



CV

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Laurent Frossard

Scientist | Author | Speaker | Entrepreneur



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1. Education

- 2009 **Professional Certificate in Clinical Research** (First Class Honours)
School of Entreprise, The University of Melbourne, Australia
- 1998 **PhD in Fundamental and Applied Sciences** (Honours with Distinction)
Faculty of Physics, University of Poitiers, France
- 1993 **Undergraduate in Sport Science** (Honours marks)
Faculty of sport and Physical Education, University of Poitiers, France

2. Roles

2.1. Employment

Figure 1. Overview of 30 years of full-time employment history including the last 17 years in executive roles in academia and industry in Australia and overseas

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Principal role	Lecturer in Biomechanics				Postdoctoral Research Fellow				Senior Researcher			Consultant	Manager of R&D		Professor of Biomechanics						Director and Chief Scientist Officer					Professor of Bionics / Director and Chief Scientist Officer			
Location																													
Overseas																													
Australia																													
Sector																													
Academy																													
Industry																													
Responsibility																													
Operational																													
Executive																													

- 2021-Onward. **Professor of Bionics** (Part time), Griffith University, Australia
- 2014-Onward. **Director / Chief Scientist Officer**, YourResearchProject, Australia
- 2014-2016. **Lecturer in Biomechanics** (Part time), QUT, Australia
- 2010-2014. **Professor of Biomechanics**, UQAM, Canada
- 2008-2010. **Manager of R&D**, PrimEd, Australia
- 2007-2008. **Consultant**, Med-e-Serv, Australia
- 2007-Onward. **Guest Lecturer-Biomechanics**, The University of Melbourne, Australia
- 2003-2006 **Senior Researcher**, QUT, Australia



- 2005-2007 **Lecturer in Biomechanics** (Part time), QUT, Australia
- 2004-Onward. **Lecturer in Biomechanics** (Part time), University of Orléans, France
- 1999-2003. **Postdoctoral Research Fellow**, QUT, Australia
- 1996–1998. **Lecturer in Biomechanics** (Full time), University of Orléans, France
- 1993-1995. **Research Assistant**, University of Montreal, Canada

2.2. Adjunct positions

- 2018-2021. **Adjunct Professor**, Griffith University, Australia
- 2014-Onward. **Adjunct Professor**, QUT, Australia
- 2014-Onward. **Adjunct Professor**, USC, Australia
- 2010-Onward. **Associate Professor**, CRME Sainte-Justine Hospital, Canada
- 2007-2010. **Visiting Research Fellow**, QUT, Australia

2.3. Board roles

- 2015-Onward. **International Society for Prosthetics and Orthotic – Australian National Member Society Inc** (ISPO). Ordinary member of board.
- 2018-Onward. **International Society for Prosthetics and Orthotic – Australian National Member Society Inc** (ISPO). Chair of the Science and Research Committee.
- 2015-2018. **International Society for Prosthetics and Orthotic – Australian National Member Society Inc** (ISPO). Chair of the Science and Education Committee.
- 2014-2017. **World Journal of Orthopedics**. Member of editorial board.
- 2011-2015. **Orthopaedic Surgical Osseointegration Society (OSOS)**. Member of board.
- 2009-Onward. **The Journal of Applied Biomedicine**. Member of editorial board.

2.4. Appointments

- 2015-Onward. Appointed by the **Queensland Minister for Health and Ambulance Services** as Public panel of Assessors for the Queensland Civil and Administrative Tribunal (QCAT).
- 2002-2010. Appointed by **Athletics Australia and Australian Paralympic Committee** as a **Sport Biomechanist**.



2.5. Affiliations

- 2018-Present. **Member of Griffith Centre of Biomedical and Rehabilitation Engineering** (GCORE). Griffith University, Australia
- 2015-Onward. **Member of Injury Prevention program**. QUT, Australia
- 2015-Onward. **Member of Movement Neuroscience Group**. QUT, Australia
- 2014-2018. **Member of Trauma Research Group**. Diamantina health partners, Integrated Trauma and Recovery, Australia
- 2011-2014. **Member of the Institute for Health and Society (ISS)**. University of Quebec in Montreal, Canada
- 2010-2014. **Member of the Group of Research on Adapted Physical Activities (GRAPA)**. Department of the Kinesiology. University of Quebec in Montreal, Canada

2.6. Selected memberships

- 2012-Onward. **Member** of the International Society of Prosthetics and Orthotics
- 2011-Onward. **Member** of the Orthopaedic Surgical Osseointegration Society
- 2006-2012. **Member** of the Australian and New Zealand Society of Biomechanics
- 2005-2016. **Member** of the International Society of Biomechanics

3. Overview of professional profiles

My 35-year professional history, particularly the last 20 years in executive roles, is **unique** as I alternated **employments in academia and industry sectors in Europe, North America and Australia**. This has led to the creation of my own company, YourResearchProject, in 2013.

I am a bionic limbs scientist passionate about developing ground-breaking prosthetic solutions to improve life of individuals suffering from limb loss. Internationally recognized as a researcher and independent expert, I contribute to this promising field of bionics as a **scientist, author, speaker** and **entrepreneur**.

My expertise in bionic limbs is unique because I can consider treatments from an all-rounded perspective integrating **prosthetic biomechanics, clinical benefits, health service delivery** and **health economics**.

I look at efficiency and safety of interventions with bionic limbs using wholesome research skills that combine **building resources, sharing knowledge** and **creating impact worldwide**.

I am currently ranked in the top 0.5% and 1.3% of medical experts in "Bone-Anchored Prosthesis" and "Artificial Limbs" by ExpertScape, respectively.



4. Publications

4.1. Overview

I am responsible for a total of over **216 publications**, including 5 books/monographs, 2 book chapters, **79 articles** and 120 abstracts (Figure 2).

Indeed, I have been **the first, second or last author of 81% (176) of these publications**, including **55% (118) as a first author**. A total of **64% (47) of my articles were published in above Q2 journals** while 43% (32) were published in Q1 journals.

Figure 2. Overview of cumulated number of publications including articles, abstracts and other publications (e.g., books, book chapters, research reports).¹



4.2. Bibliometrics

An overview of my citations rate generated by key independent organizations is provided in Table 1. Reflecting on productivity and citation impact of the publications, my **H-Index ranges between 18 to 26 and i10-Index is 54**.

¹ The position of each author within the byline of these publications was established according to the guideline provided in the literature (Tscharntke, T., M.E. Hochberg, T.A. Rand, V.H. Resh, and J. Krauss, Author sequence and credit for contributions in multi-authored publications. PLoS Biology, 2007. 5(1): p. 13-14). Typically, the most contributing authors were represented in the first, second and last positions. The first author was systematically the writer and the person the most responsible for the development of the material presented in the publication.



Altogether, my publications have led to over 84K downloads from free repositories (e.g., Mendeley: 18K, ResearchGate: 22K, ePrint: 43K).

Table 1. Citations generated by key independent organisations

	Scopus	Google Scholar
Up to	26/03/2022	26/03/2022
Number of items considered	53	220
Sum of the times cited	1,004	3,290
H-index	19	28
i10-index	-	60
Source for Scopus:	www.scopus.com/home.url	
Source for Google Scholar:	https://scholar.google.ca/citations?user=KVmDLtIAAAAJ	

4.3. Books

- Frossard L. ***Innovations of health services and economic evaluation of bone-anchored prosthesis using osseointegration: the Queensland Artificial Limb Service's experience***. Ed: YourResearchProject. 2018. ISBN: 978-0-646-98338-7. pp 16. http://eprints.qut.edu.au/115907/2017_Scientific_Report_QALS.pdf
- Frossard L, O'Riordan A, Goodman S. ***Performance analysis of stationary throwers: data for evidence-based classification*** (First edition). 2009. Ed: Queensland University of Technology. ISBN: 978-0-9805274-1-4. pp 174 <http://eprints.qut.edu.au/18099/1/c18099.pdf>
- Frossard L, O'Riordan A, Goodman S. ***Performance analysis of stationary throwers: data for evidence-based training*** (First edition). 2009. Ed: Queensland University of Technology. ISBN: 978-0-9805274-2-1. pp 129 <http://eprints.qut.edu.au/18103/1/c18103.pdf>
- Frossard L, O'Riordan A, Goodman S. ***Performance analysis of stationary throwers: data for evidence-based officiating*** (First edition). 2009. Ed: Queensland University of Technology. ISBN: 978-0-9805274-3-8. pp 133 <http://eprints.qut.edu.au/18107/1/c18107.pdf>

4.4. Book chapter

- Neumann E, Frossard L, Ramos M, Bidwell K. Prosthesis: **Load Cell Applicability to Outcome Measurement**. Chapt. 6 Vol 121 p. 133-172 of *Advances in Medicine and Biology*. 2017. Nova Science Publishers, New York.



- Frossard L, O’Riordan A, Goodman S. **Applied biomechanics for evidence-based training of Australian elite seated throwers**. "Sport for Persons with a Disability" Perspectives, The Multidisciplinary Series of Physical Education and Sport Science. Publisher: International Council of Sport Science and Physical Education. 2006. 7. p 175-198
<https://eprints.gut.edu.au/2713/1/2713.pdf>

4.5. Articles

- Frossard L, Laux S, Geada M, Heym P, Lechler K. **Loading characteristics data applied on osseointegrated implant by transfemoral bone-anchored prostheses fitted with state-of-the-art components during daily activities**. Data In Brief. 2022. 41 (107936), P 1-23. <https://doi.org/10.1016/j.dib.2022.107936>. 10.1016/j.dib.2022.107936.
<https://www.sciencedirect.com/science/article/pii/S2352340922001470?via%3Dihub>
- Frossard L, Ferrada L, Quincey T, Berg D. **Cost-effectiveness of transtibial bone-anchored prostheses using osseointegrated fixation: From challenges to preliminary data**. Journal of Prosthetics and Orthotics. 2021. 33 (3). p 184-195.
10.1097/JPO.0000000000000372.
- Berg D, Frossard L. **Health service delivery and economic evaluation of limb lower bone-anchored prostheses: A summary of the Queensland artificial limb service’s experience**. Canadian Prosthetics & Orthotics Journal. 2021. 4 (2), No 12. p 1-22.
10.33137/cpoj.v4i2.36210.
<https://eprints.gut.edu.au/213587/1/98989157.pdf>
- Frossard L, Berg D. **Preliminary cost-utility analysis of transfemoral bone-anchored prostheses using osseointegrated fixation: from inter-participant variability to limitations and barriers**. Mendeley Data. 2021. V3.
<http://dx.doi.org/10.17632/nzjvtjynzv.3>. 10.17632/nzjvtjynzv.3.
<https://data.mendeley.com/datasets/nzjvtjynzv/3>
- Frossard L, Berg D. **Loading data applied on osseointegrated implant by transfemoral bone-anchored prostheses fitted with state-of-the-art components: confounders and loading boundaries**. Mendeley Data. 2021. V1. <https://doi.org/10.17632/GMSYV97CPC.1>.
<https://data.mendeley.com/datasets/gmsyv97cpc/1>
- Pitkin M, Frossard L. **Loading Effect of Prosthetic Feet’s Anthropomorphicity on Transtibial Osseointegrated Implant**. Military Medicine. 2021. 186 (Supplement 1). p 681-687. 10.1093/milmed/usaa461.



https://academic.oup.com/milmed/article/186/Supplement_1/681/6119489

- Frossard L, Laux S, Geada M, Heym P, Lechler K. **Load applied on osseointegrated implant by transfemoral bone-anchored prostheses fitted with state-of-the-art prosthetic components**. Clinical Biomechanics. 2021. 89. p 105457. 10.1016/j.clinbiomech.2021.105457.

<https://eprints.qut.edu.au/213175/1/98285729.pdf>

- Frossard L. **Trends and opportunities in health economic evaluations of prosthetic care innovations**. Canadian Prosthetics & Orthotics Journal. 2021. 4 (2), No 9. p 1-17. 10.33137/cpoj.v4i2.36364.

https://eprints.qut.edu.au/213559/1/2021_Art_CPOJ_Part_1_Trend_and_opportunities_01.pdf

- Frossard L. **A preliminary cost-utility analysis of the prosthetic care innovations: basic framework**. Canadian Prosthetics & Orthotics Journal. 2021. 4 (2), No 10. 0. 10.33137/cpoj.v4i2.36365.

https://eprints.qut.edu.au/213585/1/2021_Art_CPOJ_Part_2_Method_for_Pre_CUA_01.pdf

- Samitier B, Guirao L, Frossard L. **A preliminary cost-utility analysis of the prosthetic care innovations: case of the keep walking implant**. Canadian Prosthetics & Orthotics Journal. 2021. 4 (2), No 11. p 1-16. 10.33137/cpoj.v4i2.36366.

https://eprints.qut.edu.au/213586/1/2021_Art_CPOJ_Part_3_Pre_CUA_of_KWI_01.pdf

- Frossard L, Lloyd D. **The future of bionic limbs**. Research Features. 2021. 134. p 74-77. <https://researchfeatures.com/wp-content/uploads/2021/02/Frossard-and-Lloyd.pdf>.

<https://eprints.qut.edu.au/208569/1/75939445.pdf>

- Frossard L. **Bionic solutions: too good to pass or too bad to grab?** Amplified Magazine. 2021. Vol (1). p 22-23.

https://eprints.qut.edu.au/208904/1/Art_Amplified_Magazine_Bionic_solutions_ePrint_V01.pdf

- Frossard L, Leech B, Pitkin M. **Loading applied on osseointegrated implant by transtibial bone-anchored prostheses during daily activities: Preliminary characterization of prosthetic feet**. Journal of Prosthetics and Orthotics. 2020. 32 (4). p 258-271.

<https://eprints.qut.edu.au/196932/>

- Prochor P, Frossard L, Sajewicz E. **Effect of the material's stiffness on stress-shielding in osseointegrated implants for bone-anchored prostheses: a numerical analysis and initial benchmark data**. Acta of Bioengineering and Biomechanics. 2020. 22 (2). p 69-81.



https://eprints.qut.edu.au/200078/1/2020_Art_PROTA_ABB_FEM_Stress_shielding_on_OI_ePrint_02.pdf

- McLay G, McGowan L, Moyle G, Frossard L. ***Building Fields of Play: An examination of the use of notational analysis to reinterpret dynamic and sequential movement from Rugby Union to inform the creation of a new dance work.*** *Choreographic Practices*. 2020. 11 (1). p 163-185.
- O'Riordan A, Frossard L. ***Coaching seated shot put: New perspectives.*** Australian Track and Field Coaches Association - Coaching Journal. 2020. Winter. p 21-29.
- O'Riordan A, Frossard L. ***Inter-participant variability data in performance of elite seated shot-putters throwing from different seating configurations.*** Mendeley Data. 2020. V1. <http://dx.doi.org/10.17632/wbj6vyy6z6.1>
- O'Riordan A, Frossard L. ***Inter and intra variability of release variables of the shot put's trajectory of elite seated shot-putters throwing from different seating configurations.*** Mendeley Data. 2020. V1. <http://dx.doi.org/10.17632/65ctb4dzcn.1>
- O'Riordan A, Frossard L. ***Variability of linear displacements and velocities of upper body of elite seated shot-putters throwing from different seating configurations.*** Mendeley Data. 2020. V1. <http://dx.doi.org/10.17632/38hvnjy2yj.1>
- Frossard L. ***Data supporting the 2017 Queensland Artificial Limb Service's science report about innovations of health services and economic evaluation of transfemoral bone-anchored prostheses.*** Mendeley Data. 2020. V1. <http://dx.doi.org/10.17632/jvcs88b9mz.1>
- Frossard L. ***Data supporting the 2019 Queensland Artificial Limb Service's science report about innovations of health services and economic evaluation of limb lower bone-anchored prostheses.*** Mendeley Data. 2020. V1. https://eprints.qut.edu.au/200097/1/2019_Scientific_Report_QALS.pdf
- Frossard L, Jones M, Stewart I, Leggat P, Schuetz M, Langton C. ***Kinetics of lower limb prosthesis: automated detection of vertical loading rate.*** *Prosthesis*. 2019. 1(1). p 16-28. <https://eprints.qut.edu.au/134187/1/prosthesis-01-00004.pdf>
- Alizad V, Meinzer M, Frossard L, Polman R, Smith S, Kerr G. ***Gait speed after applying anodal-transcranial Direct Current Stimulation in people with Parkinson's disease?*** *Brain Stimulation*. 2019. 12 (2). p 517. [https://www.brainstimjrn.com/article/S1935-861X\(18\)31311-1/fulltext](https://www.brainstimjrn.com/article/S1935-861X(18)31311-1/fulltext). [https://www.brainstimjrn.com/article/S1935-861X\(18\)31311-1/fulltext](https://www.brainstimjrn.com/article/S1935-861X(18)31311-1/fulltext)



- Frossard L, Leech B, Pitkin M. **Automated characterization of anthropomorphicity of prosthetic feet fitted to bone-anchored transtibial prosthesis**. IEEE Transactions on Biomedical Engineering. 2019. 66 (12). p 3402-3410.
<https://eprints.qut.edu.au/127745/1/127745.pdf>
- Gibeaux V, Naaim A, Robert T, Frossard L, Dumas R. **Medial-lateral margin of stability for the comparison of two bone-anchored prostheses – a case study**. Computer Methods in Biomechanics and Biomedical Engineering. 2019. 22 (Sup 1). p 118-120.
<https://doi.org/10.1080/10255842.2019.1668135>
- Frossard L, Leech B, Pitkin M. **Inter-participant variability data in characterization of anthropomorphicity of prosthetic feet fitted to bone-anchored transtibial prosthesis**. Data In Brief. 2019. (26) 104195, p 1-6.
<https://eprints.qut.edu.au/131562/1/2019%20Art-PROT-BID-Ankle%20stiffness%20TTA%20with%20BAP-ePrint%2004.pdf>
- Frossard L, Leech B, Pitkin M. **Inter-participant variability data in loading applied on osseointegrated implant by transtibial bone-anchored prostheses during daily activities**. Data In Brief. 2019. (26) 104510, p 1-14.
<https://eprints.qut.edu.au/133633/8/1-s2.0-S2352340919308650-main.pdf>
- Frossard L. **Inter-participant variability of loading characteristics applied on osseointegrated implant by transfemoral bone-anchored prostheses fitted with basic components during daily activities**. Mendeley Data. 2019. V1.
<http://dx.doi.org/10.17632/hh8rjih73w.1>
- Frossard L. **Loading characteristics data applied on osseointegrated implant by transfemoral bone-anchored prostheses fitted with basic components during daily activities**. Data In Brief. 2019. (26) 104492, p 1-36.
<https://eprints.qut.edu.au/133636/9/1-s2.0-S2352340919308479-main.pdf>
- Frossard L, Ferrada L, Berg D. **Survey on the quality of life of consumers fitted with osseointegrated fixation and bone-anchored limb prostheses provided by government organization**. Mendeley Data. 2019. V1.
<https://eprints.qut.edu.au/131550/2/Art-DIB-Survey%2BCQI-Survey-Form-Medeley%2B01.pdf>
- Frossard L, Ferrada L, Berg D. **Survey data on the quality of life of consumers fitted with osseointegrated fixation and bone-anchored limb prostheses provided by government organization**. Data In Brief. 2019. (26) 104536, p 1-17.
<https://eprints.qut.edu.au/133649/1/133649.pdf>
- Frossard L. **Inter-participant variability data in loading characteristics applied on**



osseointegrated implant by transtibial bone-anchored prostheses fitted with usual and Free-Flow feet during daily activities. Mendeley Data. 2019. V1.

<http://dx.doi.org/10.17632/vhc6sf7ngy.1>

- Pather S, Vertriest S, Sondergeld P, Frossard L. ***Load characteristics following transfemoral amputation in individuals fitted with bone-anchored prostheses: a scoping review protocol.*** JBI Database of Systematic Reviews and Implementation Reports. 2018. 16 (6). p 1286-1310
<https://eprints.qut.edu.au/119229/>
- Frossard L, Merlo G, Burkett B, Quincey T, Berg D. ***Cost-effectiveness of bone-anchored prostheses using osseointegrated fixation: myth or reality?*** Prosthetics and Orthotics International. 2018. 42 (3). p 318-327
<https://eprints.qut.edu.au/114520/1/Art-QALS-Cost%20Effectiveness-ePrint-06.pdf>
- Alizad V, Meinzer M, Frossard L, Polman R, Smith S, Kerr G. ***Effects of transcranial direct current stimulation on gait in people with Parkinson's disease: study protocol for a randomized, controlled clinical trial.*** Trials. 2018. 19 (661). p 1-12
- Frossard L, Laux S, Lee Gow D, Berg D. ***Role of the prosthetist in provision of bone-anchored prostheses: governmental and practitioner perspectives.*** The AOPA Review. 2018. 3 (1). p 26-27
<https://eprints.qut.edu.au/123164/1/Art-AOPA%20Review-Role%20of%20CPO-ePrint-02.pdf>
- Frossard L, Ferrada L, Quincey T, Burkett B, Berg D. ***Development of a government continuous quality improvement procedure for assessing the provision of bone anchored limb prosthesis: A process re-design descriptive study.*** Canadian Prosthetics & Orthotics Journal. 2018. 1 (2). p 1-14
<https://eprints.qut.edu.au/123763/1/Art-CPOJ-CQI%20for%20BAP-ePrint%2003.pdf>
- Vertriest S, Pather S, Sondergeld P, Frossard L. ***Rehabilitation programs after the implantation of transfemoral osseointegrated fixations for bone-anchored prostheses: a scoping review protocol.*** JBI Database of Systematic Reviews and Implementation Reports. 2017. 15 (2): 607-619.
<https://eprints.qut.edu.au/105567/1/2017%20Art-PROT-JBI-Scoping%20study%20rehab%20program-ePrint%2001.pdf>
- Vertriest S, Coorevits P, Hagberg K, Branemark R, Haggstrom E, Vanderstraeten G, Frossard L. ***Static load bearing exercises of individuals with transfemoral amputation fitted with an osseointegrated implant: Loading compliance.*** Prosthetics and Orthotics International. 2017. 41 (4). p 393-401



<https://eprints.qut.edu.au/116311/1/Art-LBE%20Compliance-ePrint-01.pdf>

- Frossard L, Berg D, Merlo G, Quincey T, Burkett B. **Development of a procedure for the government provision of bone-anchored prosthesis using osseointegration in Australia.** PharmacoEconomics-Open. 2017. 9 (4). p 301-314
<https://eprints.qut.edu.au/107652/1/Art-QALS-Policy%20QLD%20experience-ePrint-03.pdf>
- Dumas R, Branemark R, Frossard L. **Gait analysis of transfemoral amputees: errors in inverse dynamics are substantial to influence prosthetic design.** IEEE Transactions on Neural Systems and Rehabilitation Engineering. 2017. 25 (6). p 679-685
<https://eprints.qut.edu.au/108254/1/Art-Inverse%20dynamics-error-ePrint-02.pdf>
- Frossard L, Berg D, Merlo G, Quincey T, Burkett B. **Cost-comparison of socket-suspended and bone-anchored transfemoral prostheses.** Journal of Prosthetics and Orthotics. 2017. 29 (4). p 1-11
<https://eprints.qut.edu.au/110461/>
- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Osseointegrated total knee replacement connected to a lower limb prosthesis: 4 cases.** Acta orthopaedica. 2015. 86 (6). p 740-744.
<https://eprints.qut.edu.au/91562/8/17453674%252E2015%252E1068635.pdf>
- Vertriest S, Coorevits P, Hagberg K, Branemark R, Haggstrom E, Vanderstraeten G, Frossard L. **Static load bearing exercises of individuals with transfemoral amputation fitted with an osseointegrated implant: Reliability of kinetic data.** IEEE Transactions on Neural Systems and Rehabilitation Engineering. 2015. 23 (3). p 423-430
<https://eprints.qut.edu.au/83154/9/83154.pdf>
- Frossard L, Häggström E, Hagberg K, Brånemark R. **Load applied on a bone-anchored transfemoral prosthesis: characterisation of prosthetic components – A case study.** Journal of Rehabilitation Research and Development. 2013. 50(5). p 619-634.
<http://eprints.qut.edu.au/83145/1/Knee%20comparison%20for%20OI-ePrint%2003.pdf>
- Frossard L, O'Riordan A, Smeathers J. **Performance of elite seated discus throwers in F30s classes - Part I: Does whole body positioning matter?** Prosthetics and Orthotics International. 2013. 37(3). p 183-191
<https://eprints.qut.edu.au/60346/1/60346.pdf>
- Frossard L, O'Riordan A, Smeathers J. **Performance of elite seated discus throwers in F30s classes - Part II: Does feet positioning matter?** Prosthetics and Orthotics International. 2013. 37(3). p 192-202
<https://eprints.qut.edu.au/55333/1/55333.pdf>
- Frossard L. **Performance dispersion for evidence-based classification of stationary**



- throwers**. Prosthetics and Orthotics International. 2012. 36 (3). p 348-355
<http://eprints.gut.edu.au/83156/1/2012%20Art-POIal-Performance%20dispersion-ePrint%2002.pdf>
- Curran S, Frossard L. **Biomechanical analyses of the performance of Paralympians: From foundation to elite level**. Prosthetics and Orthotics International. 2012. 36 (3). p 380-395
<http://eprints.gut.edu.au/83157/1/2012%20Art-POIal-Editor%20dialogue-ePrint%2003.pdf>
 - Frossard L, Cheze L, Dumas R. **Dynamic input to determine hip joint moments, power and work on the prosthetic limb of transfemoral amputees: ground reactions vs knee reactions**. Prosthetics and Orthotics International. 2011. 35(2). p 140-149.
<http://eprints.gut.edu.au/83146/1/Comp%20INV-DYN%20II-Hip-ePrint%2001.pdf>
 - Frossard L, Stevenson N, Sullivan J, Uden M, Percy M. **Categorization of activities of daily living of lower limb amputees during short-term use of a portable kinetic recording system: a preliminary study**. Journal of Prosthetics and Orthotics. 2011. 23 (1). p 2-11
<http://eprints.gut.edu.au/83160/1/Technote-Technique19-Manuscript-ePrint02.pdf>
 - Frossard L. **Load on osseointegrated fixation of a transfemoral amputee during a fall: Determination of the time and duration of descent**. Prosthetics and Orthotics International. 2010. 34 (4). p 472-487.
<http://eprints.gut.edu.au/83155>
 - Frossard L, O'Riordan A, Goodman S. **Throwing frame and performance of elite male seated shot-putters**. Sports Technology. 2010. 3 (2), p 88-101.
<https://eprints.gut.edu.au/39938/>
 - Frossard L, Lee Gow D, Hagberg K, Cairns N, Contoyannis B, Gray S, Brånemark R, Percy M. **Apparatus for monitoring load bearing rehabilitation exercises of a transfemoral amputee fitted with an osseointegrated implant: a proof-of-concept study**. Gait and Posture. 2010. 31. p 223-228.
<http://eprints.gut.edu.au/30963/1/c30963.pdf>
 - Frossard L, Hagberg K, Haggstrom E, Lee Gow D, Brånemark R, Percy M. **Functional outcome of transfemoral amputees fitted with an osseointegrated fixation: temporal gait characteristics**. Journal of Prosthetics and Orthotics. 2010. 22 (1). p 11-20.
<http://eprints.gut.edu.au/29462/1/29462.pdf>
 - Frossard L, Tranberg R, Haggstrom E, Percy M, Brånemark R. **Load on osseointegrated fixation of transfemoral amputee during a fall: loading, descent, impact and recovery analysis**. Prosthetics and Orthotics International. 2010. 34(1): 85–97.



<http://eprints.qut.edu.au/31306/1/c31306.pdf>

- Helgason B, Pálsson H, Rúnarsson T, Frossard L, Viceconti M. **Risk of failure during gait for direct skeletal attachment of a femoral prosthesis: A finite element study.** Medical Engineering and Physics. 2009. 31. p 595–600.
<http://eprints.qut.edu.au/20850/1/c20850.pdf>
- Frossard L, Hagberg K, Haggstrom E, Brånemark R. **Load-relief of walking aids on osseointegrated fixation: Instrument for evidence-based practice.** IEEE Transactions on Neural Systems and Rehabilitation Engineering. 2009. 17 (1). p 9-14.
<http://eprints.qut.edu.au/18213/1/c18213.pdf>
- Dumas R, Cheze L, Frossard L. **Loading applied on prosthetic knee of transfemoral amputee: comparison of inverse dynamics and direct measurements.** Gait and Posture. 2009. 30. p 560-562.
<http://eprints.qut.edu.au/27619/1/27619.pdf>
- Dumas R, Cheze L, Frossard L. **Load during prosthetic gait: is direct measurement better than inverse dynamics?** Gait and Posture. 2009. 30 (2). p S86-S87.
<http://eprints.qut.edu.au/27617/1/c27617.pdf>
- Frossard L, Tranberg R, Haggstrom E, Percy M, Brånemark R. **Fall of a transfemoral amputee fitted with osseointegrated fixation: loading impact on residuum.** Gait and Posture. 2009. 30 (2). p S151-S152.
<http://eprints.qut.edu.au/27615/1/c27615.pdf>
- Frossard L, Stevenson N, Smeathers J, Häggström E, Hagberg K, Sullivan J, Ewins D, Lee Gow D, Gray S, Brånemark R. **Monitoring of the load regime applied on the osseointegrated fixation of a trans-femoral amputee: A tool for evidence-based practice.** Prosthetics and Orthotics International. 2008. 32 (1).
<https://eprints.qut.edu.au/21041/1/Technote-Technique19-Manuscript-ePrint02.pdf>
- Lee W, Doocey J, Brånemark R, Adam C, Evans J, Percy M, Frossard L. **FE stress analysis of the interface between the bone and an osseointegrated implant for amputees - implications to refine the rehabilitation program.** Clinical Biomechanics. 2008. 23 (10). p 1243-1250
<http://eprints.qut.edu.au/archive/00015033/>
- Frossard L, Liebich G, Hooker G, Brooks P, Robinson L. **Introducing physician assistants into new roles: international experiences.** Medical Journal of Australia. 2008. 188 (4). p 199-201
- Frossard L, Smeathers J, O’Riordan A, Evans J, Goodman S. **Quality control procedure**



- for kinematic analysis of elite seated shot-putters during world-class events.* The Sport Journal. 2008. 11 (1). <http://www.thesportjournal.org/article/quality-control-procedure-kinematic-analysis-elite-seated-shot-putters-during-world-class-ev>
<https://eprints.qut.edu.au/14219/>
- Frossard L, Smeathers J, O’Riordan A, Goodman S. **Shot trajectory parameters in gold medal stationary shot-putters during world-class competition.** Adapted Physical Activity Quarterly. 2007. 24 (4). p 317-331
<http://eprints.qut.edu.au/archive/00010606/>
 - Lee W, Frossard L, Hagberg K, Häggström E, Lee Gow D, Gray S, Brånemark R. **Magnitude and variability of loading on the osseointegrated fixation of transfemoral amputees during walking.** Medical Engineering and Physics. 2007. 30. p 825-833.
<http://eprints.qut.edu.au/29105/1/c29105.pdf>
 - Lee W, Frossard L, Hagberg K, Häggström E, Brånemark R. **Kinetics of transfemoral amputees fitted with osseointegrated fixation performing common activities of daily living.** Clinical Biomechanics. 2007. 22 (6). p 665-673
<https://eprints.qut.edu.au/8341/1/8341.pdf>
 - Frossard L, Stolp S, Andrews M. **Video recording of elite seated shot putters during world-class events.** The Sport Journal. 2006. 9 (3).
<http://www.thesportjournal.org/article/video-recording-elite-seated-shot-putters-during-world-class-events>
<http://eprints.qut.edu.au/4742/>
 - Frossard L, Stevenson N, Smeathers J, Lee Gow D, Gray S, Sullivan J, Daniel C, Häggström E, Hagberg K, Brånemark R. **Daily activities of a transfemoral amputee fitted with osseointegrated fixation: continuous recording of the loading for an evidence-based practice.** Kinesitherapie Revue. 2006. 6 (56-57). p 53-62
<https://eprints.qut.edu.au/5253/1/5253.pdf>
 - O’Riordan A, Frossard L. **Seated shot-put – What’s it all about?** Modern Athlete and Coach. 2006. 44 (2). p 2-8
<https://eprints.qut.edu.au/4411/1/4411.pdf>
 - Frossard L, Stolp S, Andrews M. **Systematic video recording of seated athletes during the shot-put event at the Sydney 2000 Paralympic Games.** International Journal of Performance Analysis in Sport. 2004. 4 (1). p 40-53
https://eprints.qut.edu.au/2714/1/2714_1.pdf
 - Frossard L, Beck J, Dillon M, Chappell M, Evans J. **Development and preliminary testing of a device for the direct measurement of forces and moments in the prosthetic limb**



of transfemoral amputees during activities of daily living. Journal of Prosthetics and Orthotics. 2003. 15 (4). p 135-142

<https://eprints.qut.edu.au/2556/1/2556.pdf>

- Aissaoui R, Allard P, Junqua A, Frossard L, Duhaime M. **Internal work estimation in 3-D gait analysis.** Medical and biological engineering and computing. 1996. 34. p 467-471
- Frossard L, Allard P, Lachance P, Lacouture P, Duboy J, Junqua A. **Role of internal work during the body weight transfer in walking of above-knee amputees.** Science and Motricity. 1996. 29-30. p 41-47

4.6. Abstracts (refereed)

- Frossard L, Langton C, Barrett R, Saxby D, Perevoshchikova N, Maharaj J, Schuetz M, Powrie R, Lloyd D. **Advancing Personalised Prosthetics After Amputation: From In-Vivo Monitoring To Bionic Limbs.** Defence Biomarkers Symposium. 2022. In press.
- Frossard L, Langton C, Barrett R, Lloyd D. **Can A Digital Twin Of The Residuum Improve Bionic Solutions For Individuals Suffering From Limb Loss?** Defence Biomarkers Symposium. 2022. In press.
- Saxby D, Pizzolato C, Nasser A, Devaprakash D, Frossard L, Lloyd D. **Personalized Digital Humans For Rehabilitation And Assistive Devices.** Defence Biomarkers Symposium. 2022. In press.
- Langton C, Barrett R, Powrie R, Lloyd D, Frossard L. **Development Of Dynamic Anatomical Ultrasonography To Advance Personalised Prosthetics.** Defence Biomarkers Symposium. 2022. In press.
- Lloyd D, Perevoshchikova N, Langton C, Barrett R, Maharaj J, Frossard L. **Advanced Modelling Of Residuum To Improve Bionic Limbs.** Defence Biomarkers Symposium. 2022. In press.
- Frossard L, Laux S, Geada M, Lechler K. **Transfemoral bionic bone-anchored prostheses: What is the margin of safety of load applied by state-of-the-art components?** OTWorld Conference. 2022. Submitted.
- Frossard L, Langton C, Perevoshchikova N, Feih S, Powrie R, Barrett R, Lloyd D. **Development of a diagnostic device to maintain residuum health of Service Members suffering from limb loss: Barriers and facilitators.** Military Health System Research Symposium. 2022. Submitted (MHSRS-22-06886).
- Pitkin M, Park H, Frossard L, Prilutsky B. **Higher index of anthropomorphicity of passive Free-Flow Foot (FFF) prosthesis as an advantage for transforming it to the powered foot prosthesis with intuitive control and sensation (Bionic FFF).** Military



Health System Research Symposium. 2022. Submitted (MHSRS-22-05274).

- Frossard L. **Choosing osseointegration: Should prosthetists refer to the “20/20 dilemma”?** XVIIIth International Society of Prosthetics and Orthotics (ISPO) World Congress. 2021. Abs 2021-5.8.
<https://doi.org/10.26226/morressier.614ca2d987a68d83cb5d5d8c>.
https://eprints.qut.edu.au/226552/1/Abs_ISPO_CPO_and_bionics_solutions_ePrint_01.pdf
- Frossard L, Langton C, Barrett R, Lloyd D. **Residuum health of Service Members suffering from limb loss: Digital twin and diagnostic device.** Military Health System Research Symposium. 2021. MHSRS-21-03471.
- Frossard L. **Osseointegration and other bionic solutions: What prosthetists should know?** Virtual Orthotics Prosthetics Canada (OPC) National Conference. 2021. P 6 (A6). . .
https://eprints.qut.edu.au/212911/1/2021_Abs OPC_Virtual_Choosing_bionics_ePrint_V02.pdf
- Frossard L, Berg D. **Provision of bone-anchored prostheses using osseointegrated implant: leading role of Queensland Artificial Limb Service.** Herston State of the Art Healthcare Symposium. 2019. Brisbane, Australia. Nb 64. p 32.
<https://eprints.qut.edu.au/131547/1/Abs-HSAHS-CU%20provision%20of%20BAP-ePrint%2001.pdf>
- Frossard L, Berg D. **Cost-effectiveness of provision of transtibial bone-anchored prosthesis: the Queensland experience.** Australian Orthotic Prosthetic Association (AOPA) Congress. 2019. Melbourne, Australia. p 23.
<https://eprints.qut.edu.au/134100/14/Abs-AOPA%2BMelbourne-Cost-effectiveness%2Bof%2BTTA-BAP-ePrint%2B01.pdf>
- Frossard L, Geada M, Laux S. **Using scientific data to support NDIS applications: a case study on advanced components for a transfemoral bone-anchored prosthesis.** Australian Orthotic Prosthetic Association (AOPA) Congress. 2019. Melbourne, Australia. p 29. <https://eprints.qut.edu.au/134098/15/Abs-AOPA%2BMelbourne-Data%2Bto%2Bsupport%2BNDIS%2Bapplication-ePrint%2B01.pdf>
- Frossard L, Leech B, Pitkin M. **Characterization of anthropomorphicity of transtibial bone-anchored prostheses: Can we assess if a prosthetic foot behaves like a sound foot?** Australian Orthotic Prosthetic Association (AOPA) Congress. 2019. Melbourne, Australia. p 32. <https://eprints.qut.edu.au/134096/15/Abs-AOPA%2BMelbourne-Ankle%2Bstiffness%2Bfor%2BTTA-BAP%2B01-ePrint%2B03.pdf>
- Frossard L, Powrie R, Langton C. **In-Vivo Kinetic system to sustain residuum health of**



- Service Members with lower limb loss: from proof-of-concept to digital twin.** Military Health System Research Symposium. 2019. Kissimmee, United States. Abstract # MHSRS-19-00882. p 111. <https://eprints.qut.edu.au/131940/15/2019%2BAbs-MHSRS-Utility%2Bof%2BIn-Vivo%2BKinetic%2BSystem-ePrint%2B05.pdf>
- Gibeaux V, Naaim A, Robert T, Dumas R, Branemark R, Frossard L. **Margin of stability of individuals fitted with transfemoral bone-anchored prosthesis using osseointegrated fixation.** XVIIth International Society of Prosthetics and Orthotics (ISPO) World Congress. 2019. Kobe, Japan. p 474. <https://eprints.qut.edu.au/197051/1/Abs-ISPO%2BKobe-TFA-OI%2Band%2Bmarign%2Bof%2Bstability-ePrint%2B01.pdf>
 - Frossard L. **Current uptake worldwide for osseointegrated prosthetic attachment.** XVIIth International Society of Prosthetics and Orthotics (ISPO) World Congress. 2019. Kobe, Japan. p 183. <https://eprints.qut.edu.au/133698/1/Abs-ISPO%20Kobe-IC%20on%20BAP-ePrint%2003.pdf>
 - Pitkin M, Frossard L. **Loading effect of prosthetic feet's anthropomorphicity on transtibial osseointegrated implant.** Military Health System Research Symposium. 2019. Kissimmee, United States. Abstract # MHSRS-19-00186, p 110. <https://eprints.qut.edu.au/131972/15/2019%2BAbs-MHSRS-Effect%2Bof%2BIA%2Bon%2BTTA-BAP-ePrint%2B03.pdf>
 - Frossard L, Berg D. **Governmental perspectives on the quality improvement for provision of bone-anchored prostheses.** Australian Orthotic Prosthetic Association (AOPA) Congress. 2018. Gold Coast, Australia. P 4
 - O'Riordan A, Greenhalgh A, Miller S, Frossard L. **Biomechanics of Seated Throwing: Kinematic contributions of upper limb.** IPC-VISTA. 2017. Toronto, Canada.
 - O'Riordan A, Greenhalgh A, Frossard L, Miller S. **Pole position and its influence on the movement patterns in seated throwing.** UK Paralympic Performance Conference. 2017. Burton on Trent, UK.
 - Frossard L, Berg D, Merlo G, Quincey T, Burkett B. **Governmental Perspective on Fair and Equitable Provision of Bone-anchored Prostheses: Barriers and Facilitators.** XVIth International Society of Prosthetics and Orthotics (ISPO) World Congress. 2017. Cape Town, South Africa. p 487.
 - Pather S, Sondergeld P, Epari D, Percy M, Frossard L. **A synthesis of the range of loads applied on the residuum of individuals with transfemoral amputation fitted with bone-anchored prostheses.** XVIth International Society of Prosthetics and Orthotics (ISPO) World Congress. 2017. Cape Town, South Africa. Paper Number 309



- Frossard L, Berg D. **Australian innovations of health services and economic evaluation of bone-anchored prosthesis using osseointegration.** Australian Orthotic Prosthetic Association (AOPA) Congress. 2017.
- O'Riordan A, Greenhalgh A, Frossard L, Miller S. **Holding pole position and its influence on trunk movement in the seated shotput.** International Council on Coaching Excellence (ICCE) Global Coaches Conference. 2017. Liverpool, UK.
- Frossard L. **The Good, the Bad and the Ugly of bone-anchored prostheses: guideline to assess true clinical outcomes.** First World Congress on Innovations in Amputation Surgery and Prosthetic Technologies (IASPT). 2016. Chicago, USA. p 53-54
- Frossard L. **Bone-anchored prostheses from rehabilitation and beyond: is what you see is what you get?** 1st Annual Scientific Meeting of Rehabilitation Medicine Society of Australia and New Zealand (RMSANZ16). 2016. Melbourne, Australia. p 2
- Frossard L. **Bone-anchored prostheses for individuals with limb loss: prosthetics or bionics?** 4th International Conference on MedicalBionics. 2016. Brisbane, Australia. Poster 27. p 55
- Frossard L. **Evaluation framework to assess clinical outcomes of bone-anchored prostheses: the truth and nothing but the truth!** 4th International Conference on MedicalBionics. 2016. Brisbane, Australia. Poster 28. p 56
- Frossard L, Formosa D, Quincey T, Berg D, Burkett B. **Cost effectiveness of osseointegration.** 2nd Australasian Osseointegrated for Amputees Conference. 2015. Brisbane, Australia. p 3.
- Frossard L. **Osseointegration Internationally: Australia is playing a key role?** 2nd Australasian Osseointegrated for Amputees Conference. 2015. Brisbane, Australia. p 3.
- Frossard L. **Evaluation framework to assess benefits and harms of bone-anchored prosthesis.** 6th International Conference Advances in Orthopaedic Osseointegration. 2015. Las Vegas, Nevada, USA. p 20.
- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Osseointegrated Prosthetic limb for amputees - Over hundred cases.** 6th International Conference Advances in Orthopaedic Osseointegration. 2015. Las Vegas, Nevada, USA. p 22.
- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Health-related quality of life of individuals with transfemoral amputation fitted with the Transcutaneous Bone Anchoring Prosthesis following the OGAAP.** 6th International Conference Advances in Orthopaedic Osseointegration. 2015. Las Vegas, Nevada, USA. p 24.



- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Osseointegrated prosthetic limb for amputees – Single stage surgery.** 6th International Conference Advances in Orthopaedic Osseointegration. 2015. Las Vegas, Nevada, USA. p 30.
- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Transcutaneous bone-anchoring prosthesis with hip replacement: A novel treatment for amputees.** 6th International Conference Advances in Orthopaedic Osseointegration. 2015. Las Vegas, Nevada, USA. p 34.
- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Transcutaneous bone-anchoring prosthesis with knee replacement: A novel treatment for amputees.** 6th International Conference Advances in Orthopaedic Osseointegration. 2015. Las Vegas, Nevada, USA. p 36.
- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Transcutaneous bone-anchoring prosthesis with knee replacement: a novel treatment for amputees.** 16th European Federation of National Associations of Orthopaedics and Traumatology (EFORT). 2015. Prague, Czech Republic
- Dumas R, Frossard L, Robert-Leblanc C, Beaulieu PM, Brånemark R. **Hip power analysis in individuals with transfemoral amputation: a different strategy from stabilisation during gait stance.** 25th Congress of the International Society of Biomechanics. 2015. Glasgow, UK. Abstract 1070.
- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Health-related quality of life of individuals with transfemoral amputation fitted with the Transcutaneous Bone Anchoring Prosthesis following the OGAAP.** XV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2015. Lyon, France. Abs 512. p 465.
- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Transcutaneous bone-anchoring prosthesis with knee replacement: a novel treatment for amputees.** XV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2015. Lyon, France. Abs 509. p 461.
- Khemka A, Frossard L, Lord S, Bosley B, Al Muderis M. **Transcutaneous bone-anchoring prosthesis with hip replacement: a novel treatment for amputees.** XV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2015. Lyon, France. Abs 510. p 463.
- Dumas R, Frossard L, Robert-Leblanc C, Beaulieu PM, Frossard L. **Errors in the knee joint forces and moments during gait depending on the foot and knee prosthetic components from stabilisation during gait stance.** XV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2015. Lyon, France. Abs 529. p



479.

- Vertriest S, Coorevits P, Hagberg K, Brånemark R, Häggström E, Vanderstraeten G, Frossard L. **Loading compliance of static load bearing exercises performed by transfemoral amputees fitted with an osseointegrated implant.** XV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2015. Lyon, France. Abs 496 p 445.
- Vertriest S, Frossard L. **Can the direct measurement of the load applied on the residuum of individuals with transfemoral amputation fitted with bone-anchored prosthesis help to improve the rehabilitation program?** XV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2015. Lyon, France. IC-Session 110-1.
- Frossard L. **Direct measurement of inner prosthesis loading during activities of daily living: proposal for classification of functional outcome.** XV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2015. Lyon, France. IC-Session 110-4.
- Frossard L. **Bone-anchored prosthesis: current developments worldwide and challenges.** XV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2015. Lyon, France. SYMP-Session 7-1.
- Frossard L. **Rehabilitation of individuals with bone-anchored prosthesis: state-of-the-art and challenges.** Australian Orthotic Prosthetic Association (AOPA) Congress. 2015. Adelaide, Australia. p 15.
- Frossard L, Merlo G, Quincey T, Berg D, Burkett B. **Cost-effectiveness of bone-anchored prosthesis: the Queensland experience.** Australian Orthotic Prosthetic Association (AOPA) Congress. 2015. Adelaide, Australia. p 13.
- Carignan B, Lavigne-Pelletier C, Hguyen H, Lauzé M, Frossard L, Duval C. **Effect of position on precision within the recording field of a markerless motion capture system.** International Society for Posture & Gait Research (ISPGR) World Congress. 2015. Sevilla, Spain. P2-V-121. P 85.
- Frossard L. **Evaluation framework to assess orthopaedic procedures.** Australian Orthopaedic Association (AOA) ASM. 2015. Brisbane, Australia. p 122.
- Frossard L. **Review of direct measurement of inner prosthesis loading in transfemoral amputation: Potential benefits for evidence-based practice.** 40th Conference of American Academy of Orthotists & Prosthetists (AAOP). 2014. Chicago, USA. FPTH14.
- Frossard L, Schuetz M, Sommerville S. **Osseointegration for limb loss: can Australia**



- play a key role?** Australian Orthopaedic Association (AOA) Queensland Branch. 2014. Gold Coast, Australia.
- Frossard L. **Are bone-anchored prostheses about to revolutionise the world of prosthetics?** Australian Orthotic Prosthetic Association (AOPA) Congress. 2014. Melbourne, Australia. p 2.
 - Vertriest S, Frossard L. **Repeatability of static load bearing exercises during rehabilitation of individuals with transfemoral amputation fitted with osseointegrated implant.** IX Australasian Biomechanics Conference (ABC9). 2014. Wollongong, Australia. p 79.
 - Pinard V, Frossard L. **Spatio-temporal characteristics of locomotion of transfemoral amputees fitted with bone-anchored prosthesis.** XIV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2013. Hyderabad, India. p 369
 - Allami N, Frossard L, Frak V. **Interlimb transfer of unimanual grasping movement in upper limb amputees - A pilot study.** XIV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2013. Hyderabad, India. p 393
 - Dumas R, Cheze L, Frossard L. **Hip joint stabilization vs. propulsion and resistance in individuals with transfemoral amputation.** XIV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2013. Hyderabad, India. p 370
 - Frossard L. **Classification of activities of daily living of individual with limb loss.** XIV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2013. Hyderabad, India. p 453
 - Frossard L. **Walking ability of individuals with transfemoral amputation fitted with osseointegrated implant.** XIV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2013. Hyderabad, India. p 463
 - Vertriest S, Coorevits P, Frossard L. **Static load bearing exercises during rehabilitation of individuals with transfemoral amputation fitted with osseointegrated implant: Kinetic analysis.** XIV World Congress of the International Society for Prosthetics and Orthotics (ISPO). 2013. Hyderabad, India. p 463
 - Beaulieu PM, Vertriest S, Frossard L. **Description of body posture during Static load bearing exercises for individuals with transfemoral amputation fitted with bone-anchored prosthesis.** 2013 O&P World Congress. 2013. Orlando, USA. p 100
 - Robert-Leblanc C, Pinard V, Ballaz L, Frossard L. **Calculation of the speed of walking of individuals with transfemoral amputation fitted with bone-anchored prosthesis.** 2013 O&P World Congress. 2013. Orlando, USA. p 100



- Vertriest S, Coorevits P, Frossard L. **Static load bearing exercises during rehabilitation of individuals with transfemoral amputation fitted with osseointegrated implant: Load compliance.** 2013 O&P World Congress. 2013. Orlando, USA. p 61
- Carignan B, Daneault JF, Lavigne-Pelletier C, Frossard L, Duval C. **The Exo-Imaging test: using a markerless motion tracking system to detect and monitor motor symptoms in patients with Parkinson's disease.** 2013 World Parkinson Congress . 2013. Montreal, Canada.
- Carignan B, Daneault JF, Lavigne-Pelletier C, Lauzé M, Sens S, Frossard L, Duval C. **Assessment of tremor and abnormal movements using a markerless motion tracking system.** XX World Congress on Parkinson's Disease and Related Disorders. 2013. Geneva, Switzerland.
- Pinard V, Frossard L. **Spatiotemporal characteristics of locomotion and functional outcomes of individuals with transfemoral amputation fitted with OPRA fixation.** 4th international conference in Advances in Orthopaedic osseointegration - Orthopaedic Surgical Osseointegration Society. San Francisco, USA. 2012. p 42
- Vertriest S, Coorevits P, Frossard L. **Load bearing exercises and functional outcome of individuals with transfemoral amputation fitted with OPRA fixation.** 4th international conference in Advances in Orthopaedic osseointegration - Orthopaedic Surgical Osseointegration Society. San Francisco, USA. 2012. p 41
- Frossard L. **Direct measurement of loading in prosthesis: benefits and challenges for evidence-based practice.** International Society for Prosthetics and Orthotics, Canada Symposium. Ottawa, Canada. 2011. p 8
- Frossard L. **Functional outcome and usage of the prosthesis of lower limb amputees with osseointegrated fixation.** International Society for Prosthetics and Orthotics, Australian National Member Society. Gold Coast, Australia. 2009. p 21-24
- Robinson L, Frossard L, Ryan C, Cruickshank N, Hendy R. **Designing CPD for impact: a decade of designed based research and development.** International Association Medical Education Conference. Prague, Czech Republic. 2008. 7F/SC5. P 207-208.
- Cairns N, Frossard L, Hagberg K , Brånemark R. **The loading techniques used during static rehabilitation of amputees using osseointegrated fixation.** XIIth World Congress of the International Society for Prosthetics and Orthotics. Vancouver, Canada. 2007. p 373
- Lee W, Frossard L, Percy M, Cairns N, Brånemark R. **Evidence-based rehabilitation of amputees using osseointegrated prostheses: Applications of Finite element modelling.** XIIth World Congress of the International Society for Prosthetics and Orthotics.



Vancouver, Canada. 2007. p 509

- Lee W, Frossard L, Cairns N, Brånemark N, Evans J, Adam C, Percy M. **Finite element modeling to aid in refining the rehabilitation of amputees using osseointegrated prostheses.** First International Conference on Digital Human Modeling. DOI: 10.1007/978-3-3540-73321-8. HCII 2007, LNCS 4561. Beijing, China. 2007. p 655-658
- Lee W, Frossard L, Brånemark R. **Loading applied on trans-femoral osseointegrated prostheses.** XXXth Annual Scientific Meeting of the International Society for Prosthetics and Orthotics. Perth, Australia. 2006. p 53-54
- Cairns N, Frossard L, Hagberg K, Brånemark R. **Static load bearing during early rehabilitation of transfemoral amputees using osseointegrated fixation.** XXXth Annual Scientific Meeting of the International Society for Prosthetics and Orthotics. Perth, Australia. 2006. p 51-52
- Lee W, Frossard L, Zhang M. **Load mechanics in external and bone-anchored prostheses.** Biomedical Engineering Conference. Hong Kong, China. 2006. p 71-74
- Lee W, Frossard L, Hagberg K, Häggström E, Lee Gow D, Gray S, Brånemark R. **Direct measurement of 3D force and moment on lower-Limb osseointegrated fixation.** IXth Symposium on 3D analysis of Human Movement. Valenciennes, France. 2006. CD-Rom, p 1-4
- O'Riordan A, Goodman S, Frossard L. **Relationship between the parameters describing the feet position and the performance of elite seated discus throwers in Class F33/34 participating in the 2002 IPC World Championships.** AAESS Exercise and Sports Science Conference. Brisbane, Australia. 2004.
- Sirotic N, Bach T, Jarrott T, McKay S, Frossard L. **Evaluation of rocker sole shapes for rigid ankle foot orthoses.** XIth International Society for Prosthetics and Orthotics. Hong Kong, China. 2004.
- Frossard L, Beck J, Dillon M, Tevelen G, Hayne M, Condie P, Mulder B, Stevenson N, Evans J. **Direct measurement of the actual loading regime applied on the residuum of transfemoral amputee: From gait laboratory to continuous ambulatory recording.** XIth International Society for Prosthetics and Orthotics. Hong Kong, China. 2004. p 133
- Jasiewicz J, McDonald M, Frossard L, Nunn H, Barriskill A. **The development and accuracy of portable motion sensors.** International Society for Posture and Gait Research. Sydney, Australia. 2003.
- Sirotic N, Bach T, Jarrott T, McKay S, Frossard L. **Evaluation of rocker sole shapes for rigid ankle foot orthoses.** International Society for Prosthetics and Orthotics-Australia.



Melbourne, Australia. 2003. p 102-105

- Frossard L, Lee Gow D, Contoyannis B, Nunn A, Brånemark R. **Load applied on the abutment of transfemoral amputees fitted with an osseointegrated implant during load bearing exercises using a long pylon.** International Society for Prosthetics and Orthotics-Australia. Melbourne, Australia. 2003. p 55-56
- Frossard L, Lee Gow D, Contoyannis B, Ewins D, Sullivan J, Tranberg R, Häggström E, Brånemark R. **Loading applied to the implant of transfemoral amputees fitted with a direct skeletal fixation during walking in a straight line and around a circle.** XIXth Congress of the International Society of Biomechanics. Dunedin, New-Zealand . 2003. p 114
- Frossard L, Schramm A, Goodman S. **Kinematic analysis of Australian elite seated shot-putters during the 2002 IPC World Championships: Parameters of the shot's trajectory.** XIXth Congress of the International Society of Biomechanics. Dunedin, New-Zealand. 2003. p 115
- Sirotic N, Bach T, Jarrott T, McKay S, Frossard L. **Evaluation of rocker sole shapes for rigid ankle foot orthoses.** IV Australasian Biomechanics Conference (ABC4). Melbourne, Australia. 2002. p 140-141
- Frossard L, Lee Gow D, Contoyannis B, Ewins D, Sullivan J, Tranberg R, Häggström E, Brånemark R. **Loading applied to the implant of transfemoral amputees fitted with a direct skeletal fixation during load bearing exercises.** IV Australasian Biomechanics Conference (ABC4). Melbourne, Australia. 2002. p 114-115
- Frossard L, Beck J, Dillon M, Evans J. **Comparison between the forces and moments applied on the residuum of above-knee amputees during daily life activities and walking.** Xth International Society for Prosthetics and Orthotics World Congress. Glasgow, Scotland. 2001. MO103
- Frossard L, Dillon M. **The impact of the camera positioning on the reconstruction and tracking of 3-D kinematics data during walking with arm-swing.** XIth International Symposium on the 3-D Human Movement. Cape Town, South Africa. 2000. p 87-90
- Frossard L. **Internal work in the walking with and without arm-swing.** IIIth Australasian Biomechanics Conference (ABC3). Gold Coast, Australia. 2000. p 29-30
- Frossard L. **Walking with and without arm-swing: some coordination and mechanical energy aspects.** IIIth Australasian Biomechanics Conference (ABC3). Gold Coast, Australia. 2000. p 27-28
- Frossard L, Aissaoui R, Lachance P, Allard P. **Angular momentum for above-knee**



amputees during walking. XVIIth International Society of Biomechanics Congress. Calgary, Canada. 1999. p 512

- Frossard L, Allard P, Lachance P, Lacouture P, Duboy J, Junqua A. **Clinical analysis of angular momentum produced by the prosthetic limb in the gait of above-knee amputees.** XVIIth International Society of Biomechanics Congress. Calgary, Canada. 1999. p 771
- Coussi O, Bessonnet G, Frossard L, Allard P. **A solution of inverse dynamic problem for 2-D human walking biped: Single and double support phases.** XIXth Congress of the International Federation of the Theory of Machines and Mechanisms. Calgary, Canada. 1995. p 2287-2291
- Frossard L, Aissaoui R, Allard P. **Body weight transfer during amputee's walking.** XXth Congress of the Society of Biomechanics in Lausanne Archives of Physiology and Biochemistry. Lausanne, Switzerland. 1995. No 103, 3, P C119

4.7. Abstracts (non-refereed)

- Frossard L, Merlo G, Quincey T, Burkett B, Berg D. **The Queensland Health's experience in provision of bone-anchored prostheses: the hidden treasure of health services and economic evaluations.** University of the Sunshine Coast Research Showcase. 2017. Maroochydore, Australia. P 3.
- O'Riordan A, Greenhalgh A, Frossard L, Miller S. **Biomechanics of Seated Shot Put.** Middlesex University Annual Research Conference. 2017. Middlesex, UK.
- Alizad V, Meinzer, M, Frossard L, Smith, S, Kerr, G. **Protocol to determine effects of transcranial direct current stimulation in people with Parkinson's Disease.** IHBI Inspire. 2015. Brisbane, Australia.
- Burkett B, Frossard L, Berg D, Formosa D. **The cost and time effectiveness of osseointegration compared to the traditional socket prosthesis.** University of the Sunshine Coast - University Research Week. 2014. Maroochydore, Australia. P 27.
- Frossard L. **Osseointegration: potential developments for users.** XVIII Conference of Quebec Association of Carers of Individuals with Amputation (AQIPA). 2012. Quebec city, Canada. p 4
- Ballaz L, Raison M, Frossard L, Lemay M, Rauch F. **Musculoskeletal disorders: transfer from research to clinical rehabilitation.** Knowledge Forum - Centre of rehabilitation Lucie-Bruneau. 2012. Montreal, Canada.



- Pinard V, Frossard L. ***Does an osseointegrated fixation improve functional outcomes of individuals with transfemoral amputation?*** Knowledge Forum - Centre of rehabilitation Lucie-Bruneau. 2012. Montreal, Canada.
- Frossard L. ***Biomechanics and osseointegration - Load applied on the osseointegrated fixation: past, current and future developments.*** Colloquium Brånemark Integration. Montpellier, France. 2011. p 6
- Vertriest S, Frossard L, Vanhove W. ***Osseointegration in Belgium: current and future research.*** Colloquium Brånemark Integration. Montpellier, France. 2011. p 7
- Pinard V, Tranberg R, Häggström E, Frossard L. ***Temporal and spatial gait characteristics of transfemoral amputees fitted with osseointegrated fixation: preliminary data.*** I Scientific day of the Group of Research on Adapted Physical Activity. Montreal, Canada. 2011. p 31
- Frossard L, O'Riordan A, Goodman S. ***Overview of the use of applied biomechanics for evidence-based training of elite seated throwers.*** XIIIth Commonwealth International Sport Conference. Melbourne, Australia. 2006. p 105
- Cairns N, Frossard L, Hagberg K, Brånemark R. ***Static load bearing in transfemoral amputees fitted with osseointegrated fixation: pilot study.*** Joint Local Symposium - Physical Sciences and Engineering in Medicine. Brisbane, Australia. 2006.
- Lee W, Frossard L, Zhang M. ***Comprehensive analysis of socket-type and osseointegrated lower-limb prostheses - advancing forward to improve comfort, safety and walking ability.*** Joint Local Symposium - Physical Sciences and Engineering in Medicine. Brisbane, Australia. 2006.
- Frossard L, Smeathers J. ***Evidence-based practice to improve outcomes of transfemoral amputee fitted with osseointegrated implant: from laboratory to daily recordings of the load regime.*** Xth Annual Health and Medical Research Conference of Queensland. Brisbane, Australia. 2005. p 151
- Frossard L, Stevenson N, Smeathers J. ***Classification of daily activities of transfemoral amputees for evidence-based practice.*** Joint Local Symposium - Physical Sciences and Engineering in Medicine. Brisbane, Australia. 2005. p 6
- Frossard L, O'Riordan A, Goodman S, Smeathers J. ***Video recording of seated shot-putters during world-class events.*** IIIth International Days on Sports Science. Paris, France. 2005. p 47-48
- Frossard L, Lee Gow D, Contoyannis B, Ewins D, Sullivan J, Tranberg R, Häggström E, Brånemark R. ***Loading applied on the abutment of transfemoral amputees fitted with***



an osseointegrated implant. Bone & Joint Decade-Multidisciplinary Research Day. Brisbane, Australia. 2002. p 19

- Frossard L, Beck J, Dillon M, Evans J. ***Forces acting on the residuum of above-knee amputees during activities of daily living.*** Joint Local Symposium - Physical Sciences and Engineering in Medicine. Brisbane, Australia. 2000. p 12

4.8. Other publications

- Frossard L. [***New evidence confirming the concept of floating skeleton.***](#) O&P Business News - Clinical news perspective. 2015. July 2015.
- Frossard L. [***Evolution in design of integral leg prosthesis leads to improved outcomes.***](#) O&P Business News - Clinical news perspective. 2015. December 2015.
- Frossard L. [***Osseointegration presents high survivorship, relatively low complication rates in transhumeral amputees.***](#) O&P Business News - Clinical news perspective. 2014. September 2014.
- Frossard L. [***Study: transfemoral amputees experience improved quality of life, fewer problems with osseointegration.***](#) O&P Business News - Clinical news perspective. 2014. June 2014.
- Frossard L. [***Interface loads dependent on amputation height in normal gait, falling.***](#) O&P Business News - Clinical news perspective. 2014. April 2014.
- Frossard L, O’Riordan A. ***Performance analysis of stationary throwers during the Beijing 2008 Paralympic Games.*** Report for the Sports Science Committee of the International Paralympic Committee. 2009. p 1-112.
- Frossard L, O’Riordan A, Goodman S. ***Performance analysis of stationary throwers during the Assen 2006 IPC World Athletics Championships - Data for evidence-based practice.*** Report for the Sports Science Committee of the International Paralympic Committee. ISBN: 978-0-9805274-0-7. 2008. p 1-296
- Frossard L, O’Riordan A, Goodman S. ***Video recording and performance of elite seated thrower during the Athens 2004 paralympic Games.*** Report for Australian Paralympic Committee. 2005. p 1-80
- Frossard L, O’Riordan A, Goodman S. ***Applied biomechanics for evidence-based training of Australian elite seated throwers.*** Report for Special Adviser to the Secretary General on Sport for Development and Peace of the United Nations (UN). 2004. p 175-198
- Frossard L. ***Parashot project: Biomechanical research for athletes with disability.***



Report for Prime Minister through the Science and Technology In Sport of the Prime Minister's Science Engineering and innovation Council (PMSEIC). 2004

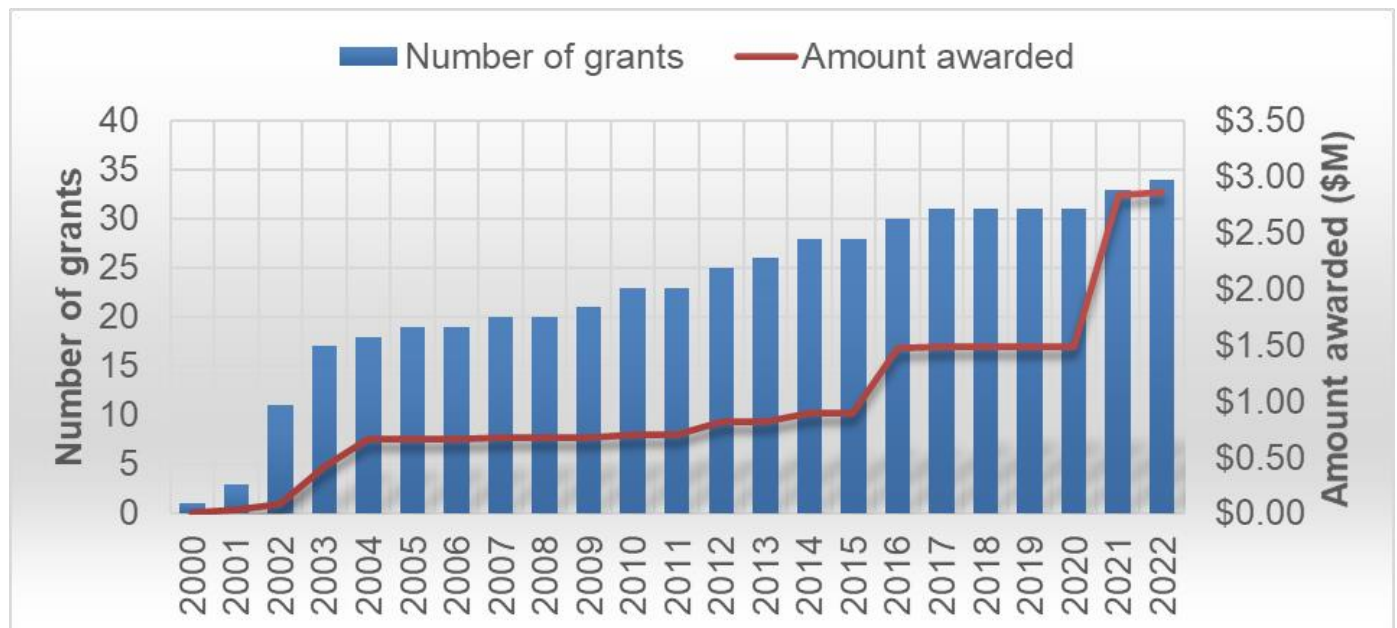
5. Grants

5.1. Overview

I am responsible for **80 competitive grant applications**. A total of **35 (\$3.2M) grants were awarded** (e.g., US-DoD, ARC Linkage project grants, ARC Discovery project grant), 33 (\$2.9M) were successful, 46 (\$24.2M) were unsuccessful. My **overall success rate is 44%**.

I was amongst the three first **Chief Investigators on 72 (90%) grants** including **33 successful ones representing \$2.9M** and the first Chief Investigator on 43 (54%) grants including 22 successful ones.

Figure 3. Overview of cumulated number of grants submitted as well as cumulated number and amount of grants successful.



5.2. Successful grants

- Byrnes J, Frossard L, Ames M, Powrie R, Berg D. **Deep dive into personal experience with bionic limb: what can we learnt from a patient journey analysis?** Australian National Member Society of the International Society for Prosthetics and Orthotics Inc (ANMS ISPO) Research Grant. 2022. 1 year. AUD\$30,000
- Frossard L, Saxby D, Schuetz M, Powrie R, Graydon C. **How bionic limbs could pull more**



- than their weight?** Bionics Queensland Challenge - Bionic Mobility. 2021. 1 year. AUD\$50,000
- Frossard L, Langton C, Lloyd D, Barrett R, Ware R, Schuetz M, Huang P, Powrie R. **Innovative In-Vivo Kinetic System to facilitate rehabilitation and maintainance residuum health after limb loss.** US Departement of Defence-Clinical and Rehabilitative Medicine Research Program-Restoring Warfighters with Neuromusculoskeletal Injuries Research Award. 2020. 2 years. AUD\$1,3M
 - Dumas R, Frossard L. **Locomotion of individuals with lower limb amputation: an innovative approach for a better control and stability.** FASIC (FrenchAustralia Science Innovation Collaboration Grants). 2017. 1 year. 11,143 \$AUD
 - Wearing S, Frossard L, Stewart I, Langton C Leggat P, Schuetz M. **New technology for early detection of residuum tissue damages.** Congressionally Directed Medical Research Programs (CDMRP)/Orthotics and Prosthetics Outcomes Research Program (OPORP)-Prosthetics Outcomes Research Award. 2016. 2 years. 526,000 \$AUD
 - Burkett B, Frossard L. **Prosthetic Protocols for Queensland Health Osseointegration Patients – Phase 3.** Queensland Artificial Limb Services (QALS). 2016. 1 year. 50,000 \$AUD
 - Burkett B, Formosa D, Frossard L. **Prosthetic Protocols for Queensland Health Osseointegration Patients – Phase 2.** Queensland Artificial Limb Services (QALS). 2014. 1 year. 50,000 \$AUD
 - Burkett B, Formosa D, Frossard L. **Prosthetic Protocols for Queensland Health Osseointegration Patients – Phase 1.** Queensland Artificial Limb Services (QALS). 2014. 1 year. 30,000 \$AUD
 - Frossard L. **Attendance to XIV World Congress of the International Society for Prosthetics and Orthotics** (ISPO), Hyderabad, India. Group of Research for Adapted Physical Activity. 2013. 1 year. 500 \$AUD
 - Frossard L, Lemaire E. **Effects of prosthetic components on actual functional outcome of individuals with lower limb loss.** American Orthotic and Prosthetic Association Research Award. 2012. 1 year. 15,000 \$USD
 - Frossard L. **Developments of research activities in Biomechanics.** Marie-Enfant and Sainte-Justine Centre of Research Kick-off grant. 2012. 2 years. 92,400 \$CAD
 - Frossard L, Branemark R, Rydevik B. **Gait lab analysis of transfemoral amputees fitted with osseointegrated fixation.** Travelling grant. 2010. 1 year. 5,000 \$CAD
 - Frossard. **Load applied on the residuum of lower limb amputees: from rehabilitation to activities of daily living.** UQAM Kick-off grant. 2010. 1 year. 30,000 \$CAD
 - Frossard. **Comparison of the load obtained with inverse dynamics and direct measurement.** QUT travelling grant. 2009. 1 year. 2,200 \$AUD



- Mechefske, Frossard. **Visit of Overseas Research Fellow**. Human Mobility Research Centre of Queen's University and Kingston General Hospital. 2007. 1 year. 3,000 \$AUD
- Frossard, Hagberg. **Visit of Overseas Research Fellow**. IHBI/BEE. 2005. 1 year. 3 000 \$AUD
- Frossard, Percy, Smeathers, Lee Gow, Gray, Daniel, Branemark. **Innovative approach to design a new osseointegrated implant for transfemoral amputees with better resistance to fractures**. ARC Linkage Project. 2004. 2 years. 249,000 \$AUD
- Frossard, Smeathers, Percy, Goodman. **Video analysis of seated athletes during the throwing event at the Athens 2004 Paralympic Games**. QUT Strategic Link with Industry. 2003. 1 year. 30,000 \$AUD
- Frossard, Percy, Smeathers, Barker, Goodman. **Novel design of a universal chair for elite Australian athletes competing in seated throw events**. QUT ARC Linkage- Project Incentive Scheme. 2003. 1 year. 2,000 \$AUD
- Barker, Frossard, Percy, Smeathers, Evans. **Biomechanical data logger for amputee gait analysis**. Collaborative IHBI project Scheme. 2003. 1 year. 6,000 \$AUD
- Frossard, Barker, Smeathers, Percy, Lee Gow, Gray, Daniel, Branemark. **True load applied on the fixation system of transfemoral amputees fitted with an osseointegrated implant during daily life activities**. QUT Strategic Link with Industry. 2003. 1 year. 33,750 \$AUD
- Frossard, Percy, Barker, Smeathers, Lee Gow, Gray, Daniel, Branemark. **Innovative approach to design a new osseointegrated implant for transfemoral amputees with better resistance to fractures**. QUT ARC Linkage- Project Incentive Scheme. 2003. 1 year. 2,000 \$AUD
- Jasiewicz, Worringham, Frossard, McDonald. **Wearable Motion Analysis System: Novel Clinical and Research Applications**. ARC Linkage Project. 2003. 3 years. 255,000 \$AUD
- Barker, Smeathers, Evans, Percy, Nunn, Branemark. **Direct measurement of the forces and moments in artificial legs during daily activities using wireless transmission of data**. ARC Discovery Project. 2003. 3 years. 254,500 \$AUD
- Frossard, Barker Smeathers, Percy, Lee Gow, Gray, Daniel, Branemark. **Direct measurement of the forces and moments applied to the abutment of trans-femoral amputees fitted with an osseointegrated implant**. QUT ARC Linkage- Project Incentive Scheme. 2002. 1 year. 1,260 \$AUD
- Frossard, Barker Smeathers, Percy, Goodman. **Biomechanical analysis of elite Australian athletes competing in seated throw events**. QUT ARC Linkage- Project Incentive Scheme. 2002. 1 year. 1,260 \$AUD
- Frossard, Barker, Smeathers, Branemark. **Direct measurement of the forces and**



moments applied to the abutment of trans-femoral amputees fitted with an osseointegrated implant. QUT Strategic Link with Industry. 2002. 1 year. 13,332 \$AUD

- Frossard, Smeathers, Barker, Goodman. **Video analysis of seated athletes during the shotput event at the 2002 IPC Athletics World Championships.** QUT Strategic Link with Industry. 2002. 1 year. 4,350 \$AUD
- Frossard, Smeathers, Evans. **Comparison of the forces and moments applied on the residual limb of above-knee amputees as produced in the 'real world' when using quadrilateral and ischial containment sockets.** QUT Early Career Research Grants Scheme. 2002. 1 year. 5,500 \$AUD
- Barker, Smeathers, Frossard. **Direct measurement of the forces and moments in artificial legs during daily activities using wireless transmission of data.** QUT Research Encouragement Award. 2002. 1 year. 15,000 \$AUD
- Pearcy, Barker, Frossard. **Measure of the forces and moments applied on the residual limb of above-knee amputees during daily-life activities as produced in the 'real world'.** QUT ATN Small Research Grants Scheme. QUT ATN Small Research Grants Scheme. 2002. 1 year. 11,819 \$AUD
- Frossard, Smeathers, Barker, Meerkin, Condie. **Data logger.** Equipment Committee of School of Human Movement Studies. 2002. 1 year. 2,093 \$AUD
- Jasiewicz, McDonald, Frossard. **Development of inertial motion sensors for remote gait analysis.** QUT Strategic Link with Industry. 2001. 1 year. 21,861 \$AUD
- Frossard, Smeathers, Barker. **Determinant of the performance of seated athletes during the shotput event at the Sydney 2000 Paralympic Games.** QUT Strategic Link with Industry. 2001. 1 year. 8,727 \$AUD
- Frossard, Meerkin. **Systematic video recording of seated athletes during the shotput event at the Sydney 2000 Paralympic Games.** Athletics Australia - Australian Institute of Sport. 2000. 1 year. 2,500 \$AUD

6. Supervision

6.1. Overview

I have been involved in the supervision of **39 domestic and overseas students** including 21 (54%) postgraduate students (i.e., 3 postdocs, 12 PhDs, 6 Masters) and 18 (46%) undergraduate students.

I have been the **principal or co-supervisor of 30 students** including 13 (62%) postgraduate and 17 (94%) undergraduate students in Australia, Canada, Belgium and UK.



6.2. Postdoctoral fellow

- 2016-2017. **Jones M.** *New Technology for Early Detection of Residuum Tissue Damages.* Postdoctoral, School of Engineering, Queensland University of Technology, Australia.
Status: Completed
Role : Principal supervisor
Funded by: DoD Orthotics and Prosthetics Outcomes Research Award
- 2011-2014. **Roy R.** *Validity and reliability of instruments used by chiropractors to determine spine stiffness.* Postdoctoral, Department of Kinesiology, UQAM, Canada.
Status: Completed
Role: Co-supervisor
- 2006-2007. **Lee W.** *Modelisation of osseointegrated implant for transfemoral amputees.* Postdoctoral, School of Engineering systems / IHBI, Queensland University of Technology, Australia.
Status: Completed
Role : Principal supervisor

6.3. Postgraduate students

- 2015-2021. **O’Riordan A.** *The Interaction between seated throwers and their throwing frame.* PhD, London Sport Institute, Middlesex University, UK
Status: Completed
Role: Principal supervisor
- 2015-2019. **Alizad V.** *The effects of transcranial direct current stimulation on gait and balance in Patients with Parkinson’s Disease.* PhD. School of Nutrition and Exercise sciences, Queensland University of Technology, Australia
Status: Completed
Role: External Supervisor/Industry Mentor
- 2014-2019. **Pather S.** *Design of protective connector for bone-anchored prosthesis.* PhD. School of Mechanical, Manufacturing & Medical Engineering, Queensland University of Technology, Australia
Status: Completed
Role: Member of supervisory team
Funded by: APA
- 2014-2017. **McLay G.** *Creation of original choreography using raw video footage of Rugby Union live game.* DCI. School of Dance, Queensland University of Technology, Australia
Status: Completed
Role: External Supervisor/Industry Mentor



- 2014-Present. **Pouilot A.** *Evaluation of active video games for the readaptation of children with cerebral palsy.* PhD, Department of Kinesiology, UQAM, Canada.
Status: On-going
Role: Member of supervisory team
- 2011-2017. **Carignan B.** *Development of system to detect automatically motor symptoms of persons with Parkinson.* PhD, Department of Kinesiology, UQAM, Canada.
Status: Not-completed
Role: Co-supervisor.
Funded by: Bourse d'étude supérieure du Canada (BESC) - CRSNG – 70,000\$CAD
- 2011-2017. **Vertriest S.** *Load bearing exercises during rehabilitation of transfemoral amputees fitted with an osseointegrated implant.* PhD, Department of Physical Therapy and Motor Rehabilitation, Ghent University, Belgium.
Status: Not-completed
Role: Co-supervisor
- 2010-2013. **Noury B.** *Analysis of joint kinetic in transfemoral amputees fitted with osseointegrated fixation: direct measurement and inverse dynamics.* Master, INRETS, UMR-T9406 (biomechanics laboratory), University of Lyon, France.
Status: Not-completed
Role: Co-supervisor
- 2010-2014. **Pinard V.** *Spatial and temporal gait characteristics of amputees fitted with osseointegrated fixation.* Master, Department of Kinesiology, University of Quebec in Montreal, Canada.
Status: Not-completed
Role: Principal supervisor
- 2006-2010. **Cairns N.** *The Feasibility of Vibration Analysis as a Technique to Detect Osseointegration of Transfemoral Implants.* PhD, School of Engineering systems / IHBI, Queensland University of Technology, Australia.
Status: Completed
Role: External supervisor
Funded by: IPRS.
Note: Principal supervisor up to 2007
- 2003-2007. **O'Riordan A.** *Interaction between the throwing techniques of elite seated athletes and the design of their throwing frame.* PhD, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Not-completed
Role: Principal supervisor



Funded by: AIS Scholarship

- 2003-2003. **Mulder B.** *Developing a portable data acquisition system.* Master, Department of Engineering, University of Maastricht, The Netherlands.
Status: Completed
Role: Associate supervisor

6.4. Undergraduate students

- 2013-2014. **Robert-Leblanc C.** *Kinetic of bone-anchored prosthesis during walking.* Honours Project, Department of Kinesiology, UQAM, Canada.
Status: Completed
Role : Principal supervisor
- 2013-2014. **Beaulieu PM.** *Kinetic of bone-anchored prosthesis during load bearing exercises.* Honours Project, Department of Kinesiology, UQAM, Canada.
Status: Completed
Role: Principal supervisor
- 2002-2002. **Amprimo K.** *Spatial-temporal parameters of the throwing technique of seated athletes during the shot put event at the 2000 Paralympic Games.* Honours Project, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2002-2002. **Hammond K.** *Spatial-temporal parameters of the throwing technique of seated athletes during the shot put event at the 2000 Paralympic Games.* Honours Project, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2001-2001. **Chappell M.** *Investigating the forces experienced in residuum of above-knee amputees during everyday activities.* Honours Project, School of Mechanical, Manufacturing & Medical Engineering, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
Note: Award for Excellence Honours Projects at the Powerlink Engineering Expo QUT. 3rd place for Honours Projects at the QUT Entrepreneur Innovation Awards
- 2004-2004. **Benedick M.** *Direct measurements of the load applied on the abutment of transfemoral amputees fitted with osseointegrated fixation system during a gym session.* Final Year Project, School of Human Movement Studies, Queensland University of



Technology, Australia.

Status: Completed

Role: Principal supervisor

- 2004-2004. **O'Connor A.** *Direct measurements of the load applied on the abutment of transfemoral amputees fitted with an osseointegrated fixation system during stationary cycling.* Final Year Project, School of Human Movement, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2003-2003. **Peters A.** *Biomechanical Analysis of Elite Seated Athletes Who Participated in the Discus Event at the 2002 IPC World Championships.* Final Year Project, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2003-2008. **Sirotic N.** *Evaluation of rocker sole shapes for rigid ankle foot orthoses.* Final Year Project, Department of Prosthetics and Orthotics, Latrobe University, Australia.
Status: Completed
Role: Associate supervisor
- 2003-2003. **McAuliffe E.** *Monitoring the load applied to the residuum of transfemoral amputees during a 24-hour period of daily activities.* Final Year Project, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2006-2006. **Ferrigno G.** *Kinematic analysis of elite seated thrower: experimental data for IPC World Championship.* Practicum, School of Human Movement, Queensland University of Technology, Australia.
Status: Completed
Role: Associate supervisor
- 2005-2005. **Philips J.** *Correlation between feet position and performance of seated throwers competing at the Athens 2004 Paralympic Games.* Practicum, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2005-2005. **Greener K.** *Kinematic analysis of elite seated thrower: experimental data.* Practicum, School of Human Movement Studies, Queensland University of Technology, Australia.



Status: Completed

Role: Principal supervisor

- 2004-2004. **Walker S.** *Video recording of Australian Elite seated throwing preparing for the Athens 2004 Paralympic Games during training.* Practicum, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2003-2003. **Peters A.** *Data computing of elite seated athletes who participated in the shot-put event at the 2002 IPC World Championships.* Practicum, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2003-2003. **Schramm A.** *Biomechanical analysis of elite seated athletes who participated in the shot put event at the 2002 IPC World Championships.* Summer Student Vacation Scholarships, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2002-2002. **Peters A.** *Video analysis of seated athletes in F34 class who participated in the discus event at the 2002 IPC World Championships.* Summer Student Vacation Scholarships, School of Human Movement Studies, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor
- 2001-2001. **Baveas E.** *Spatial-temporal parameters of walking with and without arm-swing.* Summer Student Vacation Scholarships, School of Mechanical, Manufacturing & Medical Engineering, Queensland University of Technology, Australia.
Status: Completed
Role: Principal supervisor

7. Teaching

7.1. Overview

I am responsible for reshaping the **curriculum in Bachelor and Master's degrees** in 2 universities in Canada and Australia.



I have **coordinated over 10 units** related to biomechanics and research methods for several years in 2 universities in Canada and Australia.

I **lectured over 1,100 hours on biomechanics, performance analysis and research methods** in 3 research and teaching intensive universities in 3 continents.

My current **average student satisfaction rate is over 80%**.

7.2. Curriculum

- 2015-2016. Redesigning curriculum for unit XNB272–Biomechanics to **increase students' employability, improve students' satisfaction and facilitate learning experience** and **comply with accreditation bodies**. Queensland University of Technology, Australia
- 2010-2014. Redesigning curriculum of units associated with kinesiology to increase students' employability, improve university branding, increase students' satisfaction, maximize teaching staff efficiency, capitalize on staff competencies and utilize all physical resources available. University of Quebec in Montreal, Canada

7.3. Coordination

- 2014-2016. **Coordination of 3 units** for School of Exercise Science and Nutrition (XNB370-Performance Analysis and XNB272-Biomechanics) and the School of Podiatry (CSB523-Clinical gait analysis). Queensland University of Technology, Australia
- 2010-2014. **Coordination of 5 units** in Bachelor of Exercise Science (i.e., Basic and Functional Anatomy, Basic, Advanced and Applied Biomechanics) and 3 units (i.e., Functional Anatomy, Basic and Advanced Biomechanics, Applied Biomechanics) in Master of Sport Science. University of Quebec in Montreal, Canada

7.4. Lecturing

- 2015. **Biomechanics** (270 Hrs). Undergraduate – 1st year. School of Exercise Science and Nutrition. Queensland University of Technology, Australia
- 2015. **Clinical gait analysis** (26 Hrs). Undergraduate – 2nd year. School of Podiatry. Queensland University of Technology, Australia
- 2014-2015. **Performance Analysis** (156 Hrs). Undergraduate – 3rd year. School of Exercises and Nutrition Sciences. Queensland University of Technology, Australia
- 2010-2011. **Kinesiology** (36 Hrs). Undergraduate - 1st year. Department of Kinesiology, University of Quebec In Montreal, Canada



- 2010-2011. **Biomechanics** (36 Hrs). Undergraduate - 2nd year. Department of Kinesiology, University of Quebec In Montreal, Canada
- 2010-2011. **Adapted Physical Activities** (3 Hrs). Postgraduate - Master. Department of Kinesiology, University of Quebec In Montreal, Canada
- 2010-2011. **Research methods** (24 Hrs). Postgraduate - Master. Department of Kinesiology, University of Quebec In Montreal, Canada
- 2010. **Kinesiology** (36 Hrs). Undergraduate - 1st year. Department of Kinesiology, University of Quebec In Montreal, Canada
- 2007. **Biomechanics** (4 Hrs). CPD. Department of Medicine - Rehabilitation Unit, University of Melbourne, Australia
- 2007. **Biomechanics** (12 Hrs). Undergraduate - 2nd year. School of Human Movement Studies, Queensland University of Technology, Australia
- 2006. **Research methods** (2 Hrs). Undergraduate - 2nd year. School of Human Movement Studies, Queensland University of Technology, Australia
- 2006. **Biomechanics** (32 Hrs). Undergraduate - 2nd year. School of Human Movement Studies, Queensland University of Technology, Australia
- 2005. **Biomechanics** (32 Hrs). Undergraduate - 2nd year. School of Human Movement Studies, Queensland University of Technology, Australia
- 2004. **Biomechanics** (8 Hrs). Undergraduate - 3rd year. Faculty of Sports and Physical Education, University of Orleans, France
- 1998. **Computer science** (100 Hrs). Undergraduate - 2nd year. Faculty of Sports and Physical Education, University of Orleans, France
- 1998. **Analysis of martial arts** (35 Hrs). Undergraduate - 1st year. Faculty of Sports and Physical Education, University of Orleans, France
- 1998. **Biomechanics** (25 Hrs). Undergraduate - 2nd year. Faculty of Sports and Physical Education, University of Orleans, France
- 1998. **Biomechanics** (25 Hrs). Undergraduate - 1st year. Faculty of Sports and Physical Education, University of Orleans, France
- 1998. **Anatomy** (30 Hrs). Undergraduate - 2nd year. Faculty of Sports and Physical Education, University of Orleans, France
- 1998. **Anatomy** (30 Hrs). Undergraduate - 1st year. Faculty of Sports and Physical Education, University of Orleans, France



Education, University of Orleans, France

- 1998. **Sports ethics** (5 Hrs). CPD. Learning and Education Centre for the Sports and Entertainment Jobs, France
- 1998. **Biomechanics** (15 Hrs). CPD. Learning and Education Centre for the Sports and Entertainment Jobs, France
- 1997. **Computer science** (100 Hrs). Undergraduate - 2nd year. Faculty of Sports and Physical Education, University of Orleans, France
- 1997. **Analysis of martial arts** (35 Hrs). Undergraduate - 1st year. Faculty of Sports and Physical Education, University of Orleans, France
- 1997. **Biomechanics** (25 Hrs). Undergraduate - 2nd year. Faculty of Sports and Physical Education, University of Orleans, France
- 1997. **Biomechanics** (25 Hrs). Undergraduate - 1st year. Faculty of Sports and Physical Education, University of Orleans, France
- 1997. **Anatomy** (30 Hrs). Undergraduate - 2nd year. Faculty of Sports and Physical Education, University of Orleans, France
- 1997. **Anatomy** (30 Hrs). Undergraduate - 1st year. Faculty of Sports and Physical Education, University of Orleans, France
- 1997. **Sports ethics** (5 Hrs). CPD. Learning and Education Centre for the Sports and Entertainment Jobs, France
- 1997. **Biomechanics** (15 Hrs). CPD. Learning and Education Centre for the Sports and Entertainment Jobs, France
- 1996. **Computer science** (100 Hrs). Undergraduate - 2nd year. Faculty of Sports and Physical Education, University of Orleans, France
- 1996. **Analysis of martial arts** (35 Hrs). Undergraduate - 1st year. Faculty of Sports and Physical Education, University of Orleans, France
- 1996. **Biomechanics** (25 Hrs). Undergraduate - 2nd year. Faculty of Sports and Physical Education, University of Orleans, France
- 1996. **Biomechanics** (25 Hrs). Undergraduate - 1st year. Faculty of Sports and Physical Education, University of Orleans, France
- 1996. **Anatomy** (30 Hrs). Undergraduate - 2nd year. Faculty of Sports and Physical Education, University of Orleans, France



- 1996. **Anatomy** (30 Hrs). Undergraduate - 1st year. Faculty of Sports and Physical Education, University of Orleans, France

7.5. Evaluations

Since 2014, I have been a sessional lecturer and unit coordinator at QUT for Performance Analysis, Clinical gait analysis and Biomechanics as detailed in Table 2.

Table 2. Teaching evaluation conducted by QUT

Unit	Year	Resp. rate	QUT – Insight survey		
			IS1	IS2	IS3
Performance Analysis (XNB370). Undergraduate – 3 rd year. School of Exercises and Nutrition Sciences. Queensland University of Technology, Australia	2014	36%	4.4 88%	4.5 90%	4.5 90%
	2015	27%	4.3 86%	3.9 78%	4.3 86%
Clinical gait analysis (CSB523). Undergraduate – 2 nd year. School of Podiatry. Queensland University of Technology, Australia	2015	44%	3.5 70%	3.8 76%	3.3 66%
Biomechanics (XNB272). Undergraduate – 1 st year. School of Exercise Science and Nutrition. Queensland University of Technology, Australia	2015	29%	3.7 74%	3.8 76%	3.4 68%
IS1: This unit provided me with good learning opportunities (mark out of 5)					
IS2: I took advantage of the opportunities to learn in this unit (mark out of 5)					
IS3: Overall, I am satisfied with this unit (mark out of 5)					

8. Other credentials

8.1. Partnerships

I have developed collaborations and/or partnerships with **96 organizations including 39 (41%) in Australia and 56 (59%) in 18 countries overseas** to support my research and/or business activities, including 45 (47%) universities or research institutions, 28 (29%) care providers, 13 (14%) industrials, 9 (9%) sport institutions (Figure 4).

As detailed in Figure 4, I have managed to attract a total of **30 organizations** involved in health care (14), industry (12), sport (3), university/research and/or business (3) in **7 countries** including:

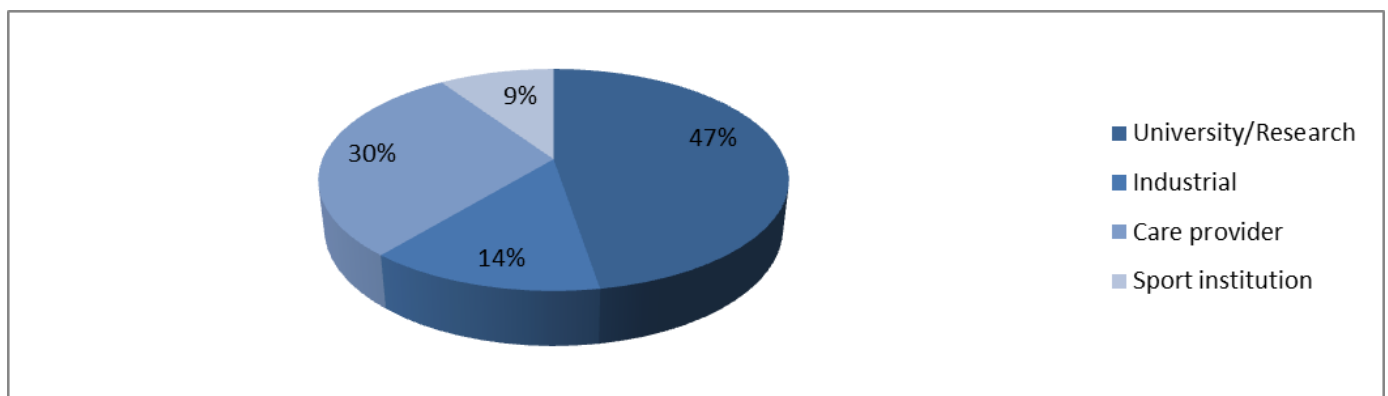


- **15 partners** who supported my academic research activities as an **industry partner** in grants (e.g., **ARC linkage grants**)
- **24 partners** who contributed to my professional scientific activities as **client** of my consulting company YourResearchProject.

I have been involved with more than **270 collaborators** including 140 co-authors of publications, 60 co-investigators in grants applications, 36 co-supervisors of students and 64 clients of YourResearchProject.

I have managed a **team of 200 front-line collaborators including professionals** working in a wide range of occupations (i.e., Biomechanists, Clinicians, Coaches, Educators, Engineers, Physiotherapists, Prosthetists, Scientists, Sport administrators, Statisticians, Surgeons, Technicians). I have led a **team of over 70 back line staffs** including postdoctoral fellows, research assistants, research fellows, technicians, statisticians, students, etc.

Figure 4. Distribution of 96 organizations support my research and/or business activities.



8.2. Invited presentations

I have presented at **121 events** in **53 cities** and **20 countries**.

List of invited presentations:

- 2021. **bionicsforeveryone.com**, Podcast, Canada. (Interview series about “*Osseointegration, Bionic Solutions, and Clinical Outcomes*” - Part 1 - Advantages of Osseointegration. Williams W, Frossard L). Invited speaker for a Podcast
- 2021. **bionicsforeveryone.com**, Podcast, Canada. (Interview series about “*Osseointegration, Bionic Solutions, and Clinical Outcomes*” - Part 2 - Disadvantages of Osseointegration. Williams W, Frossard L). Invited speaker for a Podcast
- 2021. **bionicsforeveryone.com**, Podcast, Canada. (Interview series about “*Osseointegration, Bionic Solutions, and Clinical Outcomes*” - Part 3 – Eight Ways to Improve Osseointegration. Williams W, Frossard L). Invited speaker for a Podcast
- 2021. **bionicsforeveryone.com**, Podcast, Canada. (Interview series about



“Osseointegration, Bionic Solutions, and Clinical Outcomes” - Part 4 – Key Issues for Osseointegration Patients. Williams W, Frossard L). Invited speaker for a Podcast

- 2020. **Lower Limb Prosthetics & Amputee Rehabilitation Course**, Royal Melbourne Hospital, Melbourne, Australia. (*Osseointegration.* Frossard L). Invited guest lecturer for a Workshop
- 2020. **Warrior Care Symposium** (WC21), The Hague, The Netherlands. (*Current uptake worldwide for osseointegrated prosthetic attachment.* Frossard L). Invited keynote speaker for a Conference
- 2020. **Orthopaedic Principles**, Webinar, India. (*Next generation of bionic limbs: feet on the ground and head in the clouds!* Frossard L). Invited keynote speaker for a Webinar
- 2020. **ARC Training Centre for Medical Implant Technologies** (ARC CMIT) and International Society for Prosthetics and Orthotics (ISPO) UK Member Society, Webinar, Melbourne. (*Protecting direct skeletal fixation: Loading with a twist.* Frossard L). Invited keynote speaker for a Workshop
- 2019. **Australian Orthotic Prosthetic Association** (AOPA) Congress, Melbourne, Australia. (*Characterization of anthropomorphicity of transtibial bone-anchored prostheses: Can we assess if a prosthetic foot behaves like a sound foot?* Frossard L, Langton C). Invited speaker for a Conference
- 2019. **XVIIth International Society of Prosthetics and Orthotics (ISPO) World Congress**, Kobe, Japan. (*Current uptake worldwide for osseointegrated prosthetic attachment.* Frossard L). Invited speaker for a Conference
- 2019. **Université Lyon 1**, Lyon, France. (*Can osseointegrated prosthetic attachment revolutionise the world of prosthetics: The truth and nothing but the truth!.* Frossard L). Invited speaker for a Seminar
- 2018. **Exercise and Sports Science Australia** (ESSA), Sydney, Australia. (*Improving mobility for individuals with limb loss – the latest research.* Frossard L). Invited speaker for a Webinar
- 2018. **Griffith university**, Gold Coast, Australia. (*Could Personalised Digital Human with Limb Amputation Help Maintain Residuum Health?* Frossard L). Invited speaker for a Seminar
- 2016. **1st Annual Scientific Meeting of Rehabilitation Medicine Society of Australia and New Zealand** (RMSANZ16), Melbourne, Australia. (*Bone-anchored prostheses from rehabilitation and beyond: is what you see is what you get?.* Frossard L). Invited speaker for a Conference
- 2015. **Australian Orthotic Prosthetic Association (AOPA) Congress**, Adelaide, Australia. (*Rehabilitation of individuals with bone-anchored prosthesis: state-of-the-art and*



challenges. Frossard L). Invited guest speaker for a Conference

- 2015. **Australian Orthotic Prosthetic Association (AOPA) Congress**, Adelaide, Australia. (*Cost-effectiveness of bone-anchored prosthesis: the Queensland experience*. Frossard L, Merlo G, Quincey T, Berg D, Burkett B). Invited guest speaker for a Conference
- 2015. **2nd Australasian Osseointegrated for Amputees Conference**, Brisbane, Australia. (*Cost effectiveness of osseointegration*. Frossard L, Formosa D, Quincey T, Berg D, Burkett B). Invited speaker for a Conference
- 2015. **2nd Australasian Osseointegrated for Amputees Conference**, Brisbane, Australia. (*Osseointegration Internationally: Australia is playing a key role?*. Frossard L). Invited speaker for a Conference
- 2014. **Alfred Hospital**, Melbourne, Australia. (*Worldwide developments in orthopaedic osseointegration for individuals with limb loss: can Australia play a key role?*. Frossard L). Invited speaker for a Group
- 2014. **IHBI Research Conference - Queensland University of Technology**, Brisbane, Australia. (*Upcoming developments in orthopaedic osseointegration for individuals with limb loss*. Frossard L). Invited speaker for a Seminar
- 2014. **Diamantina Health Partners - Trauma research group**, Brisbane, Australia. (*Upcoming developments in orthopaedic osseointegration for individuals with limb loss*. Frossard L). Invited speaker for a Seminar
- 2014. **WorkCover Queensland**, Brisbane, Australia. (*Worldwide developments in bone-anchored prostheses: is Australia playing a key role?* Frossard L). Invited speaker for a Seminar
- 2014. **Australian Orthotic Prosthetic Association (AOPA) Congress**, Melbourne, Australia. (*Are bone-anchored prostheses about to revolutionise the world of prosthetics?*. Frossard L). Invited speaker for a Conference
- 2013. **Center of Research, Marie-Enfant's Rehabilitation Centre**, Montreal, Canada. (*Bone-anchorage attachment for individuals with limb loss*. Frossard L). Invited speaker for a Seminar
- 2013. **Center of Research, Marie-Enfant's Rehabilitation Centre**, Montreal, Canada. (*Bone-anchorage attachment for pediatric population*. Frossard L). Invited speaker for a Seminar
- 2013. **Center of Research, Sainte-Justine Hospital**, Montreal, Canada. (*Bone-anchorage attachment for pediatric population*. Frossard L). Invited speaker for a Seminar
- 2013. **XIV World Congress of the International Society for Prosthetics and Orthotics (ISPO)**, Hyderabad, India. (*Classification of activities of daily living of individual with limb*



loss. Frossard L). Invited speaker for a Conference

- 2013. **XIV World Congress of the International Society for Prosthetics and Orthotics (ISPO)**, Hyderabad, India. (*Walking ability of individuals with transfemoral amputation fitted with osseointegrated implant*. Frossard L). Invited speaker for a Conference
- 2012. **4th international conference in Advances in Orthopaedic osseointegration - Orthopaedic Surgical Osseointegration Society**, San Francisco, USA. (*Load bearing exercises and functional outcome of individuals with transfemoral amputation fitted with OPRA fixation*. Vertriest S, Coorevits P, Frossard L). Invited speaker for a Conference
- 2012. **5th international conference in Advances in Orthopaedic osseointegration - Orthopaedic Surgical Osseointegration Society**, San Francisco, USA. (*Spatiotemporal characteristics of locomotion and functional outcomes of individuals with transfemoral amputation fitted with OPRA fixation*. Pinard V, Frossard L). Invited speaker for a Conference
- 2012. **Center of Research, Marie-Enfant's Rehabilitation Centre**, Montreal, Canada. (*Walking assistive device for individuals with lower limb loss: development of an osseointegrated fixation*. Frossard L). Invited speaker for a Seminar
- 2012. **Center of Research, Sainte-Justine Hospital**, Montreal, Canada. (*Osseointegrated implant to attach lower limb prosthesis: innovations and challenges*. Frossard L). Invited speaker for a Seminar
- 2012. **XVIII Conference of Quebec Association of Carers of Individuals with Amputation (AQIPA)**, Quebec City, Canada. (*Osseointegration: potential developments for users*. Frossard L). Invited speaker for a Conference
- 2011. **International Society for Prosthetics & Orthotics-Canada**, Ottawa, Canada. (*Direct measurement of loading in prosthesis: benefits and challenges for evidence-based practice*. Frossard L). Invited speaker for a Conference
- 2011. **Group of Research on Adapted Physical Activities, University of Quebec in Montreal**, Montreal, Canada. (*Biomechanics of lower limb amputees fitted with osseointegrated fixation*. Frossard L). Invited speaker for a Seminar
- 2011. **Colloquium Branemark Integration**, Montpellier, France. (*Biomechanics and osseointegration - Load applied on the osseointegrated fixation: past, current and future developments*. Frossard L). Invited speaker for a Conference
- 2010. **Centre of Orthopaedic Osseointegration, Sahlgrenska University Hospital**, Gothenburg, Sweden. (*Overview Protamine project: Biomechanics of locomotion of lower limb amputees*. Frossard L). Invited speaker for a Seminar
- 2010. **Bone & Joint Research Lab, University of Utah**, Salt Lake City, USA. (*Direct measurement of load applied on osseointegrated fixation: Can it help designing implant?*.



Frossard L). Invited speaker for a Seminar

- 2010. **3th international conference in Advances in Orthopaedic osseintegration** - Orthopaedic Surgical Osseointegration Society, Gothenburg, Sweden. (*Biomechanics of transfemoral amputees fitted with osseointegrated fixation: Loading data for evidence-based practice*. Frossard L). Invited keynote speaker for a Conference
- 2009. **Laboratory Biomechanics and Human Modeling, University Claude Bernard**, Lyon, France. (*Locomotion of transfemoral amputees: evidence-based practice*. Frossard L). Invited speaker for a Seminar
- 2009. **International Society for Prosthetics & Orthotics-Australia**, Gold Coast, Australia. (*Locomotion of transfemoral amputees fitted with osseointegrated implant: data for evidence-based practice*. Frossard L). Invited keynote speaker for a Conference
- 2007. **Human Mobility Research Centre, Queen's University**, Kingston, Canada. (*Locomotion of transfemoral amputees: evidence-based practice as clinical solution*. Frossard L). Invited speaker for a Seminar
- 2007. **35th AAPA's annual conference, International Symposium and Roundtable**, Philadelphia, USA. (*To PA or not to PA?*. Frossard L, Robinson L). Invited speaker for a Conference [CHIS project]
- 2006. **e-Health Research Colloquium**, Brisbane, Australia. (*Locomotion of transfemoral amputees: evidence-based practice*. Frossard L). Invited speaker for a Seminar
- 2006. **13th Commonwealth International Sport Conference**, Melbourne, Australia. (*Overview of the use of applied biomechanics for evidence-based training of elite seated throwers*. Frossard L). Invited guest speaker for a Conference
- 2005. **Rehabilitation Bioengineering Seminar Series, University of Hong Kong**, Hong Kong, China. (*Locomotion of transfemoral amputees: evidence-based practice as clinical solution*. Frossard L). Invited speaker for a Seminar
- 2005. **Postgraduate program of School of Human Movement Studies, Queensland University of Technology**, Brisbane, Australia. (*Research methods and evidence-based practice*. Frossard L). Invited Guest Lecturer for a Seminar [Other project]
- 2005. **IHBI Research Conference, Queensland University of Technology**, Brisbane, Australia. (*Locomotion of transfemoral amputees: evidence-based practice as clinical solution*. Frossard L). Invited speaker for a Conference
- 2005. **e-Health Research Centre**, Brisbane, Australia. (*Locomotion of transfemoral amputees: evidence-based practice as clinical solution*. Frossard L). Invited speaker for a Seminar
- 2005. **Department of Physical Education, Victoria University**, Melbourne, Australia.



- (*Biomechanics: A clinical solution for evidence-based practice.* Frossard L). Invited speaker for a Seminar
- 2005. **Department of Physical Education, James Cook University**, Townsville, Australia. (*Biomechanics: A solution for evidence-based training of elite seated throwers.* Frossard L, O’Riordan A). Invited speaker for a Seminar
 - 2004. **Queensland Amputee Limb Service Information Forum**, Brisbane, Australia. (*Research in biomechanics and design of prosthetic components: from gait laboratory to real world data.* Frossard L). Invited keynote speaker for a Conference
 - 2004. **Queen Mary’s Rehabilitation Center**, London, UK. (*Load measurement and osseointegration.* Frossard L). Invited speaker for a Seminar
 - 2004. **Postgraduate program of Faculty of Sports and Physical Education, University of Orléans**, Orléans, France. (*Evidence-based care of lower limb amputees.* Frossard L). Invited guest lecturer for a Seminar
 - 2004. **Postgraduate program of Faculty of Sports and Physical Education, University of Orléans**, Orléans, France. (*Evidence-based training of athletes with disability.* Frossard L). Invited guest lecturer for a Seminar
 - 2004. **Otto-Bock**, Vienna, Austria. (*Direct measurement of loading in prosthesis for evidence-based design of components.* Frossard L). Invited speaker for a Seminar
 - 2004. **OSSUR**, Reykjavik, Iceland. (*Load measurement and osseointegration.* Frossard L). Invited speaker for a Seminar
 - 2004. **National conference in Physiotherapy**, Gold Coast, Australia. (*Biomechanics and evidence-based practice.* Frossard L). Invited keynote speaker for a Conference
 - 2004. **International Society for Prosthetics & Orthotics, Symposium on Instrumentation to Measure Clinical Performance and Outcomes in Prosthetics and Orthotics**, Hong Kong, China. (*Direct measurement of the actual loading regime applied on the residuum of transfemoral amputee: From gait laboratory to continuous ambulatory recording.* Frossard L). Invited speaker for a Symposium
 - 2004. **International Days of Sport Science**, Paris, France. (*Video recording of seated shot-putters during world-class events.* Frossard L). Invited keynote speaker for a Conference
 - 2004. **ESKA Implant**, Luebeck, Germany. (*Load measurement and osseointegration.* Frossard L). Invited speaker for a Seminar
 - 2004. **Centre of Orthopaedic Osseointegration, Sahlgrenska University Hospital**, Gothenburg, Sweden. (*Load measurement and osseointegration.* Frossard L). Invited speaker for a Seminar



- 2004. **Centre for Bio-Medical Engineering, University College London**, Stanmore, UK. (*Load measurement and osseointegration*. Frossard L). Invited speaker for a Seminar
- 2004. **Branemark osseointegrated symposium**, Gothenburg, Sweden. (*Load measurements and osseointegration*. Frossard L). Invited keynote speaker for a Symposium
- 2002. **Centre of Orthopaedic Osseointegration, Sahlgrenska University Hospital**, Gothenburg, Sweden. (*Forces and moments applied on the abutment of above-knee amputees during load bearing exercises and daily life activities and walking*. Frossard L, Lee Gow D, Contoyannis B, Nunn A, Evans J, Brånemark R). Invited speaker for a Seminar
- 2002. **Bayside Physiotherapy**, Brisbane, Australia. (*Biomechanics: From a descriptive to a mechanical approach of walking*. Frossard L). Invited speaker for a Seminar [Other project]
- 2001. **Prosthetic Research Center**, Seattle, USA. (*From the measure to the analysis of forces and moments applied to residuum of above knee amputees during every-day situations*. Frossard L, Beck J, Dillon M, Evans J). Invited speaker for a Seminar

8.3. Reviewer of scientific journals

Since 2006, I have been invited to review **172 scientific manuscripts by 65 journals**, including some top-ranked ones in their field (e.g., **Nature, PLoS one**). I have **accepted 94 (55%)** and declined 78 (45%) of these invitations.

Regularly reviewer for:

- Acta Mechanica et Automatica
- Acta Orthopaedica
- Adapted Physical Activity Quarterly
- Advances in Bioscience and Biotechnology (ABB)
- African Educational Research Journal
- American Journal of Case Reports
- American Journal of Physical Medicine and Rehabilitation
- Annals of Biomedical Engineering
- Annals of Physical and Rehabilitation Medicine



- Applied Bionics and Biomechanics
- Archives of Physical Medicine and Rehabilitation
- Australian Physical and Engineering Sciences in Medicine
- BioMed Research International
- BioMed Research International
- BMJ Open
- Canadian Prosthetics & Orthotics Journal
- Clinical Biomechanics
- Data in Brief
- Disability and Rehabilitation
- Disability and Rehabilitation: Assistive Technology
- Frontiers in Bioengineering and Biotechnology
- Gait & Posture
- IEEE - Transactions on Biomedical Engineering
- IEEE - Transactions on Neural Systems & Rehabilitation Engineering
- IEEE-Transactions on Medical Robotics and Bionics
- Instrumentation Science & Technology
- International Journal of Sports Physiology and Performance
- Journal of Applied Biomedicine
- Journal of Biomechanics
- Journal of Biomedical Materials Research: Part A
- Journal of Biomedical Materials Research: Part B - Applied Biomaterials
- Journal of Legal, Ethical and Regulatory Issues
- Journal of Mechanical Engineering Science-Part C, PIME
- Journal of Medicine and Medical Sciences
- Journal of Military, Veteran and Family Health
- Journal of NeuroEngineering and Rehabilitation
- Journal of NeuroEngineering and Rehabilitation



- Journal of Orthopaedic Research
- Journal of Physical Education and Sport Management
- Journal of Prosthetics and Orthotics
- Journal of Rehabilitation Research and Development
- Journal of Sports Sciences
- Measurement
- Medical Engineering & Physics
- Nature - Scientific Reports
- Physiotherapy Theory and Practice
- PLOS One
- Prosthetics and Orthotics International
- Sensors
- Sports
- Sports Engineering
- Sports Technology
- The European Journal of Health Economics
- World Journal of Clinical Pediatrics
- World Journal of Orthopedics

8.4. Reviewer of funding bodies

- 2019. **International Society for Prosthetics and Orthotic – Australian National Member Society Inc (ISPO)**. Australia. Scheme: Research Grant.
- 2017. **International Society for Prosthetics and Orthotic – Australian National Member Society Inc (ISPO)**. Australia. Scheme: Research Grant.
- 2017. **Exercise and Sports Science Australia (ESSA)**. Australia. Scheme: Applied Sports Science Research Grant.
- 2015. **National Health and Medical Research Council (NHMRC)**. Australia. Scheme: Research project grant.
- 2014. **Marie-Enfant Center of Rehabilitation**. Canada, Scheme: Peer review program for FRSQ–Junior 1.



- 2014. **American Institute of Biological Sciences and US Army Medical Research and Materiel Command**. US. Scheme: Military medical Research and Development.
- 2011. **Research Institute for Work Health and Safety (IRRST)**. Canada. Scheme: Scholarship for postgraduate and postdoctoral studies.
- 2006. **QUT**. Australia. Scheme: Peer Review Program.
- 2008. **The University of Queensland / Faculty of Health / Centre for Health Innovation and Solutions**. Australia. Scheme: ARC Future Fellowship.

8.5. Other reviewing

- 2017. **PhD examiner**. *Biomechanics of Sprinting Prostheses*. Rigney S. PhD Thesis. Graduate School of Biomedical Engineering, UNSW Engineering.
- 2015. **Abstracts reviewer**. International Society of Prosthetics and Orthotics - World Congress. Lyon, France.
- 2013. **Invited internal examiner**. *Rational for design of comfortable and efficient braces for idiopathic scoliosis in teenagers*. Cobetto N. PhD Thesis. Ecole Polytechnique, Canada.
- 2013. **Invited internal examiner**. *Effects of total knee replacement surgery on gait performance*. Liu Y. PhD Thesis. QUT, Australia.
- 2013. **Abstracts reviewer**. International Society of Prosthetics and Orthotics - World Congress. Hyderabad, India.
- 2013. **Abstracts reviewer**. Design of Medical Devices Conference Europe (DMDEUR2013). Delft, Netherlands.
- 2012. **Invited internal examiner**. *Rational for design of braces for idiopathic scoliosis in teenagers*. Desbiens F. PhD Thesis. Ecole Polytechnique, Canada.
- 2011. **Invited internal examiner**. *Physiological demand while using active video games in children with cerebral palsy*. Robert M. Master Thesis. University of Quebec in Montreal, Canada.
- 2003. **Invited external examiner**. *Reconstruction of three-dimensional coordinates of multiple targets using linear sensors*. Georgiev. PhD thesis. University of Cape Town, South Africa

8.6. Expert opinion

- 2020. **Invited expert**. Establish is Prosthetics and Orthotics Technicians Association. Partec



- 2016. **Invited expert.** Development of Prosthetics and Orthotics (O&P) Technician program. Partec
- 2015. **Invited expert.** Orthotics and Prosthetic (O&P) workforce issues: NSW Health Workforce Strategy Taskforce. NSW Ministry of Health
- 2015. **Invited expert.** AOPA Course Accreditation Standards: forum for member and stakeholder consultation. Australian Orthotic Prosthetic Association (AOPA)
- 2015. **Participant.** Review of Australia's Research Training System: Public Forum. Australian Council of Learned Academies (ACOLA)
- 2010. **Invited expert.** Development of the video recording product "The Zone" developed by SiliconCoach Inc
- 2005. **Invited expert.** Group of international researchers focusing on Sports for people with disability during real event. International Paralympic Committee

8.7. Conferences

- 2022. **Chairperson.** Scientific Symposium of 2022 Australian Neuroscience Society meeting focusing on "Neuroprosthetics". Melbourne, Australia
- 2021. **Chairperson.** Scientific Symposium of 2021 International Society for Prosthetics & Orthotics conference focusing on "*Free Paper Session titled "Osseointegration" (topic: Prosthetics: Lower Limb)*". Virtual
- 2015. **Organizer and Chairperson.** Scientific Symposium of 2015 International Society for Prosthetics & Orthotics conference focusing on "*Bone-anchored prosthesis: update in international developments*". Lyon, France
- 2015. **Organizer and Chairperson.** Instructional Course of 2015 International Society for Prosthetics & Orthotics conference focusing on "*Instructional Course on Direct measurement of prosthetic loading for evidence-based practice*". Lyon, France
- 2015. **Member of steering committee.** Queensland Artificial Limb Association Forum. Brisbane, Australia.
- 2015. **Member of organizing committee.** Quebec support group for individuals with amputation (AQIPA) conference. Sherbrook, Canada.
- 2015. **Member of organizing committee.** 5th international conference in Advances in Orthopaedic osseointegration - Orthopaedic Surgical Osseointegration Society. Las Vegas, USA.
- 2013. **Organizer and Chairperson.** Symposium of 2013 International Society for Prosthetics & Orthotics conference focusing on "*Osseointegration and biomechanics: future*



solutions". Hyderabad, India

- 2013. **Organizer and Chairperson.** Symposium of 2013 International Society for Prosthetics & Orthotics conference focusing on "*Direct measurement of loading for evidence-based practice*". Hyderabad, India
- 2012. **Member of organizing committee.** 4th international conference in Advances in Orthopaedic osseointegration - Orthopaedic Surgical Osseointegration Society. San Francisco, USA.
- 2004. **Invited chairperson.** Session on *Sport Science and Paralympian Athletes*. AAESS Exercise and Sports Science Conference. Brisbane, Australia
- 2004. **Invited chairperson.** Session on *Novel Instrumentation in Prosthetic and Orthotics*. 2004 ISPO conference. Hong Kong, China
- 2002. **Invited chairperson.** Session on *Gait analysis*. IV Australasian Biomechanics Conference (ABC4). Melbourne, Australia

8.8. Awards

- 2005. **Award nomination.** Queensland University of Technology Outstanding Contribution Award for Academic Staff
- 2005. **Award nomination.** Paralympic Scientific Award of the International Paralympic Committee
- 2005. **Award for the Best Paper.** *Classification of Daily Activities of Transfemoral Amputees for Evidence-Based Practice*. Frossard et al. Joint Local Symposium - Physical Sciences and Engineering in Medicine. Brisbane, Australia
- 2004. **Award nomination.** Research and Development Award at the Engineering Excellence Awards ceremony organized by the Queensland division of the Engineers Australia (IEAust)
- 2002. **Award for the Best Presentation.** *Loading applied on the abutment of transfemoral amputees fitted with an osseointegrated implant*. Frossard et al. Bone & Joint Decade-Multidisciplinary Research Day. Brisbane, Australia
- 2000. **Award for the Best Presentation.** *Forces acting on the residuum of above-knee amputees during activities of daily living*. Frossard et al. Joint Local Symposium - Physical Sciences and Engineering in Medicine. Brisbane, Australia



8.9. Additional information

8.9.1. Social networks

- Twitter: @LaurentFrossard (Over 418 followers since 01/01/2016)
- LinkedIn: <https://au.linkedin.com/in/LaurentFrossard> (Over 30,000 connections)
- Facebook: www.facebook.com/YourResearchProject (Over 4,000 professional friends)
- Google+: <https://www.google.com/+Yourresearchprojectgoogle>
- YouTube: <https://www.youtube.com/channel/UCpdOB8YxO6bgz9YKz2u1Zyg>
- AboutMe: <https://about.me/laurentfrossard>
- Instagram: <https://www.instagram.com/laurentfrossard/>

8.9.2. Public scientific profiles

- ePrint: http://eprints.qut.edu.au/view/person/Frossard_Laurent.html
- Google Scholar: <http://scholar.google.ca/citations?user=KVmDLtIAAAAJ>
- ResearchGate: http://www.researchgate.net/profile/Laurent_Frossard
- ORCID: <http://orcid.org/0000-0002-0248-9589>
- ResearchID: <http://www.researcherid.com/rid/C-3582-2008>
- Expertscape: <https://expertscape.com/au/bone-anchored+prosthesis/Frossard%2C+Laurent>
- Expertscape: <https://expertscape.com/au/artificial+limbs/Frossard%2C+Laurent>

9. Additional information

- 2010. Reach the Annapurna base camp in Himalayas
- 2008. Jury duty for Brisbane Magistrate Court (8-day trial)
- 1994. First-place standing in the Eastern Canadian Judo Championships
- 1992. Winner on the French TV show "[Fort Boyard](#)"
- 1990-Onward. Travelled several times around the world (e.g., Canadian Arctic, Himalayas)
- 1987. Judo French National High School Championships – Juvenile



10. Contact me

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