1991). Lung volume changes in response to altered breathing gas pressure during upright immersion. *European Journal of Applied Physiology*. 62(2):122-129.
DOI: 10.1007/BF00626767 PubMed ID: 2022200
- 5.3.13 Taylor, N.A.S., Sanders, R.H., Howick, E.I., and Stanley, S.N. (1991). Static and dynamic assessment of the Biodex dynamometer. *European Journal of Applied Physiology*. 62(3):180-189.
DOI: 10.1007/BF00643739 PubMed ID: 2044524
- 5.3.14 Taylor, N.A.S., and Morrison, J.B. (1991). Pulmonary flow-resistive work during hydrostatic loading. *Acta Physiologica Scandinavica*. 142(3):307-312.
DOI: 10.1111/j.1748-1716.1991.tb09162.x PubMed ID: 1927545
- 5.3.15 Stanley, S.N., and Taylor, N.A.S. (1993). Isokinematic muscle mechanics in four groups of women of increasing age. *European Journal of Applied Physiology*. 66(2):178-184.
DOI: 10.1007/BF01427060 PubMed ID: 8472701
- 5.3.16 Maw, G.J., Boutcher, S.B., and Taylor, N.A.S. (1993). Ratings of perceived exertion and affect in hot and cool environments. *European Journal of Applied Physiology*. 67(2):174-179.
DOI: 10.1007/BF00376663 PubMed ID: 8223525
- 5.3.17 Taylor, N.A.S., Clarke, J.R. (1993). Pulmonary function hysteresis during compression to, and decompression from 31.3 ATA. *Acta Physiologica Scandinavica*. 148(4):371-378.
DOI: 10.1111/j.1748-1716.1993.tb09572.x PubMed ID: 8213192
- 5.3.18 Taylor, N.A.S., and Morrison, J.B. (1993). Static and dynamic pulmonary compliance during upright immersion. *Acta Physiologica Scandinavica*. 149(4):413-417.
DOI: 10.1111/j.1748-1716.1993.tb09637.x PubMed ID: 8128889
- 5.3.19 Smith, T.B.R.J., Hopkins, W.G., and Taylor, N.A.S. (1994). Respiratory responses of elite oarsmen, former oarsmen and highly trained non-rowers during rowing, cycling and running. *European Journal of Applied Physiology*. 69(1):44-49.
DOI: 10.1007/BF00867926 PubMed ID: 7957155
- 5.3.20 Patterson, M.J., Warlters, D., and Taylor, N.A.S. (1994). Attenuation of the cutaneous blood flow response during combined exercise and heat stress. *European Journal of Applied Physiology*. 69(4):367-369.
DOI: 10.1007/BF00392045 PubMed ID: 7851375
- 5.3.21 Solomon, C., and Taylor, N.A.S. (1994). The effects of exercise duration on respiratory gas exchange dynamics. *European Journal of Applied Physiology*. 69(5):421-428.
DOI: 10.1007/BF00865406 PubMed ID: 7875139
- 5.3.22 Stanley, S.N., Marshall, R.N., Tilyard, M.W., and Taylor, N.A.S. (1994). Skeletal muscle mechanics in osteoporotic and non-osteoporotic post-menopausal women. *European Journal of Applied Physiology*. 69(5):450-455.
DOI: 10.1007/BF00865411 PubMed ID: 7875144
- 5.3.23 Taylor, N.A.S., Cotter, J.D., and Griffiths, R.F. (1994). Epidemiology of hypothermia: fatalities and hospitalisations in New Zealand. *Australian and New Zealand Journal of Medicine*. 24(6):705-710.

- DOI: 10.1111/j.1445-5994.1994.tb01788.x PubMed ID: 7717924
- 5.3.24 Cotter, J.D., and Taylor, N.A.S. (1995). Physiological assessment of the RNZAF constant wear immersion suit: laboratory and field trials. *Aviation, Space, and Environmental Medicine*. 66(6):528-536.
PubMed ID: 7646402
- 5.3.25 Boutcher, S.H., Maw, G.J., and Taylor, N.A.S. (1995). Forehead skin temperature and thermal sensation during exercise in cool and thermoneutral environments. *Aviation, Space, and Environmental Medicine*. 66(11):1058-1062.
PubMed ID: 8588795
- 5.3.26 Maw, G.J., Mackenzie, I.L., and Taylor, N.A.S. (1995). Redistribution of body fluids during postural manipulations. *Acta Physiologica Scandinavica*. 155(2):157-163.
DOI: 10.1111/j.1748-1716.1995.tb09960.x PubMed ID: 8669288
- 5.3.27 Taylor, N.A.S., Allsopp, N.K., and Parkes, D.G. (1995). Preferred room temperature of young versus aged males: the influence of thermal sensation, thermal comfort and affect. *Journals of Gerontology Series A: Biological Sciences and Medical Sciences*. 50(4):M216-M221.
DOI: 10.1093/gerona/50A.4.M216 PubMed ID: 7614244
- 5.3.28 Patterson, M.J., Cotter, J.D., and Taylor, N.A.S. (1995). Thermal tolerance following artificially-induced polycythaemia. *European Journal of Applied Physiology*. 71(5):416-423.
DOI: 10.1007/BF00635875 PubMed ID: 8565973
- 5.3.29 Cotter, J.D., Patterson, M.J., and Taylor, N.A.S. (1995). The topography of eccrine sweating in humans during exercise. *European Journal of Applied Physiology*. 71(6):549-554.
DOI: 10.1007/BF00238559 PubMed ID: 8983924
- 5.3.30 Maw, G.J., Mackenzie, I.L., Comer, D., and Taylor, N.A.S. (1996). Whole-body hyperhydration in endurance-trained males determined using radionuclide dilution. *Medicine and Science in Sports and Exercise*. 28(8):1038-1044.
DOI: 10.1097/00005768-199608000-00014 PubMed ID: 8871914
- 5.3.31 Regan, J.M., Macfarlane, D.J., and Taylor, N.A.S. (1996). An evaluation of the role of skin temperature during heat adaptation. *Acta Physiologica Scandinavica*. 158(4):365-375.
DOI: 10.1046/j.1365-201X.1996.561311000.x PubMed ID: 8971258
- 5.3.32 Moses, R.G., Patterson, M.J., Regan, J.M., Chaunchaiyakul, R., Taylor, N.A.S., and Jenkins, A.B. (1997). A non-linear effect of ambient temperature on apparent glucose tolerance. *Diabetes Research and Clinical Practice*. 36:35-40.
DOI: 10.1016/S0168-8227(97)01391-0 PubMed ID: 9187413
- 5.3.33 Cotter, J.D., Patterson, M.J., and Taylor, N.A.S. (1997). Sweat distribution before and after repeated heat exposure. *European Journal of Applied Physiology*. 76(2):181-186.
DOI: 10.1007/s004210050232 PubMed ID: 9272778
- 5.3.34 Taylor, N.A.S., Patterson, M.J., Cotter, J.D., and Macfarlane, D.J. (1997). Effects of artificially-induced anaemia on sudomotor and cutaneous blood flow responses to heat stress. *European Journal of Applied Physiology*. 76(4):380-386.
DOI: 10.1007/s004210050265 PubMed ID: 9349656
- 5.3.35 Patterson, M.J., Cotter, J.D., and Taylor, N.A.S. (1998). Human sudomotor responses to heating and cooling upper body skin surfaces: differential cutaneous thermal sensitivity. *Acta Physiologica Scandinavica*. 163(3):289-296.
DOI: 10.1046/j.1365-201x.1998.00379.x PubMed ID: 9715741
- 5.3.36 Maw, G.J., Mackenzie, I.L., and Taylor, N.A.S. (1998). Human body-fluid distribution during exercise in hot, temperate and cool environments. *Acta Physiologica Scandinavica*. 163(3):297-304.
DOI: 10.1046/j.1365-201x.1998.00380.x PubMed ID: 9715742
- 5.3.37 Taylor, N.A.S., and Morrison, J.B. (1999). Static respiratory muscle work during

immersion with positive and negative respiratory loading. *Journal of Applied Physiology*. 87(4):1397-1403.

PubMed ID: 10517770

- 5.3.38 Taylor, N.A.S., Osborne, M.A., Bube, T.L.A., and Stocks, J.M. (1999). Cardiorespiratory dynamics: sensitivity of the on-transition to endurance-training status. *European Journal of Applied Physiology*. 80(5):505-507.
DOI: 10.1007/s004210050625 PubMed ID: 10502087
- 5.3.39 Maw, G.J., Mackenzie, I.L., and Taylor, N.A.S. (2000). Can skin temperature manipulation, with minimal core temperature change, influence plasma volume in resting humans? *European Journal of Applied Physiology*. 81(1):159-162.
DOI: 10.1007/PL00013790 PubMed ID: 10552282
- 5.3.40 Taylor, N.A.S. (2000). Principles and practices of heat adaptation. *Journal of the Human-Environment System*. 4(1):11-22. **Invited Review**.
DOI: 10.1618/jhes.4.11
- 5.3.41 Booth, J.D., Wilsmore, B.R., MacDonald, A.D., Zeyl, A., McGhee, S., Calvert, D., Marino, F.E., Storlien, L.H., and Taylor, N.A.S. (2001). Whole-body pre-cooling does not alter human muscle metabolism during sub-maximal exercise in the heat. *European Journal of Applied Physiology*. 84(6):587-590.
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- 5.6.58 van den Heuvel, A.M.J., Croft, R.J., Haberley, B.J., Hoyle, D.J.R., and Taylor, N.A.S. (2013). The affects of heat strain and dehydration on cognitive function. In: Cotter, J.D., Lucas, S.J.E., and Mündel, T. (Editors). *Environmental Ergonomics XV. Proceedings of the Fifteenth International Conference on Environmental Ergonomics*. Queenstown, New Zealand. February 11th-15th, 2013. Pp. 72-74. **ISBN: 978-0-473-22438-7.**
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- 5.6.60 Taylor, N.A.S. (2015). Physiological strain in firefighters: contributions and unlikely solutions. *International Symposium on Firefighters' Protective Equipment and Heat Strain*. College of Human Ecology, Seoul National University, Seoul, Republic of Korea. April 8th, 2015. Pp. 4-25. **Invited Keynote Presentation. [Presented without an abstract].**
- 5.6.61 de Rome, L., Taylor, N.A.S., Troynikov, O., Hurren, C., Fitzharris, M., Croft, R.J., and Brown, J. (2015). Motorcycle protective clothing: physiological and perceptual barriers to its summer use. *Proceedings of the 2015 Australasian Road Safety Conference*. Gold Coast, Australia. October 14th-16th, 2015. Pp. 1-5.
- 5.6.62 Taylor, N.A.S. (2016). How humans adapt to exercising and working in the tropics. *Science of Sport, Exercise and Physical Activity in the Tropics*. Conference Proceedings. Townsville, Australia. September 7th-9th, 2016. Pp. 11-12. **Invited Keynote Presentation.**
- 5.6.63 Taylor, N.A.S. (2016). Intelligent solutions to thermal challenges in the workplace. *Textile International Forum and Exhibition 2016 - Proceedings*. Taipei, Taiwan. September 27th-29th, 2016. Pp. S3-5-48. **Invited Conference Presentation.**

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- 5.7.3 Morrison, J.B., and Taylor, N.A.S. (1988). Breathing gas pressure and its effect upon hyperbaric, immersed exercise in man. *Journal of Physiology*. 407:37P.

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- 5.7.9 Doubt, T.J., Roberts, J.M., and Taylor, N.A.S. (1991). Effects of pyrodostigmine upon respiratory control while breathing 100% O₂ during warm water exercise. *The FASEB Journal*. 5(4):A768.

Associated Conference: *Federation of American Societies for Experimental Biology*. Annual Meeting, Atlanta, U.S.A. April 21-25th, 1991.

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- 5.7.13 Clarke, J.R., Carlson, N.A., Taylor, N.A.S., and Tresansky, G. (1991). Testing predictions of exercise and resistive loading tolerance at 450 metres. *Undersea Biomedical Research*. 18(Supplement):96-97.

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- 5.7.22 Maw, G.J., Mackenzie, I.L., and Taylor, N.A.S. (1993). Changes in the ratio of whole-body to venous haematocrit affect the measurement of plasma volume during exercise. *Proceedings of the Australian Physiological and Pharmacological Society*. 24(2):150P.
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Associated Conference: *The Sixty-Sixth Meeting of the Australian Physiological and Pharmacological Society*. Brisbane, Australia. September 27th-October 1st, 1998.
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Associated Conference: *The Sixty-Sixth Meeting of the Australian Physiological and Pharmacological Society*. Brisbane, Australia. September 27th-October 1st, 1998.
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Associated Conference: *The Forty-sixth Annual Meeting of the American College of Sports Medicine*. Seattle, U.S.A. June 2nd-5th, 1999.
- 5.7.44 Wilsmore, B.R., Cotter, J.D., and N.A.S. Taylor. (1999). Individual characteristics and exercising core temperature. *Medicine and Science in Sports and Exercise*. 31(5):S310.
Associated Conference: *The Forty-sixth Annual Meeting of the American College of Sports Medicine*. Seattle, U.S.A. June 2nd-5th, 1999.
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Associated Conference: *The Sixty-Seventh Meeting of the Australian Physiological and Pharmacological Society*. Newcastle, Australia. September 27th-29th, 1999.

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Associated Conference: *The Sixty-Seventh Meeting of the Australian Physiological and Pharmacological Society*. Newcastle, Australia. September 27th-29th, 1999.

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Associated Conference: *The Sixty-Seventh Meeting of the Australian Physiological and Pharmacological Society*. Newcastle, Australia. September 27th-29th, 1999.

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Associated Conference: *Proceedings of The Physiological Society*. Glasgow, Scotland. September 14-16th, 1999.

- 5.7.51 Taylor, N.A.S., Groeller, H., Booth, J.D., and Walker, R. (2001). Review and evaluation of Royal Australian Navy Clearance Divers' tasks and physical assessments. *Undersea and Hyperbaric Medicine*. 28(Supplement):21.

Associated Conference: *Undersea and Hyperbaric Medical Society*, Annual Scientific Meeting. San Antonio, U.S.A. June 14th-16th, 2001.

- 5.7.52 Gordon, C.J., Fogarty, A.L., Greenleaf, J.E., Taylor, N.A.S., and Stocks, J.M. (2001). Plasma volume measurement: comparisons during short-term thermoneutral and cold-water immersion. *Proceedings of the Australian Physiological and Pharmacological Society*. 32(1 [Supplement 1]):43P.

Associated Conference: *International Thermal Physiology Symposium*. Wollongong, Australia. September 2nd- 6th, 2001.

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Associated Conference: *International Thermal Physiology Symposium*. Wollongong, Australia. September 2nd- 6th, 2001.

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of the Australian Physiological Society. 35:76P.

Associated Conference: *The Australian Health and Medical Research Congress*. Sydney, Australia. November 21st-26th, 2004.

- 5.7.56 Haley, C.D., Gordon, C.J., Taylor, N.A.S., and Jenkins, A.B. (2004). Non-thermal mechanisms may modulate novel high-amplitude oscillations in skin blood flow. *Proceedings of the Australian Physiological Society*. 35:73P.
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- 5.7.58 Haley, C.D., Gordon, C.J., Taylor, N.A.S., and Jenkins, A.B. (2005). High-amplitude oscillations in human skin blood flow are distinct from known cardiac or respiratory influences. *Proceedings of the Australian Physiological Society*. 36:142P.
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- 5.7.59 Machado-Moreira, C.A., Caldwell, J.N., Meijer, A.K., Wilmink, F., and Taylor, N.A.S. (2006). Non-thermal sweating in humans: an investigation of mental sweating from non-glabrous skin surfaces. *Proceedings of the Australian Physiological Society*. 37:93P.
Associated Conference: *ComBio2006: A joint meeting of the Australian Physiological Society, the Australian Society for Biochemistry and Molecular Biology, the Australian Society of Plant Scientists, the Australia and New Zealand Society for Cell and Developmental Biology, the New Zealand Society for Biochemistry and Molecular Biology and the New Zealand Society of Plant Physiologists*. Brisbane, Australia. September 24th-28th, 2006. P159.
- 5.7.60 Caldwell, J.N., van den Heuvel, A.M.J., Patterson, M.J., and Taylor, N.A.S. (2007). Whole-body cooling during hyperthermia: physiology versus physics. *Proceedings of the Australian Physiological Society*. 38:117P.
Associated Conference: *A joint meeting of the Australian Physiological Society and the Australian Society for Biophysics*. Newcastle, Australia. December 2nd-5th, 2007.
- 5.7.61 Machado-Moreira, C.A., and Taylor, N.A.S. (2007). Inter-segmental distribution of emotional sweating. *Proceedings of the Australian Physiological Society*. 38:171P.
Associated Conference: *A joint meeting of the Australian Physiological Society and the Australian Society for Biophysics*. Newcastle, Australia. December 2nd-5th, 2007.
- 5.7.62 Machado-Moreira, C.A., Barry, R.J., Vosselman, M.J., and Taylor, N.A.S. (2009). Thermal and non-thermal sweating: what you see is not necessarily what you get. *Journal of Physiological Sciences*. 59(Supplement 1):167.
Associated Conference: *XXXVI International Congress of Physiological Sciences*. Kyoto, Japan. July 27th-August 1st, 2009.
- 5.7.63 Machado-Moreira, C.A., McLennan, P.L., Lillioja, S., van Dijk, W., Caldwell, J.N., and Taylor, N.A.S. (2010). The local dynamics of thermal sweat suppression following a systemic cholinergic blockade. *Proceedings of the Australian Physiological Society*. 41:82P.
Associated Conference: *Australian Physiological Society*. Adelaide, Australia. November 28th-December 1st, 2010. <http://www.aups.org.au/Proceedings/41/82P/>
- 5.7.64 Machado-Moreira, C.A., McLennan, P.L., Lillioja, S., van Dijk, W., Caldwell, J.N., and Taylor, N.A.S. (2010). Do non-cholinergic efferent pathways have a functional relevance during the thermal and non-thermal stimulation of human eccrine sweat glands? *Proceedings of the Australian Physiological Society*. 41:83P.
<http://www.aups.org.au/Proceedings/41/83P/>

Associated Conference: *Australian Physiological Society*. Adelaide, Australia. November 28th-December 1st, 2010.

- 5.7.65 Sampson, J.A., McAndrew, D., Taylor, N.A.S., and Groeller, H. (2011). The impact of contraction velocity on amortisation and electromyographic activity during heavy-load resistance exercise. *British Journal of Sports Medicine*. 45(15):A1.

Associated Conference: *International Sports Science and Sports Medicine Conference*. Newcastle, England. August 18 -20th, 2011.

- 5.7.66 Notley, S.R., Park, J., Tagami, K., Ohnishi, N., Kenny, G.P., and Taylor, N.A.S. (2014). An interaction of morphology in the modulation of evaporative heat loss during exercise. *Proceedings of the Australian Physiological Society*. 45:75P.

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Associated Conference: *Australian Physiological Society*. Brisbane, Australia. November 30th-December 3rd, 2014.

- 5.7.67 Grönkvist, M., Keramidis, M.E., Taylor, N.A.S., and Eiken, O. (2014). Intraocular pressure and cerebral oxygenation during prolonged headward acceleration. *Aviation, Space, and Environmental Medicine*. 85(3):353.

Associated Conference: *Eighty-fifth Annual Scientific Meeting of Aerospace Medical Association*. San Diego, California, U.S.A. May 11- 15th, 2014.

- 5.7.68 Taylor, N.A.S., Notley, S.R., Burdon, C.A., Taylor, E.A., and Ohnishi, N. (2015). Is the dermatomal recruitment of sweating a physiological reality or a misinterpretation? *Extreme Physiology and Medicine*. 4(Supplement 1):A17.

<http://www.extremephysiolmed.com/supplements/4/S1>

Associated Conference: *Sixteenth International Conference on Environmental Ergonomics*. Portsmouth, England. June 28th-July 3rd, 2015.

- 5.7.69 de Rome, L., Taylor, E.A., Croft, R.J., Brown, J., and Taylor, N.A.S. (2015). Can motorcycle riding in Australia really be that thermally stressful? *Extreme Physiology and Medicine*. 4(Supplement 1):A20.

<http://www.extremephysiolmed.com/supplements/4/S1>

Associated Conference: *Sixteenth International Conference on Environmental Ergonomics*. Portsmouth, England. June 28th-July 3rd, 2015.

- 5.7.70 Burdon, C.A., Tagami, K., Park, J., Caldwell, J.N., and Taylor, N.A.S. (2015). Does the skin of mildly hyperthermic individuals display local variations in thermosensitivity for the control of skin blood flow? *Extreme Physiology and Medicine*. 4(Supplement 1):A94.

<http://www.extremephysiolmed.com/supplements/4/S1>

Associated Conference: *Sixteenth International Conference on Environmental Ergonomics*. Portsmouth, England. June 28th-July 3rd, 2015.

- 5.7.71 Notley, S.R., Park, J., Tagami, K., Ohnishi, N., and Taylor, N.A.S. (2015). Individual differences in thermoeffector function in the heat: morphological variations help determine effector activation. *Extreme Physiology and Medicine*. 4(Supplement 1):A102.

<http://www.extremephysiolmed.com/supplements/4/S1>

Associated Conference: *Sixteenth International Conference on Environmental Ergonomics*. Portsmouth, England. June 28th-July 3rd, 2015.

- 5.7.72 Patterson, M.J., Stocks, J.M., and Taylor, N.A.S. (2015). Compartmental changes in the body-fluid contributions to the plasma volume restoration during recovery from dehydration following heat acclimation. *Extreme Physiology and Medicine*. 4(Supplement 1):A108.

<http://www.extremephysiolmed.com/supplements/4/S1>

Associated Conference: *Sixteenth International Conference on Environmental Ergonomics*. Portsmouth, England. June 28th-July 3rd, 2015.

- 5.7.73 Burdon, C.A., Tagami, K., Park, J., Caldwell, J.N., and Taylor, N.A.S. (2015). Cutaneous thermosensitivity differences among the face, hand and thigh appear not to exist for skin blood flow during normothermic states. *Extreme Physiology and Medicine*.

4(Supplement 1):A116.

<http://www.extremephysiolmed.com/supplements/4/S1>

Associated Conference: *Sixteenth International Conference on Environmental Ergonomics*. Portsmouth, England. June 28th-July 3rd, 2015.

- 5.7.74 Caldwell, J.N., Nykvist, Å., Powers, N., Notley, S.R., and Taylor, N.A.S. (2015). The impact of thermal pre-conditioning on cutaneous vasomotor and shivering thresholds.

Extreme Physiology and Medicine. 4(Supplement 1):A117.

<http://www.extremephysiolmed.com/supplements/4/S1>

Associated Conference: *Sixteenth International Conference on Environmental Ergonomics*. Portsmouth, England. June 28th-July 3rd, 2015.

- 5.7.75 Ohnishi, N., Notley, S.R., Park, J., Tagami, K., Burdon, C.A., Taylor, E.A., and Taylor, N.A.S. (2015). Postural influences on sweating: exploring the effects of gravity and pressure.

Extreme Physiology and Medicine. 4(Supplement 1):A154.

<http://www.extremephysiolmed.com/supplements/4/S1>

Associated Conference: *Sixteenth International Conference on Environmental Ergonomics*. Portsmouth, England. June 28th-July 3rd, 2015.

- 5.7.76 Bowes, H.M., Burdon, C.A., and Taylor, N.A.S. (2015). The scaling of human basal metabolic rate in adult males.

Proceedings of the Australian Physiological Society. 46:54P.

<http://www.aups.org.au/Proceedings/46/54P/>

Associated Conference: *Australian Physiological Society*. Hobart, Australia. November 29th-

December 2nd, 2015.

- 5.7.77 Notley, S.R., Park, J., Tagami, K., Ohnishi, N., and Taylor, N.A.S. (2015). Can variations in body morphology explain gender-related differences in heat loss?

Proceedings of the Australian Physiological Society. 46:57P. <http://www.aups.org.au/Proceedings/46/57P/>

Associated Conference: *Australian Physiological Society*. Hobart, Australia. November 29th-

December 2nd, 2015.

- 5.7.78 Peoples, G.E., Lee, D.S., Notley, S.R., and Taylor, N.A.S. (2016). The effects of thoracic load carriage on maximal work tolerance and acceptable work duration.

Applied Physiology, Nutrition, and Metabolism. 41(6 [Supplement 2]):S190.

Associated Conference: *Second International Conference on Physical Employment Standards*.

Canmore, Alberta, Canada. August 23rd-26th, 2015. Pp. 46-47.

- 5.7.79 Notley, S.R., Taylor, E.A., Ohnishi, N., and Taylor, N.A.S. (2017). Evidence that cutaneous vasomotor adaptation may be influenced by the nature of the heat-acclimation method.

The FASEB Journal. 31(Supplement 1):1085.3.

Associated Conference: *Experimental Biology*. Chicago, U.S.A. April 22nd-26th, 2017.

- 5.7.80 Bowes, H.M., Burdon, C.A., and Taylor, N.A.S. (2017). The allometric scaling of aerobic power in adult humans, across the physiological range.

Proceedings of the Australian Physiological Society. 48:117P. <http://www.aups.org.au/Proceedings/48/117P/>

Associated Conference: *Australian Physiological Society*. Melbourne, Australia. November

19th-22nd, 2017.

- 5.7.81 Hingley, L., Caldwell, J.N., Taylor, N.A.S., Peoples, G.E. (2017). Thoraco-pulmonary mechanical perturbations accompanying thoracic load carriage.

Proceedings of the Australian Physiological Society. 48:114P. <http://www.aups.org.au/Proceedings/48/114P/>

Associated Conference: *Australian Physiological Society*. Melbourne, Australia. November

19th-22nd, 2017.

- 5.7.82 Hingley, L., Caldwell, J.N., Taylor, N.A.S., and Peoples, G.E. (2017). The effects of increasing thoracic load carriage, using a backpack and body-armor ensemble, on ambulatory lung volumes.

Journal of Science and Medicine in Sports. 20(2):S39.

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Associated Conference: *Fourth International Congress on Soldiers' Physical Performance*.

Melbourne, Australia. November 28th-December 1st, 2017.

- 5.7.83 Bowes, H.M., Burdon, C.A., and Taylor, N.A.S. (2017). The impact of ambulatory gradients on the oxygen cost of torso load carriage for people of varying body size. *Journal of Science and Medicine in Sports*. 20(2):S40.
<https://www.sciencedirect.com/science/journal/14402440/20/supp/S2>
Associated Conference: *Fourth International Congress on Soldiers' Physical Performance*. Melbourne, Australia. November 28th-December 1st, 2017.
- 5.7.84 Taylor, N.A.S. (2017). Heat adaptation within a military context. *Journal of Science and Medicine in Sports*. 20(2):S56.
<https://www.sciencedirect.com/science/journal/14402440/20/supp/S2>
Associated Conference: *Fourth International Congress on Soldiers' Physical Performance*. Melbourne, Australia. November 28th-December 1st, 2017. **Invited Conference Presentation (Symposium).** **Symposium topic:** *Acute, short and long term responses to heat stress - implications for combatants' performance and health*.
- 5.7.85 Bowes, H.M., Burdon, C.A., and Taylor, N.A.S. (2017). A contribution to understanding the impact of variations in body mass on fractionating the metabolic burden of military load carriage. *Journal of Science and Medicine in Sports*. 20(2):S75-S76.
<https://www.sciencedirect.com/science/journal/14402440/20/supp/S2>
Associated Conference: *Fourth International Congress on Soldiers' Physical Performance*. Melbourne, Australia. November 28th-December 1st, 2017.
- 5.7.86 Hingley, L., Caldwell, J.N., Taylor, N.A.S., and Peoples, G.E. (2017). Backpack and body-armor ensembles reduce pulmonary function according to the mass carried and its distribution around the thorax. *Journal of Science and Medicine in Sports*. 20(2):S76.
<https://www.sciencedirect.com/science/journal/14402440/20/supp/S2>
Associated Conference: *Fourth International Congress on Soldiers' Physical Performance*. Melbourne, Australia. November 28th-December 1st, 2017.
- 5.7.87 Peoples, G.E., Hingley, L., Caldwell, J.N., and Taylor, N.A.S. (2017). The effects of increasing thoracic load carriage, using a backpack and body-armor ensemble, on peak aerobic power and exercise tolerance. *Journal of Science and Medicine in Sports*. 20(2):S105-S106. <https://www.sciencedirect.com/science/journal/14402440/20/supp/S2>
Associated Conference: *Fourth International Congress on Soldiers' Physical Performance*. Melbourne, Australia. November 28th-December 1st, 2017.

5.8 International and National Conference Presentations - Abstracts in Proceedings:

- 5.8.1 Taylor, N.A.S., and Morrison, J.B. (1988). Effect of breathing gas pressure on respiratory statics and dynamics of immersed man. In: Pasche, A., and Ilmarinen, R. *Proceedings of the Third International Conference on Environmental Ergonomics*. Institute of Occupational Health, Helsinki, Finland. August 8-12th, 1988. P. 52.
- 5.8.2 Taylor, N.A.S., and Morrison, J.B. (1988). Determination of pulmonary compliance in divers: a methodological critique. In: Pasche, A., and Ilmarinen, R. *Proceedings of the Third International Conference on Environmental Ergonomics*. Institute of Occupational Health, Helsinki, Finland. August 8-12th, 1988. P. 53.
- 5.8.3 Taylor, N.A.S., Cotter, J.D., Gartner, P.W., Silver, D.T. Stanley, S.N., and Marshall, R.N. (1990). The inter-relationship of torque and velocity in leg extension of normals and elite athletes. *Commonwealth and International Conference on Physical Education, Sport, Health, Dance, Recreation and Leisure*. Auckland, New Zealand. January 18-23rd, 1990.
- 5.8.4 Mazur, S.M., Taylor, N.A.S., and Marshall, R.N. (1990). Three-dimensional muscle activation surfaces: a study of torque, angular velocity and joint angle. *Commonwealth and International Conference on Physical Education, Sport, Health, Dance, Recreation and Leisure*. Auckland, New Zealand. January 18-23rd, 1990.
- 5.8.5 Millar, C.G., Chambers, D.J., and Taylor N.A.S. (1990). Methods for increasing hip joint range of motion. *Commonwealth and International Conference on Physical Education, Sport,*

- Health, Dance, Recreation and Leisure*. Auckland, New Zealand. January 18-23rd, 1990.
- 5.8.6 Smith, T.B.R.J., Hopkins, W., and Taylor, N.A.S. (1991). Is performance in rowing limited by respiratory constraints? *Combined Meeting of Physiological Society of New Zealand, Australian Neuroscience Society, Australian Physiological and Pharmacological Society, and the Anatomical Society of Australia and New Zealand*. Dunedin, New Zealand. January 28-31st, 1991.
- 5.8.7 Taylor, N.A.S., Willis, P.E., and Wight, P.J. (1991). Specificity of isokinematic strength training. *International Congress on Sports Medicine and Human Performance*. Vancouver, Canada. April 16-20th, 1991.
- 5.8.8 Taylor, N.A.S., Wight, P.J., and Willis, P.E. (1991). Anaerobic power: the phosphogenic component. *International Congress on Sports Medicine and Human Performance*. Vancouver, Canada. April 16-20th, 1991.
- 5.8.9 Solomon, C., and Taylor, N.A.S. (1991). The effects of exercise duration on gas exchange dynamics. *The Annual Scientific Conference in Sports Medicine*. Canberra, Australia. October 8-12th, 1991.
- 5.8.10 Meerkin, J.D., Proctor, C.D., and Taylor, N.A.S. (1991). An absence of circadian shift in respiratory gas exchange kinetics data. *The Annual Scientific Conference in Sports Medicine*. Canberra, Australia. October 8-12th, 1991.
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Presentation.

- 5.8.34 Taylor, N.A.S., Groeller, H., and Booth, J.D. (2002). Workplace assessment of physically-demanding military trades: Royal Australian Navy Clearance Divers. *Abstracts of the Defence Health Symposium*. Sydney, Australia. July 26-28th, 2002. P. 77. **Invited Conference Presentation.**
- 5.8.35 Taylor, N.A.S. (2003). Strategies to enhance performance in the heat. *Seventh International Olympic Committee World Congress on Sports Sciences*. Athens, Greece. October 7-11th, 2003. P. 7B. **Invited Keynote Presentation.**
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- 5.8.37 Taylor, N.A.S. (2004). Measurement issues in exercise science: separating the “meaningful” from the “meaningless”. *Inaugural Conference of the Australian Association of Exercise and Sports Science*. Brisbane, Australia. April 14-16th, 2004. **Invited Keynote Presentation.** [Presented without an abstract].
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- 5.8.40 Haley, C.D., Gordon, C.J., Taylor, N.A.S., and Jenkins, A.B. (2004). Investigating high-amplitude oscillations in rat tail skin blood flow during core heating and cooling. *First Integrated Symposium on the Physiology and Pharmacology of Thermal Biology and Temperature Regulation*. Rhodes, Greece. October 10-15th, 2004. P. 144.
- 5.8.41 Booth, J.D., Wilsmore, B.R., MacDonald, A.D., Zeyl, A., Storlien, L.H., and Taylor, N.A.S. (2004). Intramuscular temperatures during exercise in the heat following pre-cooling and pre-heating. *First Integrated Symposium on the Physiology and Pharmacology of Thermal Biology and Temperature Regulation*. Rhodes, Greece. October 10-15th, 2004. P. 167.
- 5.8.42 Taylor, N.A.S. (2005). Heat adaptation: guidelines for the optimisation of athletic performance. *Environmental Factors Affecting Athletic Performance*. Institute of Kinesiology Research. University of Primorska, Koper, Slovenia. December 17th, 2005. **Invited Keynote Presentation.** [Presented without an abstract].
- 5.8.43 Taylor, N.A.S., Caldwell, J.N., and Mekjavic, I.B. (2006). The distribution of thermal sweating on the foot. *Second International Meeting on the Physiology and Pharmacology of Temperature Regulation*. Phoenix, Arizona, U.S.A. March 3rd-6th, 2006. P. 71.
- 5.8.44 Babic, M., Lenarcic, J., Zlajpah, L., Taylor, N.A.S., Lenart, B., Vrhovec, M., Redotier, B., Candas, V., and Mekjavic, I.B. (2007). A sweating thermal torso manikin incorporating physiological characteristics of sweating. In: Mekjavic, I.B., Kounalakis, S.N., and Taylor, N.A.S. (Editors). *Environmental Ergonomics XII*. Proceedings of the Twelfth International Conference on Environmental Ergonomics. Piran, Slovenia. Biomed d.o.o., Ljubljana, Slovenia. P. 442. **ISBN: 978-961-90545-1-2.**
Associated Conference: Twelfth International Conference on Environmental Ergonomics. Piran, Slovenia. August 19-24th, 2007.
- 5.8.45 Sampson, J.A., Groeller, H., McAndrew, D., Britton, A., and Taylor, N.A.S. (2008). Repetition failure is not required for significant strength adaptation. *Annual Meeting of the European College of Sports Science*. Estoril, Portugal. July 9-12th, 2008. P. 33.
- 5.8.46 Groeller, H., Sampson, J.A., and Taylor, N.A.S. (2008). Contralateral strength facilitation during attempted high velocity movements. *Annual Meeting of the European*

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- 5.8.47 Sampson, J.A., Groeller, H., McAndrew, D., Britton, A., and Taylor, N.A.S. (2008). Endurance training history influences individual responsiveness to resistance training. *Annual Meeting of the European College of Sports Science*. Estoril, Portugal. July 9-12th, 2008. P. 466.
- 5.8.48 Taylor, N.A.S. (2009). Thermal adaptation in indigenes: is it genetically determined? *Third International Symposium on the Physiology and Pharmacology of Temperature Regulation*. Matsue, Japan. July 23rd-26th, 2009. P. 44. **Invited Conference Presentation (Symposium).**
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- 5.8.50 Cotter, J.D., and Taylor, N.A.S. (2009). Regionalised cutaneous thermosensitivity supports the concept of temperature rather than heat regulation. *Third International Symposium on the Physiology and Pharmacology of Temperature Regulation*. Matsue, Japan. July 23rd-26th, 2009. P. 125.
- 5.8.51 Taylor, N.A.S. (2009). Human and applied physiology: the Gown serving the Crown. *Defence Human Sciences Symposium*. Melbourne, Australia. September 15-16th, 2009. P. 37. **Invited Keynote Presentation.**
- 5.8.52 Caldwell, J.N., van den Heuvel, A.M.J., Kerry, P., Clark, M.J., Patterson, M.J., Peoples, G.E., and Taylor, N.A.S. (2009). Water-immersion treatments for exertional hyperthermia. *Defence Human Sciences Symposium*. Melbourne, Australia. September 15-16th, 2009. P. 38.
- 5.8.53 van den Heuvel, A.M.J., Kerry, P., van der Velde, J., Patterson, M.J., and Taylor, N.A.S. (2009). Do not always listen to the manufacturers: undergarments are of no physiological benefit for personnel working in body armour in hot environments. *Defence Human Sciences Symposium*. Melbourne, Australia. September 15-16th, 2009. P. 39.
- 5.8.54 Kerry, P., van den Heuvel, A.M.J., van Dijk, M., Peoples, G.E., and Taylor, N.A.S. (2009). An evaluation of thermal protective clothing for fire fighting. *Defence Human Sciences Symposium*. Melbourne, Australia. September 15-16th, 2009. P. 50.
- 5.8.55 Taylor, N.A.S. (2010). Heat adaptation and athletic performance. *International Symposium of Sports Science in Southern Taiwan*. Tainan, Taiwan. March 28th, 2010. P. 24. **Invited Keynote Presentation.**
- 5.8.56 Billing, D.C., Drain, J.R., van den Heuvel, A.M.J., Peoples, G.E., Silk, A., Taylor, N.A.S., and Patterson, M.J. (2010). Thermal load and physical mobility implications of body armour systems with different levels of protection. *Defence Human Sciences Symposium*. Edinburgh, Australia. October 11-12th, 2010. P. 6.
- 5.8.57 Taylor, N.A.S., Lewis, M.C., Notley, S.R., and Peoples, G.E. (2011). Load distribution within personal protective equipment and its physiological consequences. In: Häkkinen, K., Kyröläinen, H., and Taipale, R. Proceedings of the *Second International Congress on Soldiers' Physical Performance*. Jyväskylä, Finland. May 4-7th, 2011. P. 81. **ISBN: 978-951-25-2208-8.**
- 5.8.58 van den Heuvel, A.M.J., van Dijk, W., Notley, S.R., Patterson, M.J., Taylor, N.A.S., and Peoples, G.E. (2011). The impact of variations in body armour mass upon physiological strain. In: Häkkinen, K., Kyröläinen, H., and Taipale, R. Proceedings of the *Second International Congress on Soldiers' Physical Performance*. Jyväskylä, Finland. May 4-7th, 2011. P. 92. **ISBN: 978-951-25-2208-8.**
- 5.8.59 Tofari, P.J., Treloar, A.K., Silk, A.J., and Taylor, N.A.S. (2011). A quantification of the physiological demands of fire suppression. In: Häkkinen, K., Kyröläinen, H., and Taipale, R. Proceedings of the *Second International Congress on Soldiers' Physical Performance*.

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- 5.8.60 Wakabayashi, H., Barwood, M.J., Eglin, C.M., Mekjavic, I.B., Taylor, N.A.S., and Tipton, M.J. (2011). The contributions of reductions in skin and deep body temperature to the habituation of the metabolic response to cold-water immersion. In: Kounalakis, S.N., and Koskolou, M. (Editors). *Proceedings of the Fourteenth International Conference on Environmental Ergonomics*. Nafplio, Greece. July 10-15th, 2011. Pp. 30. **ISBN:** 978-960-489-272-3.
- 5.8.61 Notley, S.R., Peoples, G.E., and Taylor, N.A.S. (2011). Heart rate predictions of whole-body metabolic rates: limitations under controlled laboratory conditions. *Defence Human Sciences Symposium*. Melbourne, Australia. November 16-17th, 2011. P. 60.
- 5.8.62 Lee, D.S., Notley, S.R., Taylor, N.A.S., and Peoples, G.E. (2011). The impact of thoracic load carriage on ventilatory function. *Defence Human Sciences Symposium*. Melbourne, Australia. November 16-17th, 2011. P. 90.
- 5.8.63 Taylor, N.A.S., and Machado-Moreira, C.A. (2012). The distributions of thermal and psychological sweating: challenging some persistent teachings. *Fourth International Symposium on the Physiology and Pharmacology of Temperature Regulation*. Armação dos Búzios, Brazil. March 22nd-25th, 2012. P. 16. **Invited Conference Presentation (Symposium)**.
- 5.8.64 Lee, D.S., Fogarty, A.L., Taylor, N.A.S., and Peoples, G.E. (2012). The impact of loaded work on maximum acceptable work duration. *Proceedings of the Fifth Biennial Scientific Conference of Exercise and Sports Science*. Gold Coast, Australia. April 19th-21st, 2012. P. 144.
- 5.8.65 Taylor, N.A.S., and Machado-Moreira, C.A. (2012). Re-evaluating the noradrenergic control of human eccrine sweat glands during thermal and non-thermal stimulations. *Fifty-ninth Annual Meeting of the American College of Sports Medicine*. Annual Meeting, San Francisco, U.S.A. May 29th-June 2nd, 2012. **Invited Conference Presentation (Symposium)**. [Presented without an abstract].
Symposium: Mechanisms and controllers of heat loss responses during heat stress in humans
- 5.8.66 Notley, S.R., Fullagar, H.H.K., Burley, S.D., Lee, D.S., and Taylor, N.A.S. (2012). Observations on the predictive utility of heart rate and minute ventilation for estimating the metabolic cost of work. In: Taylor, N.A.S., and Billing, D.C. (Editors). *Physiological and Physical Employment Standards I*. Proceedings of the First Australian Conference on Physiological and Physical Employment Standards (Canberra, Australia. November 27th-28th, 2012). University Of Wollongong, Wollongong, Australia. Pp. 22-23. **ISBN:** 978-1-74128-220-7.
- 5.8.67 Taylor, N.A.S., Fullagar, H.H.K., Sampson, J.A., and Groeller, H. (2012). The physically demanding and critical tasks performed by permanent and retained firefighters. In: Taylor, N.A.S., and Billing, D.C. (Editors). *Physiological and Physical Employment Standards I*. Proceedings of the First Australian Conference on Physiological and Physical Employment Standards (Canberra, Australia. November 27th-28th, 2012). University Of Wollongong, Wollongong, Australia. Pp. 40-41. **ISBN:** 978-1-74128-220-7.
- 5.8.68 Fullagar, H.H.K., Groeller, H., Sampson, J.A., Notley, S.R., Burley, S.D., Lee, D.S., and Taylor, N.A.S. (2012). The physiological and physical demands of contemporary fire fighting: simulations performed by operational fire fighters. In: Taylor, N.A.S., and Billing, D.C. (Editors). *Physiological and Physical Employment Standards I*. Proceedings of the First Australian Conference on Physiological and Physical Employment Standards (Canberra, Australia. November 27th-28th, 2012). University Of Wollongong, Wollongong, Australia. Pp. 42-43. **ISBN:** 978-1-74128-220-7.
- 5.8.69 Groeller, H., Fullagar, H.H.K., Sampson, J.A., and Taylor, N.A.S. (2012). Recommended screening tests for contemporary firefighters. In: Taylor, N.A.S., and Billing, D.C. (Editors). *Physiological and Physical Employment Standards I*. Proceedings of the First

- Australian Conference on Physiological and Physical Employment Standards (Canberra, Australia. November 27th-28th, 2012). University Of Wollongong, Wollongong, Australia. Pp. 44-45. **ISBN: 978-1-74128-220-7.**
- 5.8.70 Taylor, N.A.S. (2012). A commentary on endurance fitness standards applied to occupations that involve load carriage and manual handling. In: Taylor, N.A.S., and Billing, D.C. (Editors). *Physiological and Physical Employment Standards I*. Proceedings of the First Australian Conference on Physiological and Physical Employment Standards (Canberra, Australia. November 27th-28th, 2012). University Of Wollongong, Wollongong, Australia. Pp. 49-50. **ISBN: 978-1-74128-220-7.**
- 5.8.71 Taylor, N.A.S., and Taylor, E.A. (2012). How much money could an Australian fire brigade save annually by increasing firefighter fitness? In: Taylor, N.A.S., and Billing, D.C. (Editors). *Physiological and Physical Employment Standards I*. Proceedings of the First Australian Conference on Physiological and Physical Employment Standards (Canberra, Australia. November 27th-28th, 2012). University Of Wollongong, Wollongong, Australia. Pp. 82-83. **ISBN: 978-1-74128-220-7.**
- 5.8.72 Caldwell, J.N., Matsuda-Nakamura, M., Fullagar, H.H.K., and Taylor, N.A.S. (2013). Exploring the interactions of core, mean skin and local skin temperatures on the cutaneous blood flow of the forearm, hand, calf and foot: three-dimensional perspectives. In: Cotter, J.D., Lucas, S.J.E., and Mündel, T. (Editors). *Environmental Ergonomics XV. Proceedings of the Fifteenth International Conference on Environmental Ergonomics*. Queenstown, New Zealand. February 11-15th, 2013. Pp. 175. **ISBN: 978-0-473-22438-7.**
- 5.8.73 Notley, S.R., Fullagar, H.H.K., Lee, D.S., Matsuda-Nakamura, M., Peoples, G.E., and Taylor, N.A.S. (2013). On the utility of cardiorespiratory surrogates of whole-body energy expenditure. In: Cotter, J.D., Lucas, S.J.E., and Mündel, T. (Editors). *Environmental Ergonomics XV. Proceedings of the Fifteenth International Conference on Environmental Ergonomics*. Queenstown, New Zealand. February 11-15th, 2013. Queenstown, New Zealand. Pp. 221. **ISBN: 978-0-473-22438-7.**
- 5.8.74 Taylor, N.A.S. (2013). Phenotypic heat adaptation: staged reductions in physiological strain. *Symposium on Activity under Hostile Environmental Conditions*. Wingate Institute, Zinman College for Physical Education and Sport Sciences, Netanya, Israel. March 21st, 2013. Pp. 1. **Invited Conference Presentation (Symposium). [Presented without an abstract].**
- 5.8.75 Taylor, N.A.S. (2013). When to, and when not to drink during exercise in the heat. *Symposium on Activity under Hostile Environmental Conditions*. Wingate Institute, Zinman College for Physical Education and Sport Sciences, Netanya, Israel. March 21st, 2013. Pp. 7. **Invited Conference Presentation (Symposium). [Presented without an abstract].**
- 5.8.76 Taylor, N.A.S. (2013). Are all employment standards for endurance fitness scientifically defensible? *Fifty-ninth Annual Meeting of the American College of Sports Medicine*. Annual Meeting, Indianapolis, U.S.A. May 29th-June 1st, 2013. **Invited Conference Presentation (Symposium). [Presented without an abstract].**
- Symposium: Occupational physiology**
- 5.8.77 Taylor, N.A.S. (2013). Physiological employment standards: Australian experiences. *Symposium of the Energy Institute Health and Technical Committee*. Portsmouth, England. June 3rd-5th, 2013. **Invited Conference Presentation. [Presented without an abstract].**
- 5.8.78 Farrell, M.J., Trevaks, D., Taylor, N.A.S., and McAllen, R.M. (2014). Different forebrain representation of thermal and psychogenic sweating in humans. *Thirty-fourth Annual Meeting of the Australasian Neuroscience Society*. Adelaide, Australia. January 28th-31st, 2014.
- 5.8.79 Taylor, N.A.S. (2014). Protection versus physiology: interactions between physiological regulation and protective equipment. Proceedings of the *Third International Congress on Soldiers' Physical Performance*. Boston, U.S.A. August 18th-21st, 2014. **Invited Keynote Presentation. [Presented without an abstract].**

- 5.8.80 Sampson, J.A., Fullagar, H.H.K., Groeller, H., and Taylor, N.A.S. (2014). A strategy for developing performance standards in a recruit screening test. *Proceedings of the Third International Congress on Soldiers' Physical Performance*. Boston, U.S.A. August 18th-21st, 2014. P. 114.
- 5.8.81 Friedl, K.E., Knapik, J.J., Häkkinen, K., Baumgartner, N., Groeller, H., Taylor, N.A.S., Duarte, A.F.A., Kyröläinen, H., Jones, B.H., Kraemer, W.J., and Nindl, B.C. (2014). Perspectives on aerobic and strength influences on military physical readiness: report of an international military physiology roundtable. *Proceedings of the Third International Congress on Soldiers' Physical Performance*. Boston, U.S.A. August 18th-21st, 2014. **Invited Symposium Presentation**. [Presented without an abstract].
- 5.8.82 Taylor, N.A.S. (2014). Adaptation specificity: how does the forcing function determine the outcome? *Fifth International Meeting on the Physiology and Pharmacology of Temperature Regulation*. Skukuza, Kruger National Park, South Africa. September 7th-11th, 2014. P. 92. **Invited Conference Presentation (Symposium)**.
- 5.8.83 Loughran, S., Verrender, A., Taylor, N.A.S., Dalecki, A., and Croft, R.J. (2015). Radiofrequency electromagnetic fields influence human working memory. *Annual meeting of the Bioelectromagnetics Society and the European Bioelectromagnetics Association*. Monterey, U.S.A. June 14th-19th, 2015. P. 30.
- 5.8.84 Taylor, N.A.S., Peoples, G.E., and Petersen, S.R. (2015). Load carriage, human performance and physiological employment standards. *Second International Conference on Physical Employment Standards*. Canmore, Alberta, Canada. August 23rd-26th, 2015. P. 21. **Invited Keynote Presentation**.
- 5.8.85 Taylor, N.A.S., Fullagar, H.H.K., Sampson, J.A., Mott, B.J., and Groeller, H. (2015). The distillation of criterion occupational tasks from workforce job lists and physiological measurements. *Second International Conference on Physical Employment Standards*. Canmore, Alberta, Canada. August 23rd-26th, 2015. P. 58. **Invited Conference Presentation**.
- 5.8.86 Groeller, H., Fullagar, H.H.K., Sampson, J.A., Mott, B.J., and Taylor, N.A.S. (2015). The transition from criterion occupational tasks to physical aptitude screening tests. *Second International Conference on Physical Employment Standards*. Canmore, Alberta, Canada. August 23rd-26th, 2015. Pp. 39-40. **Invited Conference Presentation**.
- 5.8.87 Taylor, N.A.S. (2016). Converting scientific observations and physiological first principles into tests of readiness for work. *Annual Meeting of the Canadian Society for Exercise Physiology*. Victoria, British Columbia, Canada. October 12th-15th, 2016. **Invited Conference Presentation (Symposium)**. [Presented without an abstract].
- 5.8.88 Taylor, N.A.S., and Caldwell, J.N. (2016). Thermoeffector threshold plasticity and its implications for temperature regulation. *Physiology and Pharmacology of Temperature Regulation*. Sixth International Meeting. Ljubljana, Slovenia. December 5th-9th, 2016. P. 183.
- 5.8.89 Taylor, N.A.S. (2016). Why is size so important? Historical context and key concepts. *Physiology and Pharmacology of Temperature Regulation*. Sixth International Meeting. Ljubljana, Slovenia. December 5th-9th, 2016. P. 190. **Invited Conference Presentation (Symposium)**.
- 5.8.90 Notley, S.R., Park, J., Tagami, K., Ohnishi, N., and Taylor, N.A.S. (2016). Why is size so important? Morphological determination of sweating and skin blood flow in humans. *Physiology and Pharmacology of Temperature Regulation*. Sixth International Meeting. Ljubljana, Slovenia. December 5th-9th, 2016. P. 193. **Invited Conference Presentation (Symposium)**.
- 5.8.91 Taylor, N.A.S. (2017). How much personal protection is too much? Conflicts between optimal performance and protective obligations. *Sixty-fourth Annual Meeting of the American College of Sports Medicine*. Annual Meeting, Denver, U.S.A. May 30th-June 3rd, 2017. **Invited Conference Presentation (Symposium)**. [Presented without an abstract].
- 5.8.92 Taylor, N.A.S. (2017). Modelling human heat loss: morphological and physiological

- considerations. *Workshop on Ensuring Radiofrequency Safety in Magnetic Resonance Imaging: Current Practices and Future Directions. International Society for Magnetic Resonance in Medicine*. McLean, U.S.A. September 28th-October 1st, 2017. **Invited Conference Presentation**. [Presented without an abstract].
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<http://www.fireinternational.net/shownews.asp?secid=8&nav=1&newstyp=&key=&page=&newsid=4573>
- 5.10.2 Taylor, N.A.S. (2005). *Heat stress: understanding normal physiological responses*. Educational module. Human Performance Laboratories and the Centre for Educational

Development and Interactive Resources, University of Wollongong, Australia. For: NSW Fire Brigades, Sydney, Australia. Pp. 1-35.

- 5.10.3 Taylor, N.A.S. (2005). *The physiological impact of thermal protective equipment and clothing on firefighters*. Educational module. Human Performance Laboratories and the Centre for Educational Development and Interactive Resources, University of Wollongong, Australia. For: NSW Fire Brigades, Sydney, Australia. Pp. 1-23.
- 5.10.4 Taylor, N.A.S. (2005). *The recognition and prevention of heat illness*. Educational module. Human Performance Laboratories and the Centre for Educational Development and Interactive Resources, University of Wollongong, Australia. For: NSW Fire Brigades, Sydney, Australia. Pp. 1-34.

5.11 International Workshops:

- 5.11.1 Taylor, N.A.S. (2001). Thermoregulation in the heat: considerations for athletes and workers. *Workshop for the Sports Science Society of Thailand*. Bangkok, Thailand, July 12th-13th, 2001. **Invited Workshop.**
- 5.11.2 Taylor, N.A.S. (2003). Thermoregulation in extreme environments. *Workshop for Suranaree University of Technology*. Nakhon Ratchasima, Thailand, April 23rd-25th, 2003. **Invited Workshop.**
- 5.11.3 Taylor, N.A.S. (2008). Endurance training and adaptation of the thermoregulatory mechanisms. *Environmental Physiology Workshop*. Tsukuba University, Tsukuba, Japan. September 25th, 2008. **Invited Workshop.**
- 5.11.4 Taylor, N.A.S., and Machado-Moreira, C.A. (2012). The autonomic control of human eccrine sweating. *Workshop on Exercise and Autonomic Regulation*. Universidade Federal de Minas Gerais, Belo Horizonte, Brazil. March 27th, 2012. **Invited Workshop.**
- 5.11.5 Taylor, N.A.S. (2018). Clinical workshop in thermoregulation. *International Conference for Adaptations and Nutrition in Sports*. Chon Buri, Thailand. July 19th, 2018. **Invited Workshop.**

5.12 Lay publications:

- 5.12.1 Taylor, N.A.S. (2013). Monday's medical myth: You lose most heat through your head. *The Conversation*. April 1st. **Invited Paper (Lay overview).**
<http://theconversation.com/mondays-medical-myth-you-lose-most-heat-through-your-head-10834>
Published in: Sykes, H., and Jackson-Webb, F. (2013). *99 & Counting: Medical Myths Debunked*. Future Leaders, Australia (www.futureleaders.com.au/ebooks/). **ISBN:** 978090332094. Pp. 222-225.
- 5.12.2 Taylor, N.A.S. (2015). Want to keep cool on hot summer days? Here's how. *The Conversation*. January 23rd. **Invited Paper (Lay overview).**
<https://theconversation.com/want-to-keep-cool-on-hot-summer-days-heres-how-34489>
- 5.12.3 Notley, S.R., and Taylor, N.A.S. (2017). Health Check: Do men really sweat more than women? *The Conversation*. March 9th. **Invited Paper (Lay overview).**
<https://theconversation.com/health-check-do-men-really-sweat-more-than-women-73903>

SECTION 6: SERVICE TO SCIENCE

6.1 Research and Scientific Appointments:

6.1.1 Clinical Physiologist (Honorary): 1987-1989.

Department of Respiratory Medicine,
Dunedin Hospital, Otago Hospital Board,
Dunedin, New Zealand.

6.1.2 Environmental Physiologist: 1988-1989.

Defence Environmental Medicine Unit,
Royal New Zealand Air Force,
Base Auckland, Whenuapai, New Zealand.

6.1.3 Resident Research Associate: 1990.

National Research Council Resident Research Associate.

Diving Medicine Department, Naval Medical Research Institute, Bethesda, MD, U.S.A.

6.2 Service to International Scientific Organisations:

6.2.1 *International Council for Science:*

(i) Member of the *Thermal Section:*

2002-2014. Co-Chair: 2006-2012. Chair: 2012-2014.

This Committee is an advisory body to the *International Commission on Comparative Physiology* (Commission VII: Comparative Physiology: Evolution, Adaptation and Environment), and is part of the *International Union of Physiological Sciences (IUPS: <http://www.iups.org/>)*. The IUPS is one of the International Unions of the *International Council for Science (ICS)*.

(ii) Construction and administration of web site for the *IUPS Thermal Physiology and Pharmacology Committee:* 2005-2014.

6.2.2 *International Society for Environmental Ergonomics:*

Executive Member: 1990-present.

6.3 Conference Administration and Service:

Summary:

- Scientific Programme Committee: 26 conferences
- Organiser - International Conference: 3 conferences

6.3.1 **International Scientific Programme Committee memberships:**

(i) *International Conference on Environmental Ergonomics:*

Austin, Texas, October 1st-5th, 1990.

Maastricht, The Netherlands. November 2nd-6th, 1992.

Montebello, Canada, September 25th-30th, 1994.

Jerusalem, Israel. October 27th-November 1st, 1996.

San Diego, U.S.A. October 18th-23rd, 1998.

Dortmund, Germany. July 30th-August 4th, 2000.

Fukuoka, Japan. September 23rd-27th, 2002.

Ystad, Sweden. May 22nd-26th, 2005.

Piran, Slovenia, August 19th-24th, 2007.

Boston, U.S.A., August 2nd-7th, 2009.

Nafplio, Greece, July 10th-15th, 2011.

Queenstown, New Zealand, February 11th-15th, 2013.

Portsmouth, England, June 28th-July 3rd, 2015.

(ii) *International Conference on Physiological and Cognitive Performance in Extreme Environments:*

Canberra, Australia. March 27th-30th, 2000.

- (iii) *IUPS Symposia: Physiology and Pharmacology of Temperature Regulation:*

Wollongong, Australia, September 2nd-6th, 2001.

Rhodes, Greece. October 7th-11th, 2004.

Phoenix, U.S.A., March 3rd-6th, 2006.

Matsue, Japan, July 23rd-26th, 2009.

Armação dos Búzios, Brazil. March 22nd-25th, 2012.

Kruger National Park, South Africa. September 7th-12th, 2014.

- (iii) *Third International Conference on the Human-Environment System:*

Tokyo, Japan. September 12th-15th, 2005.

- (iv) *Eighteenth International Congress of Biometeorology:*

Tokyo, Japan. September 22- 26th, 2008.

- (v) *International Conference on Physical Employment Standards:*

Canberra, Australia, November 27th-28th, 2012.

Canmore, Canada, August 23rd-26th, 2015.

- (vi) *International Congress on Soldiers' Physical Performance:*

Boston, U.S.A., August 18th-21st, 2014.

Melbourne, Australia, November 28th-December 1st, 2017.

6.3.2 Organiser - International Conferences:

- (i) *International Thermal Physiology Symposium*. Satellite meeting of the 2001 *International Union of the Physiological Sciences*. Wollongong, Australia, September 2nd-6th, 2001.

- (ii) *Twelfth International Conference on Environmental Ergonomics*. Piran, Slovenia, August 19th-24th, 2007.

- (iii) *First Australian Conference on Physiological and Physical Employment Standards*. Canberra, Australia, November 27th-28th, 2012.

6.4 Refereed Publication Service:

Summary:

- Senior Editorial Positions: 3
- Guest Editor (Journal Special Issues): 4
- Editorial Boards: 10
- Reviewer: International Journals: 39
- Reviewer: Australian Journals: 2

6.4.1 Editorial Executive Positions:

Associate Editor-in-Chief: *Journal of the Human-Environment System*: 2006.

Field Editor: *International Journal of Biometeorology*: 2008-2011.

Reviews Editor: *European Journal of Applied Physiology*: 2009-2017.

6.4.2 Guest Editor for Journal Special Issues:

Journal of Thermal Biology. (2001). Volume 26(4-5).

Special Issue: International Thermal Physiology Symposium (Wollongong, Australia, 2001).

Guest Editor: Nigel A.S. Taylor

Journal of the Human-Environment System: (2007). Volume 10(1).

Special Issue: Third International Conference on the Human-Environment System (Tokyo, Japan, 2005).

Guest Editors: George Havenith and Nigel A.S. Taylor

European Journal of Applied Physiology. (2008). Volume 104(2).

Special Issue: Environmental Ergonomics.

Guest Editors: Igor B. Mekjavic, Nigel A.S. Taylor and Pietro E. di Prampero

European Journal of Applied Physiology. (2010). Volume 109(1).

Special Issue: Proceedings of Third International Symposium on Physiology and Pharmacology of Temperature Regulation: Matsue, Japan 2009.

Guest Editors: Osamu Shido, Tatsuo Watanabe, Nigel A.S. Taylor and George Havenith

6.4.3 Membership of **International Editorial Boards:**

European Journal of Applied Physiology: 2000-2017

Extreme Physiology and Medicine: 2011-2018

Frontiers of Autonomic Neuroscience. 2014-2017

International Journal of Biometeorology: 2008-2011

Journal of Physiological Anthropology: 2000-2009

Journal of the Human-Environment System: 2000-2010

Journal of Thermal Biology: 2008-present

Medicine and Science in Sports and Exercise: 2006-2019

The Ergonomics Open Journal: 2007-2016

The Open Sport Medicine Journal: 2008-2015

6.4.4 Reviewer: International Journals:

Acta Physiologica (Scandinavica)

American Journal of Medical Sciences

American Journal of Physiology

Applied Ergonomics

Applied Physiology, Nutrition and Metabolism

Aviation, Space, and Environmental Medicine

Brazilian Journal of Medical and Biological Research

British Journal of Sports Medicine

Clinical and Experimental Pharmacology and Physiology

Frontiers of Autonomic Neuroscience

Medical and Biological Engineering and Computing

Ergonomics

Experimental Physiology

Extreme Physiology and Medicine

European Journal of Applied Physiology

European Journal of Clinical Investigation

European Respiratory Journal

Industrial Health

International Journal of Biometeorology

Psychophysiology

International Journal of Sport Nutrition and Exercise Metabolism

Journal of Basic Clinical Physiology and Pharmacology

Journal of Physiology

Journal of Physiological Sciences (formerly: *Japanese Journal of Physiology*)

Journal of Applied Physiology

Journal of Human-Environment System

Journal of Physiological Anthropology

Journal of Thermal Biology

Journal of the Royal Society Interface

Journal of Sports Sciences

Journal of Strength and Conditioning Research

Medicine and Science in Sport and Exercise

Physiological Measurement

Physiological Reports

Physiological Research (formerly: Physiologia Bohemoslovaca)

Physiology and Behaviour

PLOS One

Temperature

Undersea Biomedical Research

6.4.5 Reviewer: Australian Journals:

Australian Journal of Nutrition and Dietetics

Journal of Science and Medicine in Sport

6.5 Environmental Physiology and Ergonomics Research Exchange:

This collaborative project involves internationally-recognised laboratories from Australia, France, Japan, Slovenia and the United Kingdom (<http://www.uow.edu.au/health/epere/index.html>). A five-way *Memorandum of Understanding* among these institutions has confirmed the commitment of each laboratory to the following goals:

- maintaining an international Centre of Excellence in human, environmental physiology
- training young researchers in a wide range of multidisciplinary skills essential to understanding integrated human physiology
- expanding research funding opportunities for each laboratory
- sharing research expertise, skills and ideas
- facilitating access to larger research teams, resources and expertise
- strengthening links between the basic sciences and wider societal needs
- facilitating research exchanges among the five laboratories.

The external collaborative institutions include:

- Jozef Stefan Institute (Slovenia)
- University of Portsmouth (U.K.)
- Louis Pasteur University and Centre National de la Recherche Scientifique (France)
- Kobe University (Japan)
- KTH Royal Institute of Technology (Sweden).

6.6 Memorandum of Understanding with Maastricht University:

Initiator of a memorandum (2008) between the Faculty of Health, Medicine and Life Sciences (Maastricht) and the Faculty of Health and Behavioural Sciences (Wollongong) covering:

- visiting research practicum programme
- semester coursework students
- academic staff exchanges

6.7 Centre for Human and Applied Physiology:

Initiator and co-ordinator of the Centre for Human and Applied Physiology (established 2009). Initial funding provided by the Defence Science and Technology Organisation as part of its Centre of Expertise programme (<http://www.uow.edu.au/health/chap>). Currently, there are seven academic staff, five research only staff and nine postgraduate students undertaking research within the Centre.

6.8 Post-doctoral Fellows and Visiting Academic staff:

6.8.1 *Post-doctoral and Research Fellows:*

Stuart Best (Australia): 2010-2011

Mayumi Matsuda-Nakamura (Japan): 2011-2012

Joanne N. Caldwell (Australia): 2012-2015

Catriona A. Burdon (Australia): 2012-2018

Kane J. Middleton (Australia): 2012-2015

Kyoko Tagami: Kao Corporation (Japan): 2013-2014

Joonhee Park (Korea): 2013-2014

6.8.2 Visiting Academic Staff: Sabbatical:

Duncan J. Macfarlane: University of Otago (New Zealand): 1994

Denise L. Smith: Skidmore (USA): 2001

Kei Nagashima: Waseda University (Japan): 2011

Norikazu Ohnishi: Mie Prefectural College of Nursing (Japan): 2013-2014

6.9 Research Grant Reviewer:

6.9.1 **Research grant reviewer** for the following national and international agencies:

Australian Research Council, Australia.

National Health and Medical Research Council, Australia.

National Science and Engineering Research Council, Canada.

National Sports Research Centre, Australia.

Sports Science New Zealand.

Technology Foundation STW, The Netherlands.

Wellcome Trust and the Higher Education Funding Council, England.

6.9.2 External grant reviewer for **Australian and overseas Institutions:**

Auckland Institute of Technology, New Zealand.

Edith Cowen University, Australia.

Raine Medical Research Foundation, University of Western Australia, Australia.

University of Ottawa, Canada.

University of Queensland, Australia.

6.10 External Reviewer for Academic Promotions:

6.10.1 **Institutions:**

Ariel University Center of Samaria, Ariel (Israel)

Griffith University, Gold Coast (Australia)

Mahidol University, Bangkok (Thailand)

The Hebrew University, Jerusalem (Israel)

Universiti Sains Malaysia, Pulau Pinang (Malaysia)

Université Louis Pasteur, Strasbourg (France)

University of Haifa, Haifa (Israel)

University of Ottawa, Ottawa (Canada)

University of Portsmouth, Portsmouth (England)

6.11 Learned Society Involvement:

6.10.1 Member of the *American College of Sports Medicine* (1986-88; 2005-2011).

6.10.2 Member of the *Royal Society of New Zealand* (1987-1990).

6.10.3 Member of the *Undersea Hyperbaric Medical Society* (1987-1995).

6.10.4 Member of the *Australian Sports Medicine Federation* (1991-1992).

6.9.5 Member of the *Australian Physiological Society* (1992-2019; formerly: *Australian Physiological and Pharmacological Society*).

SECTION 7: ACADEMIC ADMINISTRATIVE EXPERIENCE

7.1 Departmental Administrative Positions:

- 7.1.1 Member of Faculty Postgraduate Committee, University of Otago, 1987-89.
- 7.1.2 Member of Postgraduate Committee, University of Wollongong, 1991-1992.
- 7.1.3 Departmental/School Library Liaison Officer, University of Wollongong, 1991-2012.
- 7.1.4 Chairperson, Departmental Research Committee: University of Wollongong, 1992-1993.
- 7.1.5 Departmental Group Research Co-ordinator, University of Wollongong, 1992-1995.
- 7.1.6 Primary Investigation Officer, School of Health Sciences, University of Wollongong, 2007-2011.
- 7.1.7 Curriculum Review Co-ordinator, School of Health Sciences, University of Wollongong, 2008-2010.

7.2 Contributions to University Governance:

- 7.2.1 Member of Faculty Executive Committee, University of Otago, 1988.
- 7.2.2 Member of Faculty Research Committee, University of Wollongong, 1992-1995. Deputy Chairperson 1993.
- 7.2.3 Member of Graduate Faculty, University of Wollongong, 1992-1994. Postgraduate scholarships sub-committee, 1994.
- 7.2.4 Faculty Representative on University Library Committee, University of Wollongong, 1993-2000.
- 7.2.5 Member of Faculty Education Committee, University of Wollongong, 1998-2001.
- 7.2.6 Member of Faculty Internationalisation Committee, University of Wollongong, 2005-2011.
- 7.2.7 Member of Faculty Investigation Committee, University of Wollongong, 2007-2011.

7.3 In-service Training Programmes:

- 7.3.1 *Leadership for Quality: Towards 2000*. Centre for Staff Development, University of Wollongong, 1993-1994.
- 7.3.2 *Leading a Team*. Centre for Staff Development, University of Wollongong, 1994.
- 7.3.3 *Improving Meeting Effectiveness*. Centre for Staff Development, University of Wollongong, 1994.
- 7.3.4 *Staff Selection Techniques - Academic*. Professional and Organisational Development Services, University of Wollongong, 2011.

SECTION 8: COMMUNITY INVOLVEMENT

8.1 Community-based Projects:

Summary:

- Total agency count (1987 onwards): 26
- Total project count (1987 onwards): 71

- 8.1.1 Glaxo New Zealand Limited (New Zealand). Consulting regarding exercise programming and equipment selection for corporate Sports and Fitness centre.
- 8.1.2 Invermay Research Centre (New Zealand). Consulting and training of staff for establishing an employee based and operated Fitness Centre.
- 8.1.3 Exercise programming roles with special-needs groups (New Zealand):
- 3.1 Dunedin Crippled Children Society.
 - 3.2 Downie Stewart Foundation (drug and alcohol rehabilitation).
 - 3.3 Otago Hospital Board (post-neurosurgery rehabilitation).
 - 3.4 Phoenix Cardiac Club.
- 8.1.4 New Zealand Fire Service (New Zealand). Consulting on fitness testing and programming for firemen within the Number 6 region.
- 8.1.5 Coaching Association of New Zealand (New Zealand). Exercise physiology for coaching accreditation.
- 8.1.6 Hillary Commission for Recreation and Sport (New Zealand). University representative on the Steering Committee for establishing a National Board for Fitness Industry Accreditation.
- 8.1.7 Defence Environmental Medicine Unit, Royal New Zealand Air Force (New Zealand). Consultant physiologist.
- 8.1.8 Roche New Zealand Limited (New Zealand). Drug trials to investigate the efficacy of Calcitrol in altering proximal muscle strength in post-menopausal osteoporotic women.
- 8.1.9 New Zealand Parliamentary Services, Parliament House (New Zealand). University of Otago Human Performance Centre, the development of a Parliamentary Fitness Centre from designing facilities through to staffing and staff training.
- 8.1.10 New Zealand Rugby Football Union (New Zealand). Prescription of training guidelines for development of physical fitness during the off-season, pre-season and in-season phases.
- 8.1.11 BHP Steel, Port Kembla (Australia):
- 11.1 Quantification of the thermal environment: the coke ovens at Port Kembla steelworks.
 - 11.2 Validation of the Metrosonics personal monitor.
- 8.1.12 National Sports Research Centre, Canberra (Australia). Respiratory gas exchange dynamics: a new model for evaluation of the athlete.
- 8.1.13 Defence Science and Technology Organisation, Department of Defence, Melbourne (Australia):
- 13.1 Heat acclimation procedures: preparation for humid heat exposure.
 - 13.2 Insulated skin temperature and cardiac frequency as indices of thermal strain during work in hot environments.
 - 13.3 Tests of cognitive, perceptual and sustained attention functions in hot environments.
 - 13.4 Physical work and cognitive function during acute heat exposure before and after heat acclimation.
 - 13.5 Insulated skin temperatures: indirect indices of human body-core temperature.
 - 13.6 The measurement of human body-fluid volumes: resting fluid volumes before and after heat acclimation.
 - 13.7 The thermal consequences of wearing body armour during extended exercise in the heat.
 - 13.8 A first-principles evaluation of auxiliary cooling for ADF personnel.
 - 13.9 Heat storage in pilots and its impact upon simulated helicopter flight performance.
 - 13.10 Chemical and biological clothing: thermal consequences of varying the heat and

- moisture transmission properties of personal protective ensembles.
- 13.11 Intermittent air cooling when working in hot environments.
- 13.12 The effect of water temperature on the reduction in body core temperature after work in a hot environment.
- 13.13 Heat retention characteristics of three first-responder chemical, biological and radiological protective ensembles.
- 13.14 The effect of clothing layers and textile composition on physiological and perceived strain during work in protective clothing in a hot environment.
- 13.15 The effect of a four-tier body armour system on body-heat retention and physiological strain.
- 13.16 The effect of a tiered body armour system on soldier physical mobility.
- 13.17 Search and rescue operations: an evaluation of the physiological demands upon firefighters.
- 13.18 Physiological employment standards for firefighters: *Report 1: The essential, physically demanding tasks of contemporary fire fighting.*
- 13.19 Physiological employment standards for firefighters: *Report 2: The physiological demands of performing physically demanding fire-fighting duties.*
- 13.20 Physiological employment standards for firefighters: *Report 3: Physical aptitude tests for contemporary firefighters.*
- 13.21 Exploring the metabolic, thermal and exercise mode determinants of the heart rate, ventilation and oxygen consumption relationships during exercise.
- 8.1.14 Dräger Australia Pty. Ltd., Brisbane (Australia). Dräger OXYBOKS K and OXY K PLUS oxygen recovery, self-rescue breathing apparatus: physiological assessment.
- 8.1.15 Protector Safety Pty. Ltd., Sydney (Australia). Physiological assessment of the Fenzy Biocell 1 oxygen recovery, self-rescue breathing apparatus.
- 8.1.16 Department of Defence, Canberra (Australia).
 - 16.1 Review and evaluation: clearance divers' tasks and physical assessments.
 - 16.2 Should women fight? A scientific review of a proposal for the employment of women in the combat arms.
 - 16.3 Evaluation and implementation of physiological competencies: a project management model.
 - 16.4 Anatomical, physiological and functional significance of gender differences.
 - 16.5 A scientific review of the Basic Fitness Assessment.
 - 16.6 Medical and physiological screening for civilian professionals within the ADF.
 - 16.7 Development of a trade-specific barrier test for Royal Australian Navy clearance divers.
 - 16.8 Physical performance optimisation: a handbook for ADF Clearance Divers.
- 8.1.17 New South Wales Fire Brigades (now Fire & Rescue NSW), Sydney (Australia):
 - 17.1 Metabolic heat storage in thermal protective clothing: a comparison of firefighter personal protective ensembles.
 - 17.2 Physiological and manikin-based assessment of firefighter helmets.
 - 17.3 The centre of mass of fire helmets.
 - 17.4 Personal protective ensembles for firefighters: an evaluation of metabolic heat loss from Australian ensembles.
 - 17.5 An epidemiological evaluation of injuries to firefighters within the NSW Fire Brigades: 1998-2007.
 - 17.6 An evaluation of the physiological burden imposed by the personal protective equipment used by the NSW Fire Brigades.
 - 17.7 Physiological employment standards for firefighters: *Report 4: Recommended physiological employment standards for the firefighters of Fire & Rescue NSW.*
- 8.1.18 Australian Mines and Metals Association, Perth (Australia):
 - 18.1 Review and scientific evaluation: Thermal testing of hyperbaric lifeboats (Technical

Note: December 1999).

18.2 Projected metabolic rate of saturation divers resting within a hyperbaric lifeboat.

8.1.19 Australian Protective Services, Canberra (Australia):

19.1 Review and scientific evaluation: Protective Service Officer: Health clearance and physical assessment information.

19.2 A theoretical review of the physical screening requirements for Air Security Officers.

19.3 Exercise prescription for Protective Service Officers: Phase I.

8.1.20 Metropolitan Fire and Emergency Services Board, Melbourne (Australia):

20.1 Heat storage in fire fighting personal protective ensembles.

20.2 Heat storage in fire fighting personal protective ensembles with and without moisture barriers.

8.1.21 HMAS Waterhen, Department of Defence, Sydney (Australia): Clearance diver project Phase 3: Physical performance optimisation.

8.1.22 Meat and Livestock Australia (Sydney, Australia) and the Cooperative Research Centre for Australian Weed Management (Australia):

22.1 Physiological demands of horseback mustering in northern Australia.

22.2 Bench-top evaluation of heat penetration through equestrian helmets.

22.3 Laboratory-based physiological assessment of the thermal strain associated with wearing horse-riding helmets.

8.1.23 W.L. Gore & Associates GmbH (Germany):

23.1 Physiological characteristics of the foot with special relevance to thermoregulation and thermal comfort.

23.2 The hand: physiological characteristics that impact upon temperature regulation and thermal comfort.

8.1.24 Emergency Management Australia (a Division of the Attorney-General's Department), Australian Government, Canberra (Australia). Indices of hydration state during progressive and controlled dehydration: the efficacy of osmolality change as a preventative index suitable for field use.

8.1.25 Australian Building Codes Board, Canberra (Australia):

25.1 Human trials to evaluate thermal performance specifications for private bushfire shelters. *Part 1*: The impact of a constant Modified Discomfort Index of 39°.

25.2 Human trials to evaluate thermal performance specifications for private bushfire shelters. *Part 2*: The impact of changes in air temperature, water vapour pressure and carbon dioxide concentration within an air-tight simulator.

25.3 Human trials to evaluate thermal performance specifications for private bushfire shelters. *Part 3*: The physiological impact of changes in air temperature and water vapour pressure on hyperthermic and dehydrated men and women.

8.1.26 Glencore, Tahmoor Coal Pty, Ltd., NSW (Australia). Carbon dioxide exposures in coal mining: an evaluation of the probable physiological and cognitive impact of the 2013 Safe Work Australia workplace exposure standards for airborne contaminants.

8.2 Community-based Voluntary Contributions:

8.2.1 Rowing:

- writing training manuals and programmes for local and overseas clubs
- training and coaching camps
- coaching
- presentations: nutrition, drugs in sport
- undergraduate placement supervision

8.2.2 Kayaking:

- coaching
- providing expertise advice to national-level coach

- undergraduate placement supervision
- 8.2.3 Regional Science Fair: Judge
St Joseph's Student Research EXPO: 2003-2005
Regional Science Fair: 2006-2016

8.3 Community-related Publications:

- 8.3.1 Taylor, N.A.S., Armstrong, K.A., Fogarty, A.L., Senakham, T., and Blade, W. (2003). Thermal testing of fire helmets. *Fire International.net*. June 2nd, 2003.
<http://www.fireinternational.net/>
<http://www.fireinternational.net/shownews.asp?secid=8&nav=1&newstype=&key=&page=&newsid=4573>
- 8.3.2 Groeller, H., Ledbrook, J., Turner, J., and Taylor, N.A.S. (2004). *Physical performance optimisation: a handbook for RAN Clearance Divers*. University Of Wollongong, Wollongong, Australia. Pp. 1-65.
ISBN: 1-74128-062-1.
- 8.3.3 Groeller, H., and Taylor, N.A.S. (2009). *Physical performance optimisation: a handbook for firefighters*. University Of Wollongong, Wollongong, Australia. Pp. 1-197.
ISBN: 978-1-74128-152-1.