Curriculum Vitae

Benjamin Avanzi

Office Address:	Department of Economics The University of Melbourne Level 3, Office 323 111 Barry Street Carlton VIC 2053 Australia
Office Phone:	+61 3 8344 8667
	b.avanzi@unimelb.edu.au
Websites:	http://www.benjaminavanzi.com https://communicate-data-with-r.netlify.app https://actl10001.netlify.app

Date of CV: September 2021

Education

2008	Ph.D.	University of Lausanne, Faculty of Business and Economics (HEC Lausanne), Actuarial Science (supervisor: Prof. Hans U. Gerber)
2005	Lic.	University of Lausanne, Faculty of Business and Economics (HEC Lausanne), Business, major in Actuarial Science
	CAS	*Casualty Actuarial Society* exams: 1, 2, 3F, 4, 5, C1, C2, S, VE, VF, COP
	SOA	*Society of Actuaries* associateship exams: 3 VEEs, P, FM, M (MLC & MFE), C, APC
		Society of Actuaries fellowship exams: GIINT, GIRR

Academic appointments

2020 –	Professor of Actuarial Studies, Centre of Actuarial Studies, Department of Economics Faculty of Business and Economics, University of Melbourne, Australia
2017 – 2018	Chair, UNSW Business School 3+ Reference Group UNSW Australia Business School, University of New South Wales (UNSW), Australia
2015 – 2017	Associate Head of School, School of Risk and Actuarial Studies UNSW Australia Business School, University of New South Wales (UNSW), Australia
2015 – 2020	Associate Professor of Actuarial Studies, School of Risk and Actuarial Studies UNSW Australia Business School, University of New South Wales (UNSW), Australia
2015 – 2018	Professeur associé en actuariat[1], Département de Mathématiques et de Statistique Faculté des Arts et des Sciences, Université de Montréal (UdeM), Canada
2013 – 2015	Professeur agrégé en actuariat[2], Département de Mathématiques et de Statistique Faculté des Arts et des Sciences, Université de Montréal (UdeM), Canada
2013 – 2015	Adjunct Associate Professor, School of Risk and Actuarial Studies UNSW Australia Business School[3], University of New South Wales (UNSW), Australia
2010 – 2013	Senior Lecturer of Actuarial Studies, School of Risk and Actuarial Studies Australian School of Business, University of New South Wales, Australia
2008 – 2010	Lecturer of Actuarial Studies, School of Actuarial Studies Australian School of Business, University of New South Wales, Australia
2005 – 2008	Various casual lecturer positions, University of Lausanne & Bordeaux Business School
2003 – 2008	Teaching and Research assistant, University of Lausanne

Referees

Available upon request.

[1] 'Adjunct Professor' of Actuarial Science
[2] 'Associate Professor' of Actuarial Science
[3] Formerly 'Australian School of Business'

RESEARCH

Insurance capital modelling (reserving, solvency, dependence), risk theory (optimal control of actuarial surplus models), modelling and statistical analysis of big data, robust estimation, social security and pensions, risk modelling in operations management.

Major awards

2018 **Taylor Fry General Insurance Seminar Silver Prize**, awarded by an independent panel for the paper *How to proxy the unmodellable: Analysing granular insurance claims in the presence of unobservable or complex drivers* (Australian Actuaries Institute General Insurance Seminar, November 2018)

2017 **Hachemeister Prize**, awarded by the Casualty Actuarial Society (CAS) for the paper *Correlations between insurance lines of business: An illusion or a real phenomenon? Some methodological considerations* (2016, ASTIN Bulletin, 46:2)

Publications

Metrics (as of September 2021)

Google Scholar: 1075 citations, h-index of 17 (since 2016: 681 citations, h-index of 14)
Scopus profile: 564 citations, h-index of 10
ResearchGate: RG Score of 23.55 (80 %ile), Research Interest of 499.0 (87 %ile), h-index of 14 (12 when self-citations are excluded)

Submitted journal articles

2021 1. Al-Mudafer, M. T., **Avanzi, B.**, Taylor, G., Wong, B.
Stochastic loss reserving with mixture density neural networks
Submitted

Peer-reviewed journal articles

Accepted manuscripts can be downloaded for free from here (2008-2019) and here (2017-) in accordance with the journals' copyright regulations.

2021 2. **Avanzi, B.**, Taylor, G., Wang, M., Wong, B.
SynthETIC: an individual insurance claim simulator with feature control
[Q1,A*][4] Insurance: Mathematics and Economics, Vol. 100, pp. 296–308

2021 3. **Avanzi, B.**, Lau, H.., Wong, B.
On the optimality of joint periodic and extraordinary dividend strategies
[Q1,A*] European Journal of Operational Research, Vol. 295, issue 3, pp. 1189–1210

2021 4. **Avanzi, B.**, Boglioni Beaulieu, G, Lafaye de Micheaux, P., Wong, B.
A Counterexample to the Central Limit Theorem for Pairwise Independent Random Variables Having a Common Absolutely Continuous Arbitrary Margin
[Q1,n/a] Journal of Mathematical Analysis and Applications, Vol. 499, Issue 1, 124982

2021 5. **Avanzi, B.**, Taylor, G., Wong, B., Yang, X.
On the modelling of multivariate counts with Cox processes and dependent shot noise intensities
[Q1,A*] Insurance: Mathematics and Economics, Vol. 99, pp. 9–24

2021 6. **Avanzi, B.**, Lau, H.., Wong, B.
Optimal Periodic Dividend Strategies for Spectrally Negative Lévy Risk Processes With Fixed Transaction Costs
[Q1,A] Scandinavian Actuarial Journal, in press

2021 7. **Avanzi, B.**, Taylor, B., Wong, B., Xian, A.
Modelling and understanding count processes through a Markov-modulated non-homogeneous Poisson process framework
[Q1,A*] European Journal of Operational Research, Vol. 290, Issue 1, pp. 177–195

[4][Quartile according to Scimago 2020, Journal rank according to the latest ABDC 2019 list]

2021 8. **Avanzi, B.**, Taylor, B., Vu, P. A., Wong, B.
On Unbalanced Data and Common Shock Models in Stochastic Loss Reserving
[Q3,A] Annals of Actuarial Science, Vol. 15, Issue 1, pp. 173–203

2020 9. **Avanzi, B.**, Lau, H.., Wong, B.
Optimal Periodic Dividend Strategies for Spectrally Positive Lévy Risk Processes With Fixed Transaction Costs
[Q1,A*] Insurance: Mathematics and Economics, Vol. 93, pp. 315–332

2020 10. **Avanzi, B.**, Taylor, B., Vu P. A., Wong, B.
A Multivariate Evolutionary Generalised Linear Model Framework with Adaptive Estimation for Claims Reserving
[Q1,A*] Insurance: Mathematics and Economics, Vol. 93, pp. 50–71

2018 11. **Avanzi, B.**, Taylor, B., Wong, B.
Common shock models for claim arrays
[Q1,A] ASTIN Bulletin, Vol. 48, Issue 3, pp. 1109-1136

2018 12. **Avanzi, B.**, Tu, V., Wong, B.
Optimal Dividends Under Erlang(2) Inter-Dividend Decision Times
[Q1,A*] Insurance: Mathematics and Economics, Vol. 79, pp. 225-242

2018 13. **Avanzi, B.**, Henriksen, L. F. B., Wong, B.
On the distribution of the excedents of funds with assets and liabilities in presence of solvency and recovery requirements
[Q1,A] ASTIN Bulletin, Vol. 48, Issue 2, pp. 647–672.

2017 14. **Avanzi, B.**, Pérez, J.-L., Wong, B., Yamazaki, K.
On optimal joint reflective and refractive dividend strategies in spectrally positive Lévy models
[Q1,A*] Insurance: Mathematics and Economics, Vol. 72, pp. 148–162.

2016 15. **Avanzi, B.**, Taylor, G., Vu, P. A., Wong, B.
Stochastic Loss Reserving with Dependence: A Flexible Multivariate Tweedie Approach
[Q1,A*] Insurance: Mathematics and Economics, Vol. 71, pp. 63–78.

2016 16. **Avanzi, B.**, Tu, V., Wong, B.
On the interface between optimal periodic and continuous dividend strategies in the presence of transaction costs
[Q1,A] ASTIN Bulletin, Vol. 46, Issue 3, pp. 709–746.

2016 17. **Avanzi, B.**, Wong, B., Yang, X.
A micro-level claim count model with overdispersion and reporting delays
[Q1,A*] Insurance: Mathematics and Economics, Vol. 71, pp. 1–14.

2016 18. **Avanzi, B.**, Taylor, G., Wong, B.
Correlations between insurance lines of business: An illusion or a real phenomenon? Some methodological considerations
[Q1,A] ASTIN Bulletin, Vol. 46, Issue 2, pp. 225–263.

2016 19. **Avanzi, B.**, Tao, J., Wong, B., Yang, X.
Capturing Non-Exchangeable Dependence in Multivariate Loss Processes with Nested Archimedean Lévy Copulas
[Q3,A] Annals of Actuarial Science, Vol. 10, Issue 01, pp. 87–117.

2016 20. **Avanzi, B.**, Tu, V., Wong, B.
A note on realistic dividends in actuarial surplus models
[Q3,B] Risks, Vol. 4, Issue 4, Number 37

2014 21. **Avanzi, B.**, Tu, V., Wong, B.
On optimal periodic dividend strategies in the dual model with diffusion
[Q1,A*] Insurance: Mathematics and Economics, Vol. 55, pp. 210–224.

2014 22. de Treville, S., Schürhoff, N., Trigeorgis, L., **Avanzi, B.**
Optimal Sourcing and Lead-Time Reduction under Evolutionary Demand Risk
[Q1,A*,FT50] Production and Operations Management, Vol. 23, Issue 12, pp. 2103–2117.

2014 23. **Avanzi, B.**, Purcal, S.
Annuitisation and cross-subsidies in a two-tiered retirement saving system
[Q3,A] Annals of Actuarial Science, Vol. 8, Part 2, pp. 234–252.

2013 24. **Avanzi, B.**, Cheung, E. C. K., Wong, B., Woo, J. K.
On a periodic dividend barrier strategy in the dual model with continuous monitoring of solvency
[Q1,A*] Insurance: Mathematics and Economics, Vol. 52, Issue 1, pp. 98–113.

2013 25. **Avanzi, B.**, Bicer, I., de Treville, S., Trigeorgis, L.
Real Options at the Interface of Finance and Operations: Exploiting Embedded Supply Chain Real Options to Gain Competitiveness
[Q1,A] European Journal of Finance, Vol. 19, Issue 7-8, pp. 760–778.

2012 26. **Avanzi, B.**, Wong, B.
On a mean reverting dividend strategy with Brownian motion
[Q1,A*] Insurance: Mathematics and Economics, Vol. 51, Issue 2, pp. 229–238.

2011 27. **Avanzi, B.**, Shen, J., Wong, B.
Optimal dividends and capital injections in the dual model with diffusion
[Q1,A] ASTIN Bulletin, Vol. 41, Issue 2, pp. 611–644.

2011 28. **Avanzi, B.**, Cassar, L. C., Wong, B.
Modelling Dependence in Insurance Claims Processes with Lévy Copulas
[Q1,A] ASTIN Bulletin, Vol. 41, Issue 2, pp. 575–609.

2010 29. **Avanzi, B.**
What is it that makes the Swiss annuitise? A description of the Swiss retirement system
[n/a,n/a] Australian Actuarial Journal, Vol. 16, Issue 2, pp. 135–162.

2009 30. **Avanzi, B.**
Strategies for Dividend Distribution: A Review
[Q2,A] North American Actuarial Journal, Vol. 13, Issue 2, pp. 217–251.

2008 31. de Treville, S., Edelson, N. M., Kharkar, A. N., **Avanzi, B.**
Constructing useful theory: The case of Six Sigma
[Q1,C] Operations Management Research, Vol. 1, Issue 1, pp. 15–23.

2008 32. **Avanzi, B.**, Gerber, H. U.
Optimal dividends in the dual model with diffusion
[Q1,A] ASTIN Bulletin, Vol. 38, Issue 2, pp. 653–667.

2007 33. **Avanzi, B.**, Gerber, H. U., Shiu, E. S. W.
Optimal dividends in the dual model
[Q1,A*] Insurance: Mathematics and Economics, Vol. 41, Issue 1, pp. 111–123.

Conference publications

2018 1. **Avanzi, B.**, Taylor, G., Wong, B., Xian, A.
How to proxy the unmodellable: Analysing granular insurance claims in the presence of unobservable or complex drivers
Proceedings of the Actuaries Institute 2018 General Insurance Seminar (peer reviewed), 12-13 November 2018 (Sydney, Australia)

2016 2. **Avanzi, B.**, Lavender, M., Taylor, G., Wong, B.
On the Impact, Detection and Treatment of Outliers in Robust Loss Reserving
Proceedings of the Actuaries Institute 2016 General Insurance Seminar (peer reviewed), 13-15 November 2016 (Melbourne, Australia)

2010 3. **Avanzi, B.**, Wong, B.
On a mean reverting dividend strategy with Brownian motion
6th Conference in Actuarial Science & Finance on Samos (Samos, Greece)

2006 4. **Avanzi, B.**, de Treville, S.
Demand Estimation Through Credibility Theory
17th Annual Conference of POMS (Boston, U.S.A.)

2005 5. de Treville, S., Edelson, N. M., Kharkar, A. N., **Avanzi, B.**
Can we develop theory around Six Sigma? Should we care?
16th Annual Conference of POMS (Chicago, U.S.A.)

2004 6. Boisvert, C., de Treville, S., Oyon, D., **Avanzi, B.**
The Impact of Performance Measurement Systems on Lead Time Reduction
CRITOM Conference (Bocconi University, Italy)

R codes and illustrations

2020 1. **Avanzi, B.**, Taylor, G., Wang, M., Wong, B.
CRAN package: *SynthETIC: an individual insurance claim simulator with feature control*
https://CRAN.R-project.org/package=SynthETIC

Other R codes related to published papers, with several reproducible examples, are available from the GitHub page

Websites

2021 1. **Avanzi, B.**, Boglioni Beaulieu, G., Lafaye de Micheaux, P., Xian, A., Yang, X.
Communicate data with R

2021 2. **Avanzi, B.**
ACTL10001 Introduction to Actuarial Studies

Working papers

Recent working papers on arXiv (updated with accepted manuscript versions)
Older working papers on SSRN (not updated)

2021 1. **Avanzi, B.**, Taylor, G., Wang, M.
SPLICE: A Synthetic Paid Loss and Incurred Cost Experience Simulator
arXiv Qfin.RM 2109.04058

2021 2. Al-Mudafer, M. T., **Avanzi, B.**, Taylor, G., Wong, B.
Stochastic loss reserving with mixture density neural networks
arXiv stat.ME 2108.07924

2020 3. **Avanzi, B.**, Taylor, G., Wang, M., Wong, B.
SynthETIC: an individual insurance claim simulator with feature control
arXiv Qfin.RM 2008.05693

2020 4. **Avanzi, B.**, Lau, H.., Wong, B.
Optimal Periodic Dividend Strategies for Spectrally Negative Lévy Risk Processes With Fixed Transaction Costs
arXiv Math.OC 2004.01838

2020 5. **Avanzi, B.**, Boglioni Beaulieu, G, Lafaye de Micheaux, P., Wong, B.
A Counterexample to the Central Limit Theorem for Pairwise Independent Random Variables Having a Common Absolutely Continuous Arbitrary Margin
arXiv Math.PR 2003.01350

2019 6. **Avanzi, B.**, Taylor, B., Vu P. A., Wong, B.
A Multivariate Evolutionary Generalised Linear Model Framework with Adaptive Estimation for Claims Reserving
UNSW Business School Research Paper No. 2019ACTL03

2019 7. **Avanzi, B.**, Taylor, B., Wong, B., Yang, X.
A Multivariate Micro-Level Insurance Counts Model With a Cox Process Approach
UNSW Business School Research Paper No. 2019ACTL02

2019 8. **Avanzi, B.**, Taylor, B., Wong, B., Xian, A.
Inference of counts using Markov-modulated non-homogeneous Poisson processes
UNSW Business School Research Paper No. 2019ACTL01

2018 9. **Avanzi, B.**, Lau, H.., Wong, B.
Optimal Periodic Dividend Strategies for Spectrally Positive Lévy Risk Processes With Fixed Transaction Costs
UNSW Business School Research Paper No. 2018ACTL02

2018 10. **Avanzi, B.**, Taylor, B., Vu, P. A., Wong, B.
On Unbalanced Data and Common Shock Models in Stochastic Loss Reserving
UNSW Business School Research Paper No. 2018ACTL01

2017 11. **Avanzi, B.**, Tu, V., Wong, B.
Optimal Dividends Under Erlang(2) Inter-Dividend Decision Times
UNSW Business School Research Paper No. 2017ACTL02

2016 12. **Avanzi, B.**, Taylor, B., Wong, B.
Common shock models for claim arrays
UNSW Business School Research Paper No. 2016ACTL07

2016 13. **Avanzi, B.**, Pérez, J.-L., Wong, B., Yamazaki, K.
On optimal joint reflective and refractive dividend strategies in spectrally positive Lévy processes
UNSW Business School Research Paper No. 2016ACTL05

2016 14. **Avanzi, B.**, Henriksen, L. F. B., Wong, B.
On the distribution of the excedents of funds with assets and liabilities in presence of solvency and recovery requirements
UNSW Business School Research Paper No. 2016ACTL03

2016 15. **Avanzi, B.**, Taylor, G., Vu, P. A., Wong, B.
Stochastic Loss Reserving with Dependence: A Flexible Multivariate Tweedie Approach
UNSW Business School Research Paper No. 2016ACTL01

2015 16. **Avanzi, B.**, Wong, B., Yang, X.
A micro-level claim count model with overdispersion and reporting delays
UNSW Business School Research Paper No. 2015ACTL25

2015 17. **Avanzi, B.**, Tu, V., Wong, B.
A note on realistic dividends in actuarial surplus models
UNSW Business School Research Paper No. 2015ACTL20

2015 18. **Avanzi, B.**, Gagné, C., Tu, V.
Is Gamma Frailty a Good Model? Evidence from Canadian Pension Funds
UNSW Business School Research Paper No. 2015ACTL15

2015 19. **Avanzi, B.**, Taylor, G., Wong, B.
Correlations between insurance lines of business: An illusion or a real phenomenon? Some methodological considerations
UNSW Business School Research Paper No. 2015ACTL11

2015 20. **Avanzi, B.**, Tu, V., Wong, B.
On the interface between optimal periodic and continuous dividend strategies in the presence of transaction costs
UNSW Business School Research Paper No. 2015ACTL10

2014 21. **Avanzi, B.**, Tao, J., Wong, B., Yang, X.
Capturing Non-Exchangeable Dependence in Multivariate Loss Processes with Nested Archimedean Lévy Copulas
UNSW Australian School of Business Research Paper No. 2014ACTL05

2013 22. **Avanzi, B.**, Tu, V., Wong, B.
On optimal periodic dividend strategies in the dual model with diffusion
UNSW Australian School of Business Research Paper No. 2013ACTL17

2012 23. **Avanzi, B.**, Cheung, E.C.K, Wong, B., Woo, J.K.
On a Periodic Dividend Barrier Strategy in the Dual Model with Continuous Monitoring of Solvency
UNSW Australian School of Business Research Paper No. 2012ACTL07

2012 24. de Treville, S., Schürhoff, N., Trigeorgis, L., **Avanzi, B.**
Optimal Sourcing and Lead-Time Reduction Under Evolutionary Demand Risk
University of Lausanne Working Paper

2011 25. **Avanzi, B.**, Cassar, L. C., Wong, B.
Modelling Dependence in Insurance Claims Processes with Lévy Copulas
UNSW Australian School of Business Research Paper No. 2011ACTL01

2010 26. de Treville, S., **Avanzi, B.**, Bicer, I., Trigeorgis, L.
Real Options at the Interface of Finance and Operations: Exploiting Embedded Supply Chain Real Options to Gain Competitiveness
UNSW Australian School of Business Research Paper No. 2010ACTL16

2010 27. **Avanzi, B.**, Shen, J., Wong, B.
Optimal dividends and capital injections in the dual model with diffusion
UNSW Australian School of Business Research Paper No. 2010ACTL15

2009 28. **Avanzi, B.**, Wong, B.
On a mean reverting dividend strategy with Brownian motion
UNSW Australian School of Business Research Paper No. 2009ACTL12

2009 29. **Avanzi, B.**, Purcal, S.
Forced savings and annuitisation with cross-subsidies: a mutation of the beast
UNSW Australian School of Business Research Paper No. 2009ACTL09

2009 30. **Avanzi, B.**
What is it that makes the Swiss annuitize? A description of the Swiss retirement system
UNSW Australian School of Business Research Paper No. 2009ACTL06

2008 31. de Treville, S., **Avanzi, B.**, Trigeorgis, L.
Rethinking Lead Time Reduction Investment: A Real Options Perspective
UNSW Australian School of Business Research Paper No. 2008ACTL16

2008 32. **Avanzi, B.**, Gerber, H. U.
Optimal dividends in the dual model with diffusion
UNSW Australian School of Business Research Paper No. 2008ACTL10

2008 33. **Avanzi, B.**
A Review of Modern Collective Risk Theory with Dividend Strategies
UNSW Australian School of Business Research Paper No. 2008ACTL09

Research Funding

National Competitive Grants

2020 – 2022 Australian Research Council (ARC) Discovery Project DP200101859
AUD 310,000 from ARC
Extreme Value Theory Approaches to Insurance in a Catastrophic Environment
Prof Qihe Tang (UNSW); A/Prof Benjamin Avanzi (University of Melbourne); A/Prof Bernard Wong (UNSW); A/Prof Jose Blanchet (Stanford)

2015 – 2020 Chief Investigator
Natural Sciences and Engineering Research Council (NSERC) of Canada, CAD 70,000
Actuarial methods for assessing diversification effects in insurance
Note: Funding for 2016–2020 (CAD 56,000) lapsed due to my return to Australia.

2013 – 2020 Australian Research Council (ARC) Linkage Project LP130100723
AUD 232,449 from ARC, and AUD 88,412 from Industry Partners
Modelling claim dependencies for the general insurance industry with economic capital in view: an innovative approach with stochastic processes
Dr Benjamin Avanzi (UNSW); Dr Bernard Wong (UNSW); Dr Gregory Taylor (UNSW); Mr Stephen Britt (Insurance Australia Group Ltd); Mr Yusuf Cakan (Suncorp Group Ltd); Mr David Koob (Allianz Australia Ltd)

Other Competitive Grants

2021 – 2024 Co-Partner Investigator (with Rui Zhou from University of Melbourne, and Katrien Antonio and Jan Dhaene from KU Leuven)
Global PhD Partnership KU Leuven/Melbourne GPP/21/003, 2 full PhD scholarship with travel budget, and about AUD 50,000 cash support for Partner Investigators
VALERIA: Valuation and Advanced Learning methods for Emerging, global Risks In Actuarial science

2019 – 2019 Chief Investigator (with Pierre Lafaye de Micheaux)
Business School and Faculty of Science Silver Star, AUD 20,000
Complex dependence modelling to unravel relationships in Big Data

2017 – 2018 Chief Investigator (with Greg Taylor and Bernard Wong)
Business School Linkage Silver Star, AUD 40,000
Quantitative risk management and optimal control for general insurers
Partners: Insurance Australia Group Ltd; Suncorp Group Ltd

2015 – 2015 Chief Investigator (with Greg Taylor and Bernard Wong)
Australian Actuarial Research Grant, Institute of Actuaries of Australia, AUD 10,000
General forms of dependency in chain ladder structures

2012 – 2013 Chief Investigator (with Greg Taylor and Bernard Wong)
Australian Actuarial Research Grant, Institute of Actuaries of Australia, AUD 35,000
An innovative approach to stochastic claims reserving with dependence

2012 – 2012 Chief Investigator
Australian School of Business Special Research Grant, AUD 9,000
Towards more realistic dividend strategies in surplus models for risk businesses

2011 – 2011 Chief Investigator (with Bernard Wong)
Australian School of Business Research Grant, AUD 25,000
Optimal dividend problems in surplus models with stochastic firm prospects

2010 – 2011 Chief Investigator (with Bernard Wong)
Australian Actuarial Research Grant, Institute of Actuaries of Australia, AUD 20,000
On the economic value of aggregating dependent portfolios

2009 – 2009 Chief Investigator (with John Evans)
UNSW 2009 International Research Collaboration Scheme, AUD 7,250
Cross-country study of social security and superannuation systems in Australia, Switzerland, and the Philippines

2009 – 2009 Chief Investigator, Australian School of Business Research Grant, AUD 18,000
Mathematical modelling of the capital of risk businesses with dividend pay-outs

Other Funding

2016 – 2016 Network leader, School of Risk and Actuarial Studies "Insurance Risk and Capital" network, seed funding of AUD 5,000.

Supervision

PhD students supervision

2021 –	Lorenzo Marchi (University of Melbourne and KU Leuven - joint PhD, joint supervisor) In progress
2021 –	Athibav Chaudhry (University of Melbourne and KU Leuven - joint PhD, co-supervisor) In progress
2019 –	Yunshen Yang (UNSW Scientia Scholar, co-supervisor) In progress
2017 –	Guillaume Boglioni-Beaulieu (UNSW with UIPA and Canadian scholarships, joint supervisor) In progress *Now Associate Lecturer at UNSW, Sydney, Australia.*
2016 –	Alan Xian (UNSW with APA, joint supervisor) In progress *Now Lecturer at Macquarie University, Sydney, Australia.*
2016 – 2020	Ka Wai (Hayden) Lau (UNSW with UIPA, joint supervisor) *Now at Insurance Australia Group (IAG), Sydney.*
2014 – 2019	Phuong Anh Vu (UdeM and UNSW with APA - joint PhD, joint supervisor) Awarded at UNSW, Awarded at UdeM (with "exceptional" performance) *Now Consultant at Taylor Fry Consulting, Sydney.*
2013 – 2017	Xinda Yang (UNSW with UIPA, joint supervisor) *Now Pricing Specialist at Insurance Australia Group (IAG), Sydney.*
2013 – 2017	Vincent Tu (UNSW with APA, joint supervisor) *Now at Taylor Fry Consulting, Sydney.*

MPhil students supervision

2015 – 2016	Guillaume Boglioni-Beaulieu, with "exceptional" performance (UdeM, joint superv.) *Now Associate Lecturer at UNSW, Sydney, Australia.*
2014 – 2015	Gwendal Combot, with "excellent" performance (UdeM, main supervisor) *Quantitative Finance (M2) graduate from École polytechnique, France.*

Masters' Essay students supervision

2020 – 2021	Xingyun (Claire) Tan (ACTL90012, University of Melbourne, main supervisor) Honours Class 1

Honours students supervision

2021	Jim (Yanfeng) Li (UNSW, co-supervisor) *in progress*
2021	David Yu (UNSW, co-supervisor) *in progress*
2020	Muhammed Al-Mudafer, Honours Class 1 (UNSW, co-supervisor) *Now at Insurance Australia Group (IAG), Sydney.*
2016	Mark Lavender, Honours Class 1 and the University Medal (UNSW, joint supervisor) *Now Investment Banking Analyst at Allier Capital, Sydney.*
2015	Alan Xian, Honours Class 1 and the University Medal (UNSW, joint supervisor) *Now Lecturer at Macquarie University, Sydney, Australia.*
2014	Clement Yeung, Honours Class 2:1 (UNSW, co-supervisor) *Now Data Scientist at Loan Market, Sydney.*
2013	Phuong Anh Vu, Honours Class 1 (UNSW, joint supervisor) *PhD UNSW and Université de Montréal.* *Now Consultant at Taylor Fry Consulting, Sydney.*
2012	Chung-Yu Liu, Honours Class 1 (UNSW, joint supervisor) *Now Pricing Specialist at Insurance Australia Group (IAG), Sydney.*

2012	Vincent Tu, Honours Class 1 (UNSW, joint supervisor) *PhD UNSW; Now at Taylor Fry Consulting, Sydney.*
2011	Jamie Tao, Honours Class 1 (UNSW, joint supervisor) *Now Head of Balance Sheet Management, Treasury, at CLSA, Hong Kong.*
2011	Timothy Yip, Honours Class 1 (UNSW, joint supervisor) *FIAA, Now Director at Taylor Fry Consulting, Sydney.*
2010	Luke Cassar, Honours Class 1 (UNSW, joint supervisor) *FIAA, Now Senior Consultant at Finity Consulting, Sydney.*
2010	Jonathan Shen, Honours Class 1 and the University Medal (UNSW, joint supervisor) *FIAA, Now Principal Consultant at Suncorp, Sydney.*

Referee and review activities

Editorial duties

2018 –	*ASTIN Bulletin*, Editor
2018 – 2021	*Insurance: Mathematics and Economics*, Associate Editor
2018 – 2018	*ASTIN Bulletin*, Member of the Editorial Board
2016 –	*Risks*, Member of the Editorial Board

Journals refereed (Publons)

Operations Research
Insurance: Mathematics and Economics
ASTIN Bulletin
North American Actuarial Journal
Scandinavian Actuarial Journal
Journal of Risk and Insurance
Annals of Actuarial Science
The Geneva Papers on Risk and Insurance: Issues and Practice
Asia-Pacific Journal of Risk and Insurance
European Actuarial Journal
Variance (CAS Publications)
Risks
Mathematical Finance
Statistics and Probability Letters
Journal of Applied Probability / Advances in Applied Probability
Journal of Computational and Applied Mathematics
Journal of Optimization Theory and Applications
SIAM Journal on Control and Optimization
Stochastic Models
Economic Modelling
Expert Systems with Applications
Communications in Statistics - Theory and Methods
Applied Stochastic Models in Business and Industry
Filomat
Applied Mathematical Modelling
Mathematical Problems in Engineering
Mathematical Methods in the Applied Sciences
Journal of Inequalities and Applications
International Journal of Information Technology & Decision Making
Intelligent Systems in Accounting, Finance and Management
Discrete Dynamics in Nature and Society
IMA Journal of Management Mathematics
Science China Mathematics
Applied Mathematics - A Journal of Chinese Universities
Bulletin of the Malaysian Mathematical Sciences Society

National Competitive Research Grant agencies

Australia: Australian Research Council (ARC) - DP, LP, and DECRA
Canada: National Science and Engineering Research Council (NSERC)
Switzerland: National Science Foundation (SNSF)
Poland: National Science Centre (NSC)

Scientific committee of conferences

2020	Online International Conference in Actuarial science, data science and finance
2020 –	Conference in Actuarial Science & Finance on Samos (Samos, Greece)
2018 *[Chair]*	22nd International Congress on Insurance: Mathematics and Economics (Sydney, Australia)
2013	New York Annual Conference of Asia-Pacific Risk and Insurance Association (APRIA)
2012	Seoul Annual Conference of Asia-Pacific Risk and Insurance Association (APRIA)
2011	Tokyo Annual Conference of Asia-Pacific Risk and Insurance Association (APRIA)
2010	Singapore World Risk and Insurance Economics Congress (WRIEC)
2009	Beijing Annual Conference of Asia-Pacific Risk and Insurance Association (APRIA)

Organising committee of conferences

2019	4th Workshop on Risk: modelling, optimization and inference (with applications in Finance, Insurance and Superannuation) (Sydney, Australia)
2017	3rd Workshop on Risk: modelling, optimization and inference (with applications in Finance, Insurance and Superannuation) (Sydney, Australia)

Miscellaneous reviewing activities

2012 Skipper Award Committee (APRIA)
2009 Skipper Award Committee (APRIA)

PhD jury

2021 Jan.	ARAUJO ACUNA, José Carlos, Tempering and seasonality in non-life insurance modeling, University of Lausanne. External examiner.
2016 Sep.	JIN, Can (Ken), Occupation time problem in some insurance risk models, University of Melbourne. External examiner.
2014 Dec.	OMIDI-FIROUZI, Hassan, On the design of customized risk measures in insurance, the problem of capital allocation and the theory of fluctuations for Lévy processes, Université de Montréal. Chair.
2014 Oct.	RAMLI, Siti Norafidah Mohd, Modelling Multivariate Dependence Structures in Insurance and Credit Risk via Copulas, Macquarie University, Macquarie University. External examiner.
2014 Aug.	SIMARD, Clarence, Modélisation du carnet d'ordres limites et prévision de séries temporelles, Université de Montréal. Chair.
2014 Mar.	FARD Farzad Alavi, Analysis of Pricing Financial Derivatives Under Regime-Switching Economy, Macquarie University. External examiner.

Academic visits

2021	Jun.	School of Risk and Actuarial Studies, UNSW Sydney (Australia)
2020	Feb.	School of Risk and Actuarial Studies, UNSW Sydney (Australia)
2019	Aug.	Department of Mathematical Science, University of Copenhagen (Denmark)
2019	Jul.	Institut de Science Financière et d'Assurances, Université Lyon 1 (France)
2019	Jun.-Aug.	Department of Actuarial Science, University of Lausanne (Switzerland)
2019	Mar.	Department of Mathematical Science, University of Copenhagen (Denmark)
2019	Jan.-Feb.	Institut de Science Financière et d'Assurances, Université Lyon 1 (France)
2018	Feb.	Department of Analytics & Operations, National University of Singapore (Singapore)
2015	Jan.	School of Risk and Actuarial Studies, University of New South Wales (Australia)
2014	July	Department of Statistics and Actuarial Science, University of Hong Kong
2014	Mar.	School of Risk and Actuarial Studies, University of New South Wales (Australia)
2014	Mar.	Centre for Actuarial Studies, University of Melbourne (Australia)
2012	Dec.	Department of Mathematics and Statistics, Université de Montréal (Canada)
2012	June	Department of Statistics and Actuarial Science, University of Hong Kong
2012	Jan.	School of Economics and Political Science, University of St. Gallen (Switzerland)
2012	Jan.	Department of Operations, University of Lausanne (Switzerland)
2010	Nov.	Department of Insurance and Risk Management, The Wharton School, UPENN (U.S.A.)
2010	Nov.	Institute of Insurance Economics, University of St. Gallen (Switzerland)
2010	June	Department of Management, University of Lausanne (Switzerland)
2009	Dec.	School of Actuarial Studies, Université Laval (Québec City, Canada)
2009	Dec.	Department of Mathematics and Statistics, Université de Montréal (Canada)
2009	Dec.	Department of Statistics and Actuarial Science, University of Waterloo (Canada)
2009	June	Department of Actuarial Science, University of Lausanne (Switzerland)

Presentations

Conference Presentations (invited speaker)

2019 Sep. *Stochastic dependence and general insurance capital: from data to models*
Plenary Speaker at 6^{th} Workshop on "Recent developments in dependence modelling with applications in finance and insurance" (Agistri, Greece)

2018 Nov. *Modelling insurance claim counts and reporting delays with Cox processes*
Research School of Finance, Actuarial Studies and Statistics – 2018 Summer Camp. (Bowral, Australia)

2017 Dec. *Modelling insurance claim counts and reporting delays with Cox processes*
UNSW-MacquarieU Workshop on Risk: Modelling, optimization and inference (Sydney, Australia)

2017 Nov. *Correlations between lines of business - Are they real or illusionary?*
CAS 2017 Annual Meeting (Anaheim, CA, USA)

2014 July *On optimal periodic dividend strategies in the dual model with diffusion*
Gerber-Shiu Workshop, University of Hong Kong (Hong Kong)

2011 Nov. *Modelling Dependence in Insurance Claims Processes with Lévy Copulas*
Advances in Financial Risk Workshop, Macquarie University (Sydney, Australia)

2010 Dec. *Claim dependence modelling with Lévy copulas*
International Conference in Applied Statistics and Financial Mathematics (Hong Kong)

Conference Presentations (peer-reviewed submissions)

2021 May *Neural Networks in Reserving: how and why are they worth considering?*
2021 All-Actuaries Virtual Summit: Thriving in an Age of Extremes (Australia)
(joint with M. Al-Mudafer, Greg Taylor, and Bernard Wong)

2019 Nov. *When (not) to use abstract dependence structures: theoretical and practical considerations*
10th Australasian Actuarial Education and Research Symposium (Melbourne, Australia)

2019 July *Inference of counts using Markov-modulated non-homogeneous Poisson processes*
23rd International Congress on Insurance: Mathematics and Economics (Munich, Germany)

2019 Apr *A tractable method for unravelling and modelling unobservable or complex dependence drivers (with granular data)*
IAA Section Colloquium 2019 (Cape Town, South Africa)

2018 June *Hybrid strategies in the presence of fixed transaction costs*
10th Conference in Actuarial Science & Finance on Samos (Samos, Greece)
2017 July *Optimal Dividends Under Erlang(2) Inter-Dividend Decision Times*
21st International Congress on Insurance: Mathematics and Economics (Vienna, Austria))
2016 Sep *On the distribution of the excedents of funds with assets and liabilities in presence of solvency and recovery requirements*
3rd European Actuarial Journal Conference (Lyon, France)
2016 May *On the interface between optimal periodic and continuous dividend strategies in the presence of transaction costs*
9th Conference in Actuarial Science & Finance on Samos (Samos, Greece)
2015 Dec *Correlations between insurance lines of business: An illusion or a real phenomenon? Some methodological considerations*
7th Australasian Actuarial Education and Research Symposium (Gold Coast, Australia)
2014 July *Claim dependencies in economic capital modeling: The Australian experience*
49th Actuarial Research Conference (Santa Barbara, USA)
2013 July *On optimal periodic dividend strategies in the dual model with diffusion*
48th Actuarial Research Conference (Philadelphia, USA)
2012 Dec. *On a mean reverting dividend strategy with Brownian motion*
5th Australasian Actuarial Education and Research Symposium (Melbourne, Australia)
2012 July *Optimal dividends in a perturbed Cramér-Lundberg model with stochastic prospects and a penalty at ruin*
4th International Gerber-Shiu Workshop (Melbourne, Australia)
2012 June *Optimal dividends in a perturbed Cramér-Lundberg model with stochastic prospects and a penalty at ruin*
16th International Congress on Insurance: Mathematics and Economics (Hong Kong)
2011 Nov. *What is it that makes the Swiss annuitise? A description of the Swiss retirement system*
2011 Australasian Actuarial Education and Research Symposium (Canberra, Australia)
2011 June *Modelling Dependence in Insurance Claims Processes with Lévy Copulas*
15th International Congress on Insurance: Mathematics and Economics (Trieste, Italy)
2011 June *Optimal dividends and capital injections in the dual model with diffusion*
15th International Congress on Insurance: Mathematics and Economics (Trieste, Italy)
2011 June *Modelling Dependence in Insurance Claims Processes with Lévy Copulas*
Memorable Actuarial Research Conference (Leuven, Belgium)
2010 June *On a mean reverting dividend strategy with Brownian motion*
6th Conference in Actuarial Science & Finance on Samos (Samos, Greece)
2009 Sep. *Forced savings and annuitisation with cross-subsidies: a mutation of the beast*
AFIR Colloquium (Munich, Germany)
2009 Sep. *What is it that make the Swiss annuitise? A description of the Swiss retirement system*
LIFE Colloquium (Munich, Germany)
2009 May *On the level of national retirement savings with annuitisation and cross-subsidies: a two-tiered economic model*
13th International Congress on Insurance: Mathematics and Economics (Istanbul, Turkey)
2009 May *What is it that make the Swiss annuitise? A description of the Swiss retirement system*
13th International Congress on Insurance: Mathematics and Economics (Istanbul, Turkey)
2008 Oct. *On Optimal Dividend Strategies: Review and Dual Model*
UNSW Actuarial Studies Research Symposium 2008 (Sydney, Australia)
2008 Jul. *A Review of Modern Collective Risk Theory with Dividend Strategies*
12th International Congress on Insurance: Mathematics and Economics (Dalian, China)
2007 Jul. *Optimal dividends in the dual model with diffusion*
11th International Congress on Insurance: Mathematics and Economics (Piraeus, Greece)
2006 Jul. *Optimal dividends in the dual model*
10th International Congress on Insurance: Mathematics and Economics (Leuven, Belgium)
2006 May *Demand Estimation Through Credibility Theory*
17th Annual Conference of POMS (Boston, USA)

Academic Seminars

2021 Nov *TBC*
School of Risk and Actuarial Studies, UNSW Sydney (Australia)
2019 Jul *A Multivariate Evolutionary Generalised Linear Model Framework with Adaptive Estimation for Claims Reserving*
Séminaires L^2 Lyon-Lausanne (ISFA, Lyon)
2019 Jun *Stochastic dependence and general insurance capital: from data to models*
Centre of Actuarial Studies, Department of Economics, University of Melbourne (Australia)
2019 Mar *Inference and prediction of counts using Markov-modulated non-homogeneous Poisson processes*
Department of Mathematical Science, University of Copenhagen (Denmark)
2019 Feb *Inference and prediction of counts using Markov-modulated non-homogeneous Poisson processes*
Séminaire Labo, Institut de Science Financière et d'Assurances, Université Lyon 1 (France)
2016 Aug *On the distribution of the profits of assets-liability funds in presence of regulation*
Macquarie University Actuarial Studies Seminar, Macquarie University (Sydney, Australia)
2015 Dec *Correlations between insurance lines of business: An illusion or a real phenomenon? Some methodological considerations*
School of Risk & Actuarial Studies Research Day 2015 (Sydney, Australia)
2015 Apr. *Dépendance et assurance: une histoire de corrélation?*
Club Mathématique de l'Université de Montréal, Montreal (Canada)
2015 Jan. *Actuarial applications of Lévy copulas*
Actuarial and Financial Mathematics Seminar, Quantact Lab, Center for Research in Mathematics (CRM), Montreal (Canada)
2014 Mar. *On optimal periodic dividend strategies in the dual model with diffusion*
Centre for Actuarial Studies, University of Melbourne (Australia)
2012 Dec. *Dividendes et injections de capital dans le modèle dual : Stratégies optimales*
Séminaires du Centre de Recherche en Mathématiques, Université de Montréal (Canada)
2010 Nov. *An Analysis of Private Pensions in Switzerland, A Country Where People Choose to Save and then Annuitize*
Rosen-Huebner-McCahan Seminar, The Wharton School, UPENN (Philadelphia, U.S.A.)
2010 Nov. *Forced savings and annuitisation: an international perspective*
University of St. Gallen (Switzerland)
2010 Apr. *On a mean reverting dividend strategy with Brownian motion*
UNSW Actuarial Studies Research Seminar (Sydney, Australia)
2009 Dec. *On a mean reverting dividend strategy with Brownian motion*
Séminaires du Centre de Recherche en Mathématiques, Université de Montréal (Canada)
2009 Dec. *On a mean reverting dividend strategy with Brownian motion*
Université Laval (Québec, Canada)
2009 Dec. *Forced savings and annuitisation with cross-subsidies: a mutation of the beast*
Department of Statistics and Actuarial Science Seminars, University of Waterloo (Canada)
2009 Dec. *On a mean reverting dividend strategy with Brownian motion*
Department of Statistics and Actuarial Science Seminars, University of Waterloo (Canada)
2009 Mar. *The demand for retirement annuities and non-mandatory superannuation savings: the case of Switzerland*
Macquarie University Actuarial Studies Seminar, Macquarie University (Sydney, Australia)
2009 Jan. *The demand for retirement annuities and non-mandatory superannuation savings: the case of Switzerland*
International Research Workshop (UNSW, Sydney, Australia)
2008 Fev. *Optimal dividends in the dual model with diffusion*
UNSW Actuarial Studies Research Seminar (Sydney, Australia)
2006 Dec. *Optimal Dividends in the Dual Model*
Séminaires L^2 Lyon-Lausanne (ISFA, Lyon)

Other attended conferences

2019 Mar. Workshop "Fair Valuation in Insurance" (Brussels, Belgium)
2016 Jun. CAS Course on Professionalism (Toronto, Canada)
2015 Jun. Enterprise Risk Management Symposium (Washington, USA)
2015 Jun. The Changing Face of GI, Actuaries Institute (Sydney, Australia)
2014 July 16th International Congress on Insurance: Mathematics and Economics (Shanghai, China)
2010 Nov. OECD/IOPS Global Forum on Private Pensions, on invitation (Sydney, Australia)

2010	Sep.	6th International Longevity Risk and Capital Markets Solutions Conference (Sydney, Australia)
2010	Jul.	18th Australian Colloquium of Superannuation Researchers, *Retirement Saving Choices: challenges for individuals, industry and public policy* (Sydney, Australia)
2009	Jul.	17th Australian Colloquium of Superannuation Researchers, *Celebrating 100 years of a National Retirement Income System - The Challenges Ahead* (Sydney, Australia)
2009	Jun.	2b) or not 2b) Conference (Lausanne, Switzerland)
2008	Nov.	1st Australasian Actuarial Education and Research Symposium (Sydney, Australia)

TEACHING

Awards

2016	2015 School of Risk and Actuarial Studies Teaching Innovation Award, for "Use of Learning Catalytics in the Actuarial Program"
2011	Nominated for a 2012 Vice-Chancellor Award for Teaching Excellence
2011	Australian School of Business Teaching Excellence Award, for "Outstanding Technology-Enabled Teaching Innovation"

Education

2017		'Presenting online' (one day), Australia's National Institute of Dramatic Art (NIDA)
2017		'Public Speaking Bootcamp' (one day), Australia's National Institute of Dramatic Art (NIDA)
2009	FULT	'Foundations of University Learning and Teaching' (five days), University of New South Wales

Courses taught

2021	S2	ACTL 10001 Introduction to Actuarial Studies (B.Sc., University of Melbourne)
2021	S1	ACTL 90020 General Insurance Modelling (M.Sc., University of Melbourne)
2021	S1	ACTL 30007 Actuarial Modelling III (B.Sc., University of Melbourne)
2020	S2	ACTL 10001 Introduction to Actuarial Studies (B.Sc., University of Melbourne)
2020	S1	ACTL 90020 General Insurance Modelling (M.Sc., University of Melbourne)
2020	S1	ACTL 30007 Actuarial Modelling III (B.Sc., University of Melbourne)
2019	T6	ZZBU 6507 Data Visualisation & Communication – developed but not delivered (fully online, Master of Analytics, UNSW)
2019	T3	ACTL 1101 Introduction to Actuarial Studies (B.Sc., UNSW)
2019	Jul	Actuarial Journals and the Publishing Process (PhD, University of Lyon 1)
2018	S2	ACTL 1101 Introduction to Actuarial Studies (B.Sc., UNSW)
2018	S1	ACTL 4003/5003 Research Methods in Actuarial Science (Honours and HDR, UNSW)
2017	S2	ACTL 1101 Introduction to Actuarial Studies (B.Sc., UNSW)
2017	S2	ACTL 4003/5003 Research Methods in Actuarial Science (Honours and HDR, UNSW)
2016	S2	ACTL 1101 Introduction to Actuarial Studies (B.Sc., UNSW)
2016	S1	ACTL 3141 Actuarial Statistics (B.Sc., UNSW)
2015	S2	ACTL 5106 Insurance Risk Models (M.Sc., UNSW)
2015	S2	ACTL 3162 Insurance Risk Models (B.Sc., UNSW)
2014	Fall	ACT3284 Modèles en assurances IARD (B.Sc., Université de Montréal)
2014	Fall	ACT3241 Théorie du Risque (B.Sc., Université de Montréal)
2013	S2	ACTL 5106 Insurance Risk Models (M.Sc., UNSW)
2013	S2	ACTL 3003 Insurance Risk Models (B.Sc., UNSW)
2013	S1	ACTL 5104 Actuarial Statistics (M.Sc., UNSW)
2013	S1	ACTL 3001 Actuarial Statistics (B.Sc., UNSW)
2012	S2	ACTL 5106 Insurance Risk Models (M.Sc., UNSW)
2012	S2	ACTL 3003 Insurance Risk Models (B.Sc., UNSW)
2011	S2	ACTL 5106 Insurance Risk Models (M.Sc., UNSW)
2011	S2	ACTL 3003 Insurance Risk Models (B.Sc., UNSW)
2011	S1	ACTL 5102 Financial Mathematics (M.Sc., UNSW)
2011	S1	ACTL 2001 Financial Mathematics (B.Sc., UNSW)
2010	SS	ACTL 5102 Financial Mathematics (M.Sc., UNSW)
2010	SS	ACTL 2001 Financial Mathematics (B.Sc., UNSW)
2010	S1	ACTL 5102 Financial Mathematics (M.Sc., UNSW)
2010	S1	ACTL 2001 Financial Mathematics (B.Sc., UNSW)
2009	S2	ACTL 4003/5003 Research Topics in Actuarial Science (Honours and HDR, UNSW)
2009	S2	ACTL 5106 Insurance Risk Models (M.Sc., UNSW)
2009	S1	ACTL 5102 Financial Mathematics (M.Sc., UNSW)
2009	S1	ACTL 2001 Financial Mathematics (B.Sc., UNSW)
2008	S2	ACTL 5106 Insurance Risk Models (M.Sc., UNSW)
2008	S1	Gestion des opérations (B.Sc., University of Lausanne)
2007	S2	Credibility Theory (M.Sc., University of Lausanne)
2007	S1	Gestion des opérations (B.Sc., University of Lausanne)

2005 S2	Laboratory of selected topics in actuarial mathematics (M.Sc., University of Lausanne)
2005 S1	Mathematics of Lead Time (MAS, Bordeaux Business School)

Masters project supervision (ACTL5004)

2016	Ka Wai (Hayden) Lau (UNSW) Now PhD student at UNSW.

Summer Research Scholarships

2019-2020	Melantha (Chenyi) Wang (UNSW)
2019-2020	Simon (Wanzhang) Jing (UNSW)
2018-2019	Wilson Cheng (UNSW)
2016-2017	Guanting Liu (UNSW)
2016-2017	Edward Djizmedjian (UNSW)

INTERNAL ENGAGEMENT AND LEADERSHIP

Awards

2018 **The Dean's Distinguished Leadership Award**, in recognition of exceptional and sustained contributions to the achievement of the goals of the UNSW School of Business and Strategy 2025.

This award may be given to an individual member of staff who, over a sustained period, has provided meritorious and distinguished leadership that has significantly exceeded the scope and commitment of usual expectations in achieving Business School goals.

Academic engagement and leadership

2021 – 2022 Elected Member, Teaching and Learning Quality Assurance Committee (TALQAC), The University of Melbourne
2020 – Member, Academic Board, The University of Melbourne
Appeals committee member (2020: 1)
2019 – 2019 Elected member, Faculty Board, UNSW Business School, UNSW
(representing the Faculty Academic Staff)
2019 – 2019 Member, School of Risk and Actuarial Studies Research Committee, UNSW
2017 – 2018 Chair, UNSW Business School 3+ Reference Group
2017 – 2018 Member, UNSW 3+ Transition Advisory Group
2017 – 2018 Member, UNSW 3+ Engagement Reference Group
2017 – 2018 Elected member, Faculty Board, UNSW Business School, UNSW
(representing the School of Risk and Actuarial Studies)
2016 – 2017 Chair, Alternative Delivery Modes Committee, School of Risk and Actuarial Studies, UNSW
2015 – 2017 Associate Head of School, School of Risk and Actuarial Studies, UNSW
2015 – 2017 Chair, Learning & Teaching Committee, School of Risk and Actuarial Studies, UNSW
2015 – 2017 Member, Faculty Education Committee, UNSW Business School, UNSW
2015 – 2017 Member, School Industry Advisory Board, School of Risk and Actuarial Studies, UNSW
2017 – 2017 Member, Education Focussed roles selection committee, UNSW Business School
2015 – 2016 Member, Faculty Board, UNSW Business School, UNSW
2014 – 2015 Chair, website committee, Departement of Mathematics and Statistics, UdeM
2014 – 2015 Member, 'internationalisation' committee, Departement of Mathematics and Statistics, UdeM
2012 – 2013 Elected chair of the *School Plenum*, School of Risk and Actuarial Studies, UNSW
2012 – 2013 Elected member of the *School Advisory Board*, School of Risk and Actuarial Studies, UNSW
2012 – 2013 Postgraduate Research Coordinator, School of Risk and Actuarial Studies, UNSW
2012 – 2013 Honours Coordinator, School of Risk and Actuarial Studies, UNSW
2012 – 2013 Member, *Australian School of Business Promotions Committee for Promotion to Senior Lecturer*, UNSW
2009 – 2012 Academic representative, *Australian School of Business E-learning Committee*, UNSW
2009 – 2012 Director, Actuarial Studies Co-op Program of the UNSW
2011 – 2011 Member, *ASB Linkage Grant Working Party*, UNSW
2010 – 2010 Member, *Australian School of Business Standing Committee*, UNSW
2007 – 2008 Elected member, Commission of the University of Lausanne Personnel (official legal representative of all (administrative and academic) staff employed by the university)
2006 – 2008 Elected member, Faculty Council, Faculty of Business and Economics of the University of Lausanne
2006 – 2008 Treasurer, *Association du Corps Intermédiaire et des Doctorants de l'Université de Lausanne* (official representative of the regular (teaching and research) staff that is below the professor level)
2006 – 2008 Member, Committee *Enseignement* (teaching) of the University of Lausanne
2006 – 2008 Member, Committee *Recherche* (research) of the University of Lausanne

Teaching leadership

Seminars and presentations

2020 (14 September) Panelist, *WCLA Symposium: Adapting to Radical Disruptions in Business Education*
2018 (February) *Digital Uplift* interview, Business Digital Learning (UNSW Business School, UNSW).

2017 (October, 18) *ACTL1101 Digital Uplift*, School of Risk and Actuarial Studies Digital Uplift Planning (UNSW Business School, UNSW).
2016 (February, 25) *Assessment Good Practice*, School of Risk and Actuarial Studies Learning & Teaching Workshop (UNSW Business School, UNSW).
2015 (November, 3) *Spotlight on Program Learning Goals in the School of Risk and Actuarial*, UNSW Business School – Academic's eLearning Showcase & Workshop (UNSW Business School, UNSW).
2014 (December, 5) Seminar on the flipped classroom to the FOLIUM team (teaching support) of the University of Montreal as well as some flipped classroom pilot project leaders, University of Montréal, Canada
2014 (October, 1) Seminar on how and when to use technology (in particular, tablet PCs and recorded videos) for teaching technical subjects, made to interested members of the Department of Mathematics and Statistics, University of Montréal, Canada
2014 (September, 8) Brief presentation on how and when to use technology (in particular, tablet PCs and recorded videos) for teaching technical subjects, made to the Department Assembly, Department of Mathematics and Statistics, University of Montréal, Canada
2014 (May, 23) Presentation on how and when to use technology (in particular, tablet PCs and recorded videos) for teaching technical subjects, made to the steering committee of the project *Mathéma-TIC*, Montréal, Canada
2013 (August, 16) Member, *Large Class Teaching Panel*, Fundamentals of University Learning and Teaching (FULT), Learning & Teaching @ UNSW
2012 (June, 21) Member, *Large Class Teaching Panel*, Fundamentals of University Learning and Teaching (FULT), Learning & Teaching @ UNSW
2012 (April, 3) *Low-tech high-impact teaching strategies for large classes*, Connections in Learning and Teaching (Learning & Teaching @ UNSW)
2011 (November, 8) *Using videos in teaching: when and how?*, ASB Academics' Showcase of Technology in Teaching (ASB, UNSW)
2011 (February, 17) Member, *Large Class Teaching Panel*, Fundamentals of University Learning and Teaching (FULT), Learning & Teaching @ UNSW
2010 (March, 1) *Australian School of Business Strategic Retreat*, invited for the eLearning component
2010 (August, 26) Member, *Large Class Teaching Panel*, Fundamentals of University Learning and Teaching (FULT), Learning & Teaching @ UNSW
2009 (November, 19) Member, *Large Class Teaching Panel*, Fundamentals of University Learning and Teaching (FULT), Learning & Teaching @ UNSW
2009 (November, 18) Recorded interview by Colina Mason (Learning & Teaching @ UNSW) for the sessional staff gateway resource
2009 (August, 28) School of Accounting seminar (UNSW), *Digital Tablets and Screen Recording*
2009 (July, 8) ASB Workshop (UNSW), *Digital Tablets and Screen Recording*

Other

2016 S1 *FULT peer observation* participant: interested FULT participants can come and observe in my lectures, as well as access the course website.

Other

Formal Mentorship/Coaching

2020 – 2020 University of Melbourne level C
2019 – 2019 UNSW Business School PhD Fellow mentor
2017 – 2017 Mentor to 1 UNSW Scientia Scholar
2016 – 2016 Mentor to 1 UNSW Scientia Scholar
2015 – 2016 Mentor to 1 ECR academic from UNSW Business School

EXTERNAL ENGAGEMENT AND LEADERSHIP

Professional appointments (selected)

2018 – 2019	Non Executive Director, Lycee Condorcet the International French School of Sydney
2014 – 2015	Actuarial consulting, Service de consultation en actuariat (Université de Montréal)
2008 – 2012	Non Executive Director, *Fondation Comoedia*, Switzerland (group insurance)
2007 – 2008	Founder, Executive Director, *Fondation Comoedia*, Switzerland (group insurance)
2006 – 2008	Executive Director, Chair, *Fondation de prévoyance Artes et Comoedia*, Switzerland (pension fund, 200 employers, 2000 insured)
2004 – 2004	Internship and then consultant, *La Suisse Assurances* (actuarial department for group life), Lausanne, Switzerland
2003 – 2003	Internship, *Nestec S.A.* (Globe Project, Change management), Vevey, Switzerland
2001 – 2003	Teaching activities in Swiss public schools (mathematics, French, economics, law, accounting, IT)

Professional affiliations

2018 –	Member, Australian Institute of Company Directors (AICD)
2014 –	Academic Member, Casualty Actuarial Society (CAS)
2008 –	Affiliate member, Actuaries Institute of Australia[5]
2007 –	Member, Swiss Association of Actuaries (full member of IAA)
2009 –	Member, Actuarial Studies in Non-Life Insurance section of IAA (ASTIN)
2008 –	Member, American Risk and Insurance Association (ARIA)
2008 – 2011	Member, Asia-Pacific Risk and Insurance Association (APRIA)

Professional service

2014 –	Member, CAS Academic Central
2009 – 2016	Member, Hachemeister and Michelbacher prizes committee (CAS)
2014 – 2016	Member, Data and Technology Working Party (CAS)

In the media

Professional websites and blogs

2021 1. Chen, J., *Virtual Summit Shorts: Neural networks in reserving – how and why are they worth considering?* Actuaries Digital, 9 June 2021. (Sydney, Australia)
11 October 2019

BusinessThink

2019 1. *A smarter approach to analysis refines insurance predictions*
11 October 2019

2015 2. *Are insurance companies holding too much capital?*
16 December 2015

[5]Inactive in 2013 and 2014.

Other non academic publications

2020 1. **Avanzi, B.**, Taylor, G., Wang, M., Wong, B.
SynthETIC: A simulator of Synthetic Experience Tracking Insurance Claims
Kasa AI Blog, 14 September 2020.

2019 2. **Avanzi, B.**, Taylor, G., Wong, B., Xian, A.
How to proxy the unmodellable
Actuaries Digital, The Magazine of the Actuaries Institute, April 2019. (Sydney, Australia).

2016 3. **Avanzi, B.**, Taylor, G., Wong, B.
Construction of detailed correlation structures across GI business segments
Actuaries Digital, The Magazine of the Actuaries Institute, 14 December 2016. (Sydney, Australia).

2015 4. **Avanzi, B.**, Taylor, G., Wong, B.
Are correlations real or imagined?
Actuaries Digital, The Magazine of the Actuaries Institute, 30 September 2015. (Sydney, Australia).

2014 5. **Avanzi, B.**, Taylor, G., Wong, B.
Research into claim dependencies: an industry and academic collaboration
Actuaries, The Magazine of the Actuaries Institute, August issue, pp. 9–11. (Sydney, Australia).

Industry reports

2016 1. Bothwell, P. T., Kannon M. J., **Avanzi, B.**, Izzo, J. M., Knobloch, S. A., Nichols, R. S., Norris, J. L., Pan, Y., Semenovich, D., Spadola, T. A., Waite, L. M., Yarnell, D. H.
Data & Technology Working Party Report
Casualty Actuarial Society Forum, Fall 2016.

2015 2. **Avanzi, B.**, Gagné, C.
Adjustment of CIA Mortality
Report commissioned by Morneau Shepell (Montréal, Canada).

Industry presentations

2017 Sep. *Recent outlier detection methods with illustrations in loss reserving*
'Insights' session of the Actuaries Institute (Sydney, Australia)

2016 Nov. *On the Impact, Detection and Treatment of Outliers in Robust Loss Reserving*
Actuaries Institute 'General Insurance Seminar' (Melbourne, Australia)

2016 Oct. *Construction of detailed correlation structures across GI business segments*
'Insights' session of the Actuaries Institute (Sydney, Australia)

2016 Sep. Non-life stream presentation of the 'Insurance Risk and Capital' network workshop on *Recent advances and open problems in Insurance Risk and Capital regulation*

2016 Apr. *Diversification in Insurance: A Capital Question*
Learn@Lunch (Sydney, Australia)

2016 Apr. *Beyond Correlation: Recent Developments in Modelling Claims Dependencies*
'Insights' session of the Actuaries Institute (Sydney, Australia)

2015 Oct. *Correlations between insurance lines of business: Illusion or phenomenon?*
'Insights' session of the Actuaries Institute (Sydney, Australia)

Events

2016 Organiser, 'Insurance Risk and Capital' network workshop on *Recent advances and open problems in Insurance Risk and Capital regulation*, with Professor Shaun Wang (NTU Singapore) and Robert Thomson (Head of Actuarial services, Australian Prudential Regulation Authority).

Miscellaneous written contributions

2019 Jan. *Welcome to new students*
Finity Actuarial Bulletin

2018 Jan. *Welcome to new students*
Finity Actuarial Bulletin

2016 Jan. *Welcome to new students*
Finity Actuarial Bulletin no 77