CURRICULUM VITA

GLEN MACARTNEY DAVIS, OAM

DATE OF BIRTH: JANUARY 30, 1952.

PLACE OF BIRTH: CASTOR, CANADA.

NATIONALITY: AUSTRALIAN AND

CANADIAN



EDUCATION:

Ph.D. University of Toronto, Toronto, Canada, 1986.

M.A. University of Western Ontario, London, Canada, 1976.

B.P.E. (HONOURS) University of Ottawa, Ottawa, Canada, 1974.

GRADE 13 DIPLOMA Hillcrest Secondary School, Ottawa, Canada, 1970

GRADE 12 DIPLOMA Hillcrest Secondary School, Ottawa, Canada, 1969

HONOURS AND FELLOWSHIPS:

2014 **MEDAL of the ORDER of AUSTRALIA** (OAM),

("...for his service to science and community health through developing and

promoting spinal cord injury therapies")

1987 FELLOW, American College of Sports Medicine.

1981 UNIVERSITY OPEN FELLOWSHIP, University of Toronto.

1979-1980 STUDENT FELLOWSHIP, Dept of National Health and Welfare, Canada

1974, 1975, 1982 GRADUATE SCHOLARSHIP, Province of Ontario.

1974 UNIVERSITY SILVER MEDAL, University of Ottawa.

1974 MAGNA CUM LAUDE GRADUATE, University of Ottawa.

PROFESSIONAL APPOINTMENTS:

5 Appointments held before 1987

2010-Present	PROFESSOR OF CLINICAL EXERCISE SCIENCES and,		
	DIRECTOR, Clinical Exercise and Rehabilitation Unit, Faculty of Health Sciences, The University of Sydney, Sydney, Australia.		
2016-2018	VISITING PROFESSOR, Faculty of Health Sciences, Universiti Teknologi Mara, Shah Alam, Kuala Lumpur, Malaysia		
2015-2017	COUNTRY COORDINATOR for Malaysia and Brunei, Southeast Asia Studies Centre, University of Sydney, Sydney, Australia		
2014-2017	VISITING PROFESSOR, Faculty of Engineering, University of Malaya, Kuala Lumpur, Malaysia		
2014-2016	Director of South-East Asia Engagement Faculty of Health Sciences, The University of Sydney, Sydney, Australia		
2007-2010	SUB-DEAN (Research Students) Faculty of Health Science, University of Sydney		
2005-2010	CLINICAL EXERCISE SPECIALIST (Consultant), Royal Rehabilitation Centre Sydney, Ryde, NSW		
1996-2009	ASSOCIATE PROFESSOR, and,		
	DIRECTOR, Rehabilitation Research Centre, School of Exercise and Sport Science, Faculty of Health Sciences, The University of Sydney, Sydney, Australia.		
1996-2003	DIRECTOR, World Health Organisation Collaborating Centre for Rehabilitation Western Pacific Region, Manila, The Philippines		
1992-1996	SENIOR LECTURER, Department of Biomedical Sciences, Faculty of Health Sciences, The University of Sydney, Sydney, Australia.		
1989-1991	LECTURER, Department of Biological Sciences, Cumberland College of Health Sciences, The University of Sydney, Sydney, Australia.		
1987-1989	ASSISTANT PROFESSOR, Department of Kinesiology, Health Promotion and Recreation, College of Education., The University of North Texas, Denton, USA.		

Funding Sources

(Research, Technology and Industry Grants)

Australia	EU	USA	Canada	Malaysia
AUD19,355,023	EUR116,742	USD1,471,141	CDN60,000	MYR3,486,750
\$6,937,228	Category 1			
\$10,286,221	Category 2			
\$2,041,219	Category 3			
\$ 90,355	Other			

2020-2024	A Novel Neuro-cardiac Self-regulation Therapy to Improve Autonomic and Neural Function after SCI: Clinical Trials and Translation to Implementation. (A Craig, J Middleton, B Gopinath, I Cameron, GM Davis, Y Tran, A Krassioukov, J Braithwaite, R Mitchell and S Gustin). Spinal Cord Injury Research Grants Program, NSW Ministry of Health (HERDC Category 2.3); 2020-2024 \$2,498,267 + \$500,000 (University of Sydney)
2020-2024	Congenital Heart Fitness Intervention Trial: CH-FIT. (The University of Sydney, on behalf of 12 Chief Investigators, including GM Davis). Medical Research Future Fund Emerging Priorities and Consumer Driven Research Initiative - Congenital Heart Disease (HERDC Category 1.3); 2020-2024. \$5,767,258, comprising \$3,328,569 (Commonwealth), \$612,063 (Institutions Cash + in-kind) and \$1,826,623 (Industry Partners Cash + in-kind).
2020-2022	Australian National Physical Activity Survey for Spinal Cord Injury (ANPASSCI). (GM Davis, CQ Oliveira and JW Middleton). Spinal Cord Injury Australia (HERDC Category 3); 2020-2022 \$229,500.
2015-2020	Muscle Fatigue and Oxygenation during Electrical Stimulation-evoked Exercise in Spinal Cord Injured Individuals: Mechanomyography and Near Infrared Spectroscopy Characteristics. (NAB Hamzaid, N Hasnan, GM Davis) Fundamental Research Grant Scheme (FRGS), Malaysian Ministry of Higher Education, Malaysia 2015-2018 MYR142,000
2016-2019	REXOWalk: A New Approach to Sensory-embedded Robotic Walking after Spinal Cord Injury (N Hasnan, NAB Hamzaid, GM Davis) Fundamental Research Grant Scheme (FRGS), Malaysian Ministry of Higher Education, Malaysia 2016-2018 MYR252,000
2013-2015	PLANET Sydney- the PhysicaL Activity NETwork Sydney University. (A Bauman, J Kay, C Sherrington, C Rissel, S Greaves, C Mulley, T Gill, GM Davis, K Refshauge, M Fiatarone Singh, L Hardy, L Baur, M Allman-Farinelli, L Clemson, R Magnusson, S Kilbreath, L Neubeck, H Dhillon, J Chau, N Johnson, D Merom, R Stancliffe, M Mackey, D Shirley, A Bundy, L Engelen, J Vardy, H van der Ploeg, B Bellew, P McGreevy). University of Sydney Research Networks Scheme (SyReNS). 2013-2015 \$170,000.

2013-2015	ATVRE – Assistive Technologies for Virtual Rehabilitation Engineering. (D Feng, F Dehghani, C Dunstan, C T-W Jin, J Kim, Q Li, A McEwan, A Ruys, G Brooker, T Buckley, W Cai, GM Davis, C Fornusek, M Fulham, M Khadra, A Mohamed, G Murray, C Peck, B Vucetic, A Weiss, H-K Chan). University of Sydney Research Networks Scheme (SyReNS) 2013-2015 \$200,000
2012- 2016 NCG	Reduction Of Breast Lymphoedema Symptoms Secondary To Breast Cancer: A Randomised Controlled Trial (S Kilbreath, L Ward <u>GM Davis</u> , A Degnim, D Black, N Foroughi) National Health and Medical Research Council. 2012-2014, \$579,880
2012-2016	Powering Up Paralyzed Muscles Using Functional Electrical Stimulation (FES) - An Advance in Rehabilitation Engineering (ABAW Khairi, NA Hamzaid, N Hasnan, GM Davis), University Malaya High Impact Research (HIR) Project Grant, Block Grant from Malaysian Ministry of Higher Education 2012-2015 MYR3,026,750 (\$918,427).
2011-2013 NCG	Embedding Sustainable Physical Activity into the Everyday Life of Adults with Intellectual Disability. (R Stancliffe, GM Davis, A Bauman, S Jans), National Health and Medical Research Council (Partnerships). 2011-2013, \$582,724 + \$150,000 (Partners)
2011-2012 NCG	Physical Well-being for Women with Metastatic Breast Cancer. (S Kilbreath, D Currow, <u>G Davis</u> , J Emery, N Wilcken, J Phillips, A Martin) National Breast Cancer Foundation Novel Concept Awards, 2011-2012, \$199,606
2011-2016	Spinal Cord Injuries – SpinalCure Australia Scholarship ¹ (GM Davis) Spinal Cord Injuries Australia and SpinalCure Australia 2011-2016, \$188,000
2011-2012	Outcomes of a Short-term FES-cycling Exercise Programme in a Spinal Cord Injured Population in Malaysia (R Husain, N Hasnan, GM Davis, JP Engkasan) University Malaya Research Grant, 2011-2012, MYR66,000 (\$20,027).
2011 ^c	NSW SCIPA Full-on Research Project (Postdoctoral Fellow) (GM Davis), Lifetime Care Support Authority (NSW), 2011, \$138,500

1 Scholarship grant awarded GM Davis. Scholarship was awarded to a post-graduate student within the Faculty of Health Sciences after open competition.

2009-2014 ^C SCIPA (Spinal Cord Injury and Physical Activity): Intensive Exercise from Acute Care to the Community.

> (M Galea, S Dunlop, GT Allison, L Harvey, GM Davis, L Dennehy, A Nunn, R Marshall, R Ackland, T Gerahty, I Mareels).

Victorian NeuroTrauma Initiative,

2009-2013, \$4,699,984

Lifetime Care Support Authority (NSW),

2009-2011, \$1,100,000

2008-2010 NCG A Novel Approach to the Training of Functional Standing following Spinal Cord Injury.

> (J Crosbie, GM Davis, JW Middleton, JE Butler). National Health and Medical Research Council.

2008-2010 - \$A396.625

2005-2009 C Enhancing Functional Recovery and Independence after Spinal Cord Injury

(JW Middleton, GM Davis, SC Gandevia, A Craig, P Nickolls, TRD Scott,

BSB Lee, SR Lord)

New South Wales Spinal Cord Injury and Other Neurological Conditions

Grants Program

2005-2008 - \$1,000,000

NSW Government Spinal Exchange Program Fellowship. 3 2007

(GM Davis, JW Middleton, J Butler, J Crosbie).

NSW Office of Science and Medical Research.

2007 - \$31,820.

2004-2006 NCG A RCT of power training and treadmill training to improve walking ability in sub-acute stroke patients.

(SL Kilbreath, M Fiatarone Singh, J Crosbie. GM Davis, B Zeman)

National Health and Medical Research Council.

2004-2006 - \$A397.416

2004-2006 NCG Orthostatic tolerance during FES-evoked stepping in paraplegia: A safety and viability study.

(GM Davis, J Crosbie, J Raymond, J Middleton) National Health and

Medical Research Council.

2004-2006 - \$A242,150

1997-2004 **c** Walk Back to the Future

(J Middleton, GM Davis, B Fisher and D Smith). Motor Accident Authority

of New South Wales, Australia

1997-2001 - \$A380,000

2001 - 2003 NCG Does aerobic or resistance exercise training improve walking ability in chronic

stroke patients?

(GM Davis, SL Kilbreath, M Fiatarone Singh, S Lord, B Zeman) National

Health and Medical Research Council.

2001-2003 - \$A150,000

³ Teaching and Curriculum Evaluation Fellowship

2001-2003	Neopraxis FES Scholarship ⁴ (GM Davis) Neopraxis Pty Lty, Lane Cove, NSW, Australia 2001-2003 - \$A75,000
2000-2003	Standing and Walking after Spinal Cord Injury. (GM Davis) NSW Department of Health, Australia 2000-2001 - \$A90,700
2000-2002 NCG	Walking for the Spinal Cord-Injured (R Smith, H Lakany, D Hill and GM Davis) Australian Research Council: Strategic Partnerships in Industry, Research and Training 2000-2002 \$A521,812 + \$A743,361 (in-kind contribution)
1997-1999 NCG	Australian Postgraduate Research Award (Industry) Scholarship ⁵ (GM Davis). Australian Research Council 1997-2000 - \$A60,540
1995-1998 NCG	An Innovative Program for the Injured/Disabled Farmers in Rural Australia - AgrAbility in Australia ⁶ (L Fragar, GM Davis and J Beard). Rural Health Support, Education and Training, Department of Health, Housing and Community Services of Australia 1995-1998 - \$A220,950
1995-1998 c	FitAbility: The Disabled Fitness Program ⁷ D Kitcher, JR Sutton, GM Davis and S Rougellis). Motor Accident Authority of New South Wales, Australia 1995-1998 - \$A243,300
1995-1995	Faculty of Health Sciences Post-graduate Scholarship in FES Research ⁸ .

(GM Davis). Multi-Tems Pty Limited, Australia.

1995-1996 - \$A18,500

NCG denotes nationally competitive grants

⁴ Scholarship grant awarded GM Davis. Scholarship was awarded to a post-graduate student within the Faculty of Health Sciences after open competition.

⁵ Scholarship grant awarded GM Davis. Scholarship was awarded to a post-graduate student within the Faculty of Health Sciences after open competition.

⁶ Project grant with research, education and service delivery components. This Project was initiated by the prior Director of the Rehabilitation Research Centre, then re-designed and re-focused by L Fragar and GM Davis

C denotes peer-reviewed competitive grants at state or foundation level.

⁷ Project grant for service delivery and research to establish an exercise rehabilitation facility at the Faculty of Health Sciences

⁸ Scholarship proposal written by GM Davis. Scholarship was awarded to a post-graduate student within the Faculty of Health Sciences after open competition.

1995-1996 NCG Autonomic dysregulation and baroreceptor sensitivity in spinal cord injury. (GM Davis, M Climstein, H Groeller and MTE Hopman). Australian Research Council International Fellowship Project Grant, Australia. 1995 - \$A6,460 1994-1996 C Walk Again (M Smith, S Engel, GM Davis, L Harvey and R Jones). Motor Accident Authority of New South Wales, Australia. 1994-1995 - \$A126,000 1995 Factors contributing to joint stiffness in spastic paraplegia. (JA Burne and GM Davis). The University of Sydney Internal Mechanism B Research Grant, Australia. 1995 - \$A19,000 1995 Morphologic, metabolic and performance changes in response to electrical stimulation of paralysed muscle in paraplegia. (JR Sutton and GM Davis). Australian Research Council Institutional Grant, Australia 1995 - \$A12,600 1993 Development of a forward dynamic model for simulating human movement (R Smith, P Sinclair, GM Davis, and R Shepherd) The University of Sydney Internal Mechanism B Grant Scheme, \$12,355 1991-1993 NCG Cardiovascular responses to functional electrical stimulation in SCI (GM Davis and JR Sutton). National Health and Medical Research Council, Australia 1991 – 1993 - \$133,308. 1991-1993 NCG Cardiovascular and metabolic responses to functional electrical stimulation and arm exercise in spinal cord injury (GM Davis, JR Sutton and M Climstein). National Heart Foundation, Australia 1991 – 1993 - \$87,668. 1990-1991 Physiological and performance effects of functional neuromuscular stimulation (FNS) exercise in paraplegics (GM Davis and GC Gass). Cumberland College of Health Sciences, The University of Sydney, Australia 1990 - 1991 - \$34,000. 1989-1990 Post-doctoral research fellowship in Physical Education (AW Jackson, GM Davis, DW Hill and RB Patton). University of North Texas, USA 1989 - \$US26,000; 1990 - \$US13,000.

1988-1989 **c** Epidemiological correlates of hypercholesterolemia and hypertension in the United States: Countdown USA 1988

(AW Jackson and GM Davis). Voluntary Hospitals of America, USA 1988 - \$US4,500; 1989 - \$US2,000.

1988-1989 Physiological and performance effects of functional neuromuscular stimulation exercise in paraplegics
(GM Davis). University of North Texas, USA

(GM Davis). University of North Texas, USA 1988 - \$US4,000, \$US5,000; 1989 - \$US5,000.

1981-1982 ^c Central and peripheral adaptation in the lower-limb disabled (GM Davis, RW Jackson and RJ Shephard). Ontario Department of Health and Social Services, Canada.

1981 - \$CDN26,000; 1982 - \$CDN34,000.

FUNDED TECHNOLOGY AND INDUSTRY GRANTS:

2015-2016 Validation of a new portable biofeedback pressure mat for wheelchair (GM Davis, CQ de Oliveira, A Stamm, S Michael and K Hamilton). Innovation Bridging Grant - Global Connections Fund. The University of Sydney. 2015-2016 - \$49000 2011 Lunar Prodigy Bone Densitometer (M Fiatarone Singh, GM Davis, J Brand-Miller, SL Kilbreath, P Brennan, L March, N Johnson, K Rooney and R Orr) National Health and Medical Research Foundation Equipment Grant 2011-\$A36,490 2007 Sportstec Trak Performance, Sportstec Sportscode-Pro, and Wacom Graphire4 Education pack system. (A Bundy, L Baur, GM Davis, D Shirley, C Canning, L Ada). National Health and Medical Research Foundation Equipment Grant. 2007 - \$A18,256 2006-2007 Linkage Projects Agreement between The University of Sydney and Otto Bock Healthcare Products GmbH – Framework 6 European Union Marie Curie Outgoing International Fellowships. (GM Davis). Otto Bock Healthcare Products GmβH 2007-2007 - €116,741.75 2006 A Non-conductive Force Platform System to Interface with Real-time Motion Analysis for Capturing and Analysing Functional Motion in Disabled Populations. (J Crosbie, SL Kilbreath, GM Davis, K Refshauge, C Maher, JW Middleton, AE Hunt, J Latimer). National Health and Medical Research Foundation Equipment Grant. 2006 - \$A32,850 2005-2006 Clinical Trial Evaluation of Otto Bock FES Systems. (GM Davis) Otto Bock Healthcare GmbH Austria Research Agreement 2005-2006 - \$A85,000 2005 An Ambulatory System for Capturing and Analysing Real-Time Motion in Disabled Populations. (J Crosbie, GM Davis, SL Kilbreath, KM Refshauge, ID Cameron, CG Maher, JW Middleton, J Alison, GL Moseley, J Latimer, N O'Dwyer) National Health and Medical Research Council Equipment Grant 2005 - \$A95,187

FUNDED TECHNOLOGY AND INDUSTRY GRANTS:

2004 Enhancing Functional Independence and Recovery after Neurological

Disability.

(GM Davis, SL Kilbreath, J Crosbie, JW Middleton, KM Refshauge,

ID Cameron, J Raymond, CG Maher)

National Health and Medical Research Council Equipment Grant

2004 - \$A33,520 + \$A12,000 (Partner Institution)

2004 NCG Innovative Assistive Technology for Severely Disabled People

(HT Nguyen, A Craig, GM Davis, JW Middleton, AB Barriskill)

Australian Research Council: Linkage – Large Equipment,

Infrastructure and Facility.2004 - \$276,317 (ARC) + \$A240,000 (Partner Institutions) + \$A180,000 (in kind, Partner Institutions)

2003-2004 Clinical trial evaluation of FES systems.

(GM Davis) Neopraxis (Cochlear) Pty Ltd Research Agreement

2003-2004 - \$A175,856

1999 WalkBack to the Future Infrastructure Grant

(GM Davis) University of Sydney University Research Grants

Scheme

1999 - \$A22,000

1987-1990 NCG Evaluation of FES techniques for exercise and ambulation

(RM Glaser and T Mathews, co-principal investigators; <u>GM Davis</u>, P.

Akuthota, P Barre, J Bors, S. Gupta and AG Suryaprasad, co-

investigators). Research Rehabilitation and Development Committee,

U.S. Department of Veterans Affairs, USA

1987 - \$US487,953; 1988 - \$US310,930; 1989 - \$US316,330;

1990 - \$US296,428.

RESEARCH THEME:

I have built my programme of research around the key theme of using innovative technologies to improve the quality of physical exercise and functional outcomes in individuals with acquired neurological disability and musculoskeletal conditions.

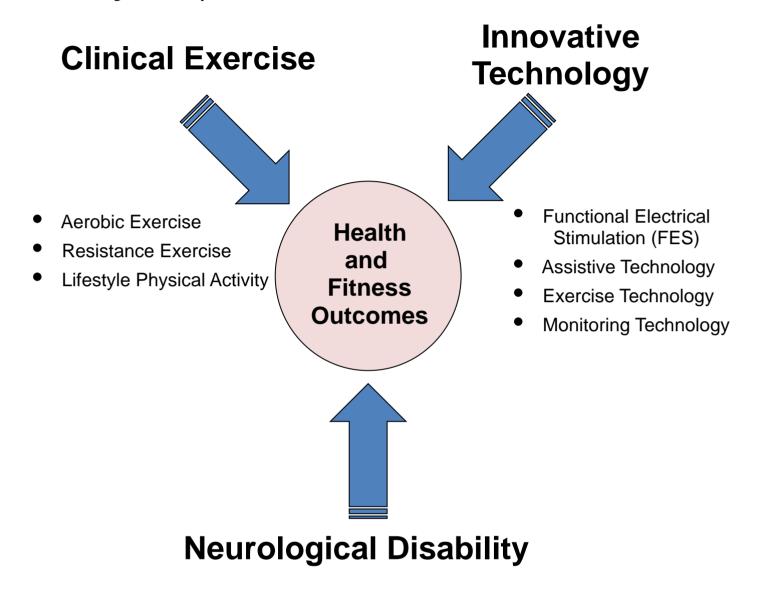


Figure 1. Clinical Exercise, FES and Innovative Technology

At the international level, I am best known for use of Functional Electrical Stimulation (FES) for the re-activation of paralysed or paretic muscles in individuals with neurological disability. The innovative technologies that I developed have included the use of constant-velocity ("isokinetic") FES leg exercise in people with traumatic spinal cord injury, the development of new technologies and control strategies for FES walking, and the use of combined ("hybrid") FES-evoked leg muscle contractions and voluntary upper body exercise for improved exercise responses.

RESEARCH THEME:



Figure 2. Assistive and Surveillance Technologies Augment Exercise Capacity

More recently, my interest in assistive technologies (including FES-evoked exercise, novel exercise machines and other devices to promote more 'dose-potent' exercise) has broadened to include use of "surveillance technologies", such as lifestyle physical activity monitors and other consumer devices or applications to both improve motivation to exercise and allow better planning of leisure time physical activity by the individual.

PUBLICATION METRICS:

My dissemination of research reflects an increasing number of citations per year, with 1399 total citations to January 2017 (35.9 citations per year), and an **h-Index of 23** (ISI Web of Science). During that time period there were 1071 publications citing my published works.

My ResearchGate metrics are **h-Index of 28** (excl. self-citations), RG score of 39.65 and RG Reach of 10,144 (1 January 2017)

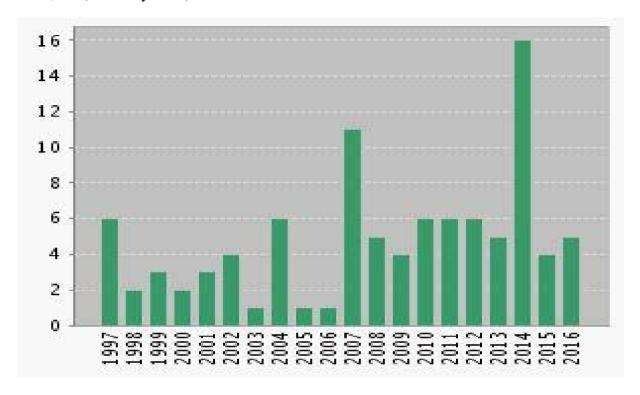


Figure 3. Publications per year (ISI Web of Knowledge)

PUBLICATION METRICS:

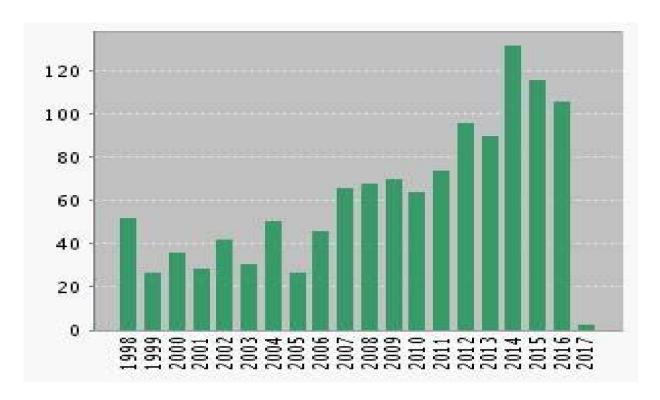


Figure 4. Citations per year (ISI Web of Knowledge)

	Historical top-10 citing all-time publications (ISI 01/01/2017) are:	Total	Average Citations per Year
	Total and Average Citations per year	1399	35.90
1.	Title: Cardiorespiratory fitness and walking ability in subacute stroke patients By: Kelly, JO; Kilbreath, SL; Davis, GM; et al. Source: ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION Volume: 84 Issue: 12 Pages: 1780-1785 Published: DEC 2003	91	6.07
2.	Title: Impaired calcium pump function does not slow relaxation in human skeletal muscle after prolonged exercise By: Booth, J; McKenna, MJ; Ruell, PA; et al. Source: JOURNAL OF APPLIED PHYSIOLOGY Volume: 83 Issue: 2 Pages: 511-521 Published: AUG 1997	75	3.57
3.	Title: Cardiorespiratory fitness in highly-active versus inactive paraplegics By: Davis, GM ; Shephard, RJ Source: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE Volume: 20 Issue: 5 Pages: 463-468 Published: OCT 1988	66	2.36

PUBLICATION METRICS:

	Historical top-10 citing all-time publications (ISI 01/01/2017) are:	Total	Average Citations per Year
	Total and Average Citations per year	1399	35.90
4.	Title: Exercise capacity of individuals with paraplegia By: Davis, GM Source: MEDICINE AND SCIENCE IN SPORTS AND EXERCISE Volume: 25 Issue: 4 Pages: 423-432 Published: APR 1993	65	2.60
5.	Title: Comparison of aerobic cycle training and progressive resistance training on walking ability after stroke: A randomised sham exercise-controlled study. By: Lee MJ, Kilbreath L et al; Source: JOURNAL OF THE AMERICAN GERIATRICS SOCIETY Volume: 56 Issue: 6 Pages: 976-985 Published: JUN 2008	54	5.40
6.	Title: Cardiorespiratory fitness in highly-active versus inactive paraplegics By: Davis GM; Shephard RJ. Source: MEDICINE and SCIENCE IN SPORTS AN EXERCISE Volume: 20 Issue: 5 Pages: 463-468 Published: OCT 1988	52	1.73
7.	Title: Effects of electrical stimulation-induced leg training on skeletal muscle adaptability in spinal cord injury By: Crameri, RM; Weston, A; Climstein, M; et al. Source: SCANDINAVIAN JOURNAL OF MEDICINE and SCIENCE IN SPORTS Volume: 12 Issue: 5 Pages: 316-322 Published: OCT 2002	51	3.19
8.	Title: Effects of electrical stimulation leg training during the acute phase of spinal cord injury: a pilot study By: Crameri, RM; Weston, AR; Rutkowski, S; et al. Source: EUROPEAN JOURNAL OF APPLIED PHYSIOLOGY Volume: 83 Issue: 4-5 Pages: 409-415 Published: NOV 2000	45	2.50
9.	Title: Cardiorespiratory, metabolic and biomechanical responses during functional electrical stimulation: Health and fitness benefits By: Davis GM ; Hamzaid NA et al. Source: 9th Vienna International Workshop on Functional Electrical Stimulation. Volume: 32 Issue: 8 Pages: 625-629 Published: AUG 2008	43	4.30
10.	Title: Sleep-deprivation and cardiorespiratory function - Influence of intermittent submaximal exercise By: Plyley MJ; Shephard, RJ; Davis, GM; et al. Source: EUROPEAN JOURNAL OF APPLIED PHYSIOLOGY AND OCCUPATIONAL PHYSIOLOGY Volume: 56 Issue: 3 Pages: 338-344 Published: 1987	42	1.35

Patents, Theses and Book Chapters

PATENTS:

Davis GM, Fornusek C, and Sinclair P (2007). Improvements relating to muscle stimulation systems. Australia Patent 2002336784

Davis GM, Sinclair PJ and Fornusek C. (2007). Muscle stimulation systems (U.S. Patent No. 7,280,871)

THESES:

Davis, GM. (1976). The effect of varied rest periods during interval training upon aerobic and anaerobic fitness. Unpublished Masters Dissertation, University of Western Ontario, London, Canada.

Davis, GM. (1986). <u>Cardiovascular fitness and muscular strength in lower-limb disabled males.</u> Unpublished Doctoral Dissertation, University of Toronto, Toronto, Canada.

BOOKS AND CHAPTERS OF BOOKS:1

- 1. Hamzaid NA, Fornusek C and Davis GM (2011). In Tong R (Ed). Functional Electrical Stimulation Leg Exercise: From Technology to Therapy (Chapter 7). <u>Biomechatronics in Medicine and Health Care</u> (ISBN 978-981-4241-61-8). Hong Kong: Pan Stanford Publishing, pp 93-108
- 2. Tanhoffer AIP, Crosbie J, Davis G.M, Middleton JW and Butler JE. (2010) In van der Woude LHV, Hoekstra F, de Groot S, Bijker KE, Dekker R, van Aanholt PCT, Hettinga FJ, Janssen TWJ and Houdijk JHP (Eds.) . A comparison of low and high frequency functional electrical stimulation during standing in spinal cord injury. Presented at the 4th International State-of-the-Art Congress Rehabilitation: Mobility, Exercise and Sports, Amsterdam, Netherlands Rehabilitation: Mobility, Exercise and Sports (IBSN 978-60750-080-3). Amsterdam:IOS Press BV, pp 335-337.
- 3. Tanhoffer RA., Tanhoffer AIP, Pithon KR, Estigoni EH, Raymond J and Davis G.M. (2010) In van der Woude LHV, Hoekstra F, de Groot S, Bijker KE, Dekker R, van Aanholt PCT, Hettinga FJ, Janssen TWJ and Houdijk JHP (Eds.) Estimation of energy expenditure derived from a body-worn sensor versus indirect calorimetry in wheelchair users. Presented at the 4th International State-of-the-Art Congress Rehabilitation: Mobility, Exercise and Sports, Amsterdam, Netherlands. Rehabilitation: Mobility, Exercise and Sports (IBSN 978-60750-080-3). Amsterdam:IOS Press BV, pp 230-232.

¹ All works in this section represent published materials in books with ISBN, ISSN (or equivalent) registration.

Patents, Theses and Book Chapters

- 4. Estigoni EH, Fornusek C, Song T, Tanhoffer RA, Smith R, and Davis G.M. (2010) Evoked EMG and muscle fatigue during isokinetic FES cycling in individuals with SCI. In van der Woude LHV, Hoekstra F, de Groot S, Bijker KE, Dekker R, van Aanholt PCT, Hettinga FJ, Janssen TWJ and Houdijk JHP (Eds.) Presented at the 4th International State-of-the-Art Congress Rehabilitation: Mobility, Exercise and Sports, Amsterdam, Netherlands. Rehabilitation: Mobility, Exercise and Sports (IBSN 978-60750-080-3). Amsterdam:IOS Press BV, pp 314-316.
- 5. Sinclair PJ, Smith RM, and Davis GM (2006). In Smith R and Sinclair P (Eds.). Forward dynamic modelling to predict electrical stimulation timing in cycling exercise for people with spinal cord injury. Computer Simulation of Human Movement. Sydney: Sydney University Press, pp31-36.
- 6. Kilbreath SL and Davis GM (2005). In Refsauge K, Ada L and Ellis E (Eds.). Cardiorespiratory fitness following stroke. <u>Science-based Rehabilitation: Theory into Practice</u>. Sydney: Butterworth-Heinemann Press, pp 131-158.
- Davis GM. (1999). Cardiovascular stresses and energy costs of orthotic and FES-assisted gait in paraplegia. In LHV van der Woude, MTE Hopman and CH van Kemenade (Eds.) <u>Biomedical Aspects of Manual Wheelchair Propulsion: The State of the Art II</u>. Amsterdam: IOS Press, pp 263-272
- 8. Van Kemenade CH, Smith R, Middleton J and Davis GM (1999). Orthotic gait in persons with SCI: a single case study. In LHV van der Woude, MTE Hopman and CH van Kemenade (Eds.) <u>Biomedical Aspects of Manual Wheelchair Propulsion</u>: The State of the Art II. Amsterdam: IOS Press, pp 300-302.
- 9. Van der Plas MN, Raymond J, Davis GM and Koppes LLJ (1999). Mechanical efficiency during electrical stimulation-induced leg cycling in people with paraplegia. In LHV van der Woude, MTE Hopman and CH van Kemenade, (Eds.) <u>Biomedical Aspects of Manual Wheelchair Propulsion: The State of the Art II</u>. Amsterdam: IOS Press, pp 303-305.
- 10. Climstein, M, Davis, G, Hunt, A, Raymond, J, Fahey, A, Kelleher, P and Sutton J (1995). Electrical stimulation-induced leg exercise during arm cranking in paraplegic and ablebodied males. In A Davison, MC Dinh, MH Fitzgerald and JM Lingard (Eds.), Current Topics in Health Sciences. Sydney, Australia: The University of Sydney, pp 60-61.
- 11. Sinclair, P, Davis, G, Cheam, B and Smith, R (1995). Forces produced during cycling by functional electrical stimulation. In A Davison, MC Dinh, MH Fitzgerald and JM Lingard (Eds.), Current Topics in Health Sciences. Sydney, Australia: The University of Sydney, pp 64-65.
- 12. Shephard, RJ and Davis, GM (1991). Sports and recreation for the physically disabled. In R Strauss (Ed.), Sports Medicine (2nd edition). Toronto, Canada: WB Saunders, pp 544-562.

Patents, Theses and Book Chapters

- 13. Gayle, GW, Davis, GM, Pohlman, RL and Glaser, RM. (1990). Wheelchair track ergometry: Effects of handrim diameter on metabolic responses. In G Doll-Tepper, C Dahms, B Doll and H von Selzam (Eds.), <u>Adapted physical activity: An interdisciplanary approach</u>. New York: Springer-Verlag, pp 101-108.
- 14. Davis, GM and Glaser, RM. (1990). Cardiorespiratory fitness following spinal cord injury. In L Ada and C Canning (Eds.), <u>Key issues in neurological physiotherapy</u>. Oxford:Heinemann Medical Books, pp 155-196.
- 15. Davis, GM, Tupling, SJ and Shephard, RJ. (1986). Dynamic strength and physical activity in wheelchair users. In C Sherrill (Ed.), <u>The 1984 Olympic Scientific Congress proceedings:</u>
 Vol 9. Sport and disabled athletes. Champaign, IL: Human Kinetics Publishers, pp 139-146.
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- 99. Wolfe, LA, Rosenfeld, HA, Davis, GM and Cunningham, DA. (1977). Relationship between maximal oxygen uptake and left ventricular function in exercise. Presented at the 1977 Southern Ontario Physiologists Conference, Collingwood, Ontario, Canada.
- 100. Wolfe, LA, Rosenfeld, HA, Davis, GM and Cunningham, DA. (1976). Left ventricular function during exercise in young men of low, moderate and high aerobic fitness. Presented at the 1976 Canadian Federation of Biological Sciences Annual Meeting, Halifax, N.S., Canada. <u>Proc Canad Fed Biol Soc</u>, 4, 23.

SYMPOSIA, INVITED LECTURES and MISCELLANEOUS PUBLICATIONS

- 1. Davis, GM (2008 April). The Role of Exercise and Technology to Benefit Patients with Chronic Neurological Disability. Invited Symposium Presentation at the University of Malaya-University of Sydney Research Collaboration Symposium. University of Malaya, Kuala Lumpur, Malaysia.
- 2. Davis GM (2017 February). Engaging Health Sciences students in the Learning process about Physical Activity and Exercise: Is the Medium still the Message? International Conference of Health Sciences Education. Selangor, Malaysia.
- 3. Davis GM. (2017 July). Cardiorespiratory Fitness after FES Exercise. In FES Exercise for Health and Fitness Benefits: The state of the art (GM Davis, Chair). RehabWeek 2017. London UK.
- 4. Davis GM (2017 July). What we know (and what we don't know) about FES cycling for fitness and health benefits. In FES Cycling. RehabWeek 2917, London U.K.
- 5. Davis GM (2007 August). FES Technology and Application: Fitness and Health Benefits of FES-evoked Physical Activity. Invited Guest lecture to Faculties of Medicine and Engineering, University of Malaya, Kuala Lumpur, Malaysia.
- 6. Davis GM, Hamzaid NA and Fornusek C (2007 SEptember). Cardiorespiratory, Metabolic and Biomechanical Responses during FES Leg Exercise- Health and Fitness Benefits. Invited Symposium at the 9th Vienna International Workshop on Functional Electrical Stimulation, Krems, Austria.
- 7. Fornusek C and Davis GM (2004 April). Technical Design of a Novel Isokinetic FES Exercise Bicycle for Spinal Cord Injured Individuals. Proceedings of the Third Congress of Restoration of (wheeled) Mobility in SCI Rehabilitation. Amsterdam, Netherlands.
- 8. Davis GM and Fornusek C (2004 April). Maximizing Muscle Forces via Low Velocity Isokinetic FES cycling. Proceedings of the Third Congress of Restoration of (wheeled) Mobility in SCI Rehabilitation. Amsterdam, Netherlands.
- 9. Davis GM (2000 November) Functional Electrical Stimulation for Exercise and Enhanced Mobility in the Spinal Cord-injured Patient. Invited presentation to the Japan National Rehabilitation Centre for Disability symposium on Functional Electrical Stimulation. Tokyo, Japan
- GM Davis, SA Simcox, SG Parker, CH van Kemenade, RW Smith, JW Middleton, W Fisher (2000, May). External Trunk and Limb Orientation Sensors for Human Movement. Proceedings 2nd Annual Conference Asia-Pacific Functional Electrical Stimulation Society.
- 11. Davis GM (1999, May) Rehabilitation after Spinal Cord Injury: Recent Trends in Service Delivery and Research to Restore Gait. Invited presentation to the World Health Organization Symposium on Clinical Epidemiology of Secondary Conditions of Disabled Persons, Tokyo, Japan.
- 12. Engel S, Harvey L, Smith M and Davis G. (1996, September). Orthotic ambulation for paraplegics. Invited symposium at the Annual Continuing Medical Education Conference, Newcastle, Australia.

SYMPOSIA, INVITED LECTURES and MISCELLANEOUS PUBLICATIONS

- 13. Davis GM, Harvey LA, Engel S and Smith MB (1996, September). Oxygen uptake dynamics, oxygen cost of ambulation and clinical outcomes in spinal cord injury. Invited presentation to the Proceedings of the International Symposium on Time Series Analysis of Cardiovascular and Respiratory Dynamics. Tokyo, Japan.
- 14. Davis, GM (1995, March). Exercise after cerebrovascular accident. In GC Gass (Chair). The measurement of fitness. Invited presentation at the XII World Congress of the International Federation of Physical Medicine and Rehabilitation, Sydney, Australia.
- 15. Davis, GM (1995, October). Fitness with disability. Invited symposium and workshop by the Australian Physiotherapy Association (A.C.T.), Canberra, Australia.
- 16. Davis, GM (1994, June). Exercise after stroke and traumatic head injury. In GW Heath (Chair). Physical activity promotion in persons with disabilities: clinical applications public health implications. Invited presentation at the 1994 American College of Sports Medicine Annual Meeting, Indianapolis, USA. Med Sci Sports Exerc, 26.
- 17. Davis, GM (1993, May) (I) Clinical isokinetic assessment (II) Clinical exercise testing. Invited symposium at the Taiwan Physiotherapy Association Annual meeting sponsored by Enraf Nonius International, Teipei, Taiwan.
- 18. Davis, GM (1993, June) (I) Clinical isokinetic assessment (II) Clinical exercise testing. Invited symposium at the Southeast Asian games sponsored by Enraf Nonius International, Singapore.
- 19. Davis, GM (1993, June) Clinical exercise testing. Invited symposium by Enraf Nonius International, Aukland, New Zealand.
- 20. Davis, GM (1993, August). Exercise fitness promotion for physical disability. Invited symposium and workshop by the Australian Physiotherapy Association (N.S.W.), Canberra, Australia.
- 21. Davis, GM, Climstein, M, Kelleher, P, Ludback, F, Wong, T and Sutton, JR (1992, July). FES-enhancement of cardiac performance during tilting in paraplegics. Presentation at the International Therapeutic Stimulation Society Symposium. Liverpool, U.K.
- 22. Davis, GM (1992, September). Exercise testing and fitness training for physical disability. Invited symposium and workshop by the Australian Physiotherapy Association (N.S.W.), Canberra, Australia.
- 23. Davis, GM (1991, May). Paraplegia. In KH Pitetti (Chair). Exercise capacities and adaptations of the chronically disabled -- Current research, future directions and widespread applicability. Invited presentation at the 1991 American College of Sports Medicine Annual Meeting, Indianapolis, USA. Med Sci Sports Exerc, 23, 1991.
- 24. Davis, GM (1990, October). Cardiovascular responses to dynamic exercise in the elderly. Invited paper presented at the Conference on Ageing and the Cardiovascular System. Sydney, Australia.
- 25. Davis, GM (1990, October). Graded exercise testing in the elderly. Invited paper presented at the Conference on Ageing and the Cardiovascular System. Sydney, Australia.
- 26. Davis, GM (1989, April). Central versus peripheral adaptation in paraplegic and able-bodied individuals. Invited paper presented at Department of Physiology and Medicine, University of Auckland, Auckland, New Zealand.

SYMPOSIA, INVITED LECTURES and MISCELLANEOUS PUBLICATIONS

- 27. Davis, GM (1989, May). Central versus peripheral adaptation in the lower-limb disabled. Invited paper presented at Sigma Xi (North Texas), Denton, Tx, USA.
- 28. Gayle, GW, Davis, GM, Pohlman, RL and Glaser, RM. (1989, June). Wheelchair track ergometry: Effects of handrim diameter on metabolic responses. Presentation at the International Federation of Adapted Physical Acitvity: Seventh International Symposium. Berlin.
- 29. Williamson, JW, Pawelczyk, JA, Davis, GM and Raven, PB. (December, 1988). Heart rate and blood pressure variability during lower body negative pressure and electrically induced isometric leg contractions. Free communication pesented at the 1988 Texas Chapter of The American College of Sports Medicine Meeting, Houston, TX.
- 30. Davis, GM. (1986, April). Strength training for athletes with disabilities. Invited paper presented at the Fourth Annual Conference on Sport for Persons with Disabilities, Storrs, CT.
- 31. Davis, GM. (1986, May). Cardiorespiratory adaptation of the lower-limb disabled. In GC Gass (Chair), The exercising paraplegic: The mechanisms and the model. Med Sci Sports Exerc, 18, xiv.
- 32. Davis, GM and Shephard, RJ. (1986, November). Modeling of muscular strength in the disabled and able-bodied. Invited paper presented at the IEEE Engineering in Medicine and Biology Society Annual Meeting, Ft. Worth, TX.
- 33. Davis, GM and Shephard, RJ. (1985, March). Cardiorespiratory fitness in the physically disabled. Invited paper presented at the Third Annual Conference on Sport for Persons with Disabilities, Storrs, CT.
- 34. Davis, GM. (1985, October). Exercise in the disabled an overview. In GM Davis (Chair), Exercise and sport for the physically disabled. Fifth International Symposia on Adapted Physical Education, Toronto, Canada.
- 35. Davis, GM and Ward, GR. (1983). "Hey coach, what about the disabled?" Coaching Sci Update, 9, 34-37
- 36. Babin, M and Davis, GM. (1983). Being fit a police necessity. Royal Canadian Mounted Police Gazette, 45, 1-16.
- 37. Davis, GM. (1983, August). Central and peripheral fitness in the disabled. Invited paper presented at the Spina Bifida and Hydracephalus Association of Ontario Conference, Toronto, Canada.
- 38. Davis, GM and Shephard, RJ. (1983, June). Exercise conditioning for upper body fitness in paraplegics. Invited paper presented at The Canadian Paraplegic Association Workshop, Toronto, Canada.
- 39. Davis, GM and Shephard RJ. (1981, October). Fitness in the lower-limb disabled. In Proceedings of the I.Y.D.P. Research Conference (pp 23-26). Ottawa, Ontario, Canada: Health and Welfare, Canada.

PROFESSIONAL ACHIEVEMENTS AND ACTIVITIES:

2020-Present	Board of Directors, Spinal Cord Injuries Australia
2019-2021	Course Director, Bachelor of Exercise Physiology, Faculty of Medicine and Health, University of Sydney.
2018– 2020	Applied GCP Training for Investigational Sites and Sponsor Representatives E6 (R2)
2018	Deputy Chair, Excellence in Research for Australia, Research Evaluation Committee (Medical and Health Sciences), Australian Research Council
2011 – 2019*	Chair, University of Sydney Human Research Ethics Committee, Office of Ethics and Research Integrity
	University of Sydney Human Research Ethics Executive Committee, Office of Ethics and Research Integrity.
2015 – 2017	University Coordinator, Malaysia and Brunei. Sydney South East Asia Centre
2016 – 2017	Course Director, Master of Exercise Physiology. Faculty of Health Sciences, University of Sydney
2013 – 2015	Inaugural Course Director. Bachelor of Exercise Physiology, Faculty of Health Sciences, University of Sydney
2012	Excellence in Research for Australia – Research Evaluation Committee (Medical and Health Sciences), Australian Research Council
2008 – 2011	Deputy Chair, University of Sydney Human Research Ethics Committee 2011 – Deputy Chair, 2008-2010 – member.
2007 – 2010	Sub Dean Research Higher Degree Students, Faculty of Health Sciences, University of Sydney

^{*} I have had formal educational training in Human Ethics, Bioethics and Research Integrity. It is somewhat of a hobby passion of mine.

MEMBERSHIP IN SOCIETIES and ASSOCIATIONS:

- AMERICAN COLLEGE OF SPORTS MEDICINE (1976-PRESENT); FELLOW (1987 PRESENT)
- AUSTRALIAN ASSOCIATION OF EXERCISE AND SPORTS SCIENCES (1993- PRESENT)
- INTERNATIONAL FUNCTIONAL ELECTRICAL STIMULATION SOCIETY (1995-PRESENT).

 BOARD OF DIRECTORS (2002-2004; 2007-2017; 2018 PRESENT; 2008 IFESS Secretary; 2011-2015 IFESS Vice President)
- SPINAL CORD INJURIES AUSTRALIA (2002- PRESENT). BOARD OF DIRECTORS (2020)
- EDITORIAL CONSULTANT (2012-PRESENT), THE JOURNAL OF THE INTERNATIONAL ACADEMY OF PHYSICAL THERAPY RESEARCH

PROFESSIONAL ACHIEVEMENTS AND ACTIVITIES:

- <u>VICE PRESIDENT</u> (2012-2013), COUNCIL OF HEADS OF EXERCISE, SPORTS AND MOVEMENT SCIENCES (CHESM)
- <u>Co-Chair</u>, International Functional Electrical Stimulation Society 2003 Annual Meeting, Sydney, Australia
- ORGANISING COMMITTEE, SYDNEY 2000 PARALYMPIC SCIENTIFIC CONGRESS (1997-2000)
- <u>Vice-president</u> (1999-2001), Asia-pacific Functional Electrical Stimulation Society (1999-2003)
- <u>Chair</u> (1989-1991), Functional Electrical Stimulation Group, Rehabilitation Engineering Society of North America.
- REHABILITATION ENGINEERING SOCIETY OF NORTH AMERICA (1987-1992)

COMMUNITY EVENTS AND MEDIA RELATIONS:

COMMUNITY EVENTS AND MEDIA RELATIONS:		
2011 (June)	"Exercise and Spinal Cord Injury" Eight-minute Video at Spinal Cord Injury Website and YouTube (26 June 2011) (I was contacted and subsequently prominently featured in a exercise and health promotion video commissioned by the Australia-New Zealand Spinal Cord Injury network. My research facilities and gymnasium were also exclusively featured with many of the clients that were filmed were participants of my research and service deliveray programs. The video is located on YouTube and at http://spinalnetwork.org.au/node/3081 "	
2006 (May)	"Re:Connections – Showcasing Contemporary Research in Spinal Cord Injury and Conditions". NSW Ministry of Science and Medical Research Reference Group (I was an invited member of the Scientific Committee Reference Group for the NSW state-wide conference on emerging research and trends in spinal cord injury. I was also Moderator and Speaker for Concurrent Session I – "Emerging Trends in Rehabilitation: From Research into Practice" with a symposium panel of international speakers. On the second day, I was invited to participate and briefly speak about my research within the context of establishing a national network of Activity-based Therapy research at the inaugural Australasian Spinal Cord Injury Network meeting.)	
2005 (December)	"Profile – Associate Professor Glen Davis: The Challenge" (December 2005) <u>Australian R and D Review</u> , 23. ISSN 1320-8977 (1-page personal profile about my research activities sent out to all biotechnology researchers in academia and business throughout Australia. This was a "high profile" showcasing of research activities within the Rehabilitation Research Centre)	
2004 (August)	"Stimulating Activities". Sydney Morning Herald (August 26, 2004). (Three-column report in the Science and Medicine Supplement of SMH describing Functional Electrical Simulation research within the Rehabilitation Research Centre at the Faculty of Health Sciences)	
2004 (December)	"The Death of Two True Superheroes". Front-page report on Sydney Morning Herald (December 10, 2004). (Following the untimely death of Christopher Reeve, actor and spinal cord injury research advocate, I was contacted for a background story on his life, some medical aspects of his condition leading to his passing away and details of the Centre's Functional Electrical Simulation research within the Faculty of Health Sciences. The front-page story was carried by AAP Newswire worldwide)	
2003 (July)	NSW Premier (Hon Bob Carr) and Minister for Science and Technology	

(Hon Frank Sartor)

(Visit of Premier and Minister to open Faculty Special Symposium

COMMUNITY EVENTS AND MEDIA RELATIONS:

entitled "Innovative Advances and Therapies after SCI" sponsored by Rehabilitation Research Centre. Subsequent to Opening Address, Premier and Minister undertook guided walk-about tour of Faculty campus and visit to RRC clinical laboratory to meet SCI patients, make televised and print media public statements and interact with visiting distinguished scientists and University Senior Administrators. The Premier then chose this venue to make a Public Policy Announcement concerning funding for SCI research in NSW).

1999 (May)

NSW Minister of Health (Hon Craig Knowles)

(Visit of Minister of Health to make Ministerial Announcement of funding for SCI research at Rehabilitation Research Centre. Television and print media carried report of announcement, walk-about tour of Faculty campus and visit to RRC laboratory in evening news and newspapers).

1992 (August)

Vice Regal Visit, Kingdom of Thailand.

(Vice Regal visit to Department of Biomedical Sciences to speak with me to discuss FES-exercise therapy on behalf of paralysed "minor Royal Person" for implementation at Bangkok Hospital, Thailand. Television and print media carried report of visit in evening news and newspapers)

PHILOSOPHICAL STATEMENT:

There is something in the nature of a curriculum vita that reduces one's life to lists... lists of employment, lists of publications, lists of grants acquired, etc. Hence, this statement of my personal philosophy and current research provides some insight into my interests. While my formal training has been in the field of exercise and applied physiology, I have developed over a number of years a strong inclination toward rehabilitation physiology, exercise therapy and assistive technology for 'special' populations. These interests presently include:

- (i) the physiologic effects of functional electrical stimulation exercise of the lower-limbs for fitness and health in spinally-injured and stroke patients,
- (ii) the use of functional electrical stimulation muscle contractions of the lower-limbs as neuroprotheses for gait and other functional tasks in spinally-injured and stroke patients,
- (iii) the rehabilitation benefits of exercise therapy in the special populations of spinal cord injury, stroke, breast and metastatic cancers, intellectual disability, cardiac disease and elderly individuals,
- (iv) quantifying physical activity and fitness using surveys and surveillance techniques in community-residential persons with disease and disability
- (v) autonomic control of the cardiovascular system during exercise in patients, healthy elderly and athletic individuals, and
- (vi) muscle responses quantified by near-infrared spectroscopy and other non-invasive techniques during exercise in patients, healthy elderly and athletic individuals.

Fundamentally, the cardiopulmonary and metabolic adaptations of these 'special' populations to exercise or other non-homeostatic stresses may be used to model the physiologic responses of disabled and non-disabled individuals, as well as to increase our underlying comprehension of basic physiologic mechanisms. These disabled men and women in society are worthy of our scientific enquiry and education no less than their able-bodied and healthy counterparts.

As briefly noted in my CV, I also have a hobby passion in the practice of ethics in research, research integrity and training young researchers to be more aware of their ethical behaviour in the conduct of research. I have had several courses that I attended, and I am part-way through a Diploma in Human Ethics (Monash University). I have served on University of Sydney Human Ethics Committees for over fifteen years in the roles of member, Deputy Chair and most recently, Chair.