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# Curriculum Vitae of Grace S. Chiu

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## Personal Information

**Affiliations:** *Professor*, [Virginia Institute of Marine Science \(VIMS\)<sup>a</sup>](#) /  
Batten School of Coastal & Marine Sciences  
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Department of Statistics<sup>f</sup>  
University of Washington  
Seattle, WA 98195, USA

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<http://goo.gl/nG7rui>

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<sup>a</sup>Among top 13 best marine research centers for marine scientists; graduate program only until Fall 2025

<sup>b</sup>2025 US News ranking of American public universities: 23th

<sup>c</sup>2025 Forbes ranking of American research universities: 55th

<sup>d</sup>2025 US News ranking of American public universities: 69th

<sup>e</sup>2024 QS ranking of universities for Statistics: 4th–5th in Canada, in world's top 100

<sup>f</sup>2022 US News ranking of American graduate programs: 7th for Statistics

## Education

- **Ph. D.** in Statistics, June 2002. SIMON FRASER UNIVERSITY.
- **M. Sc.** in Statistics, June 1996. UNIVERSITY OF BRITISH COLUMBIA.
- **B. Sc.** in Mathematics and Statistics, May 1994. UNIVERSITY OF BRITISH COLUMBIA.

## Academic Ancestry

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D.H. Blackwell ---> R.A. Lockhart --
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                               --> G.S. Chiu
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E.C. Pielou ---> R.D. Routledge --
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## Research Grants

1. *Chesapeake Bay Trust-Chesapeake Oyster Alliance – Chesapeake Oyster Innovation Award for M.D. Griffin (student)*, 2024 competition: 2025. <https://go.wm.edu/DssXC4> <https://go.wm.edu/lHDRpz>
2. *Virginia Sea Grant Graduate Research Fellowship for M. Ahmadian*, 2022 competition: 2023–2025. <https://vaseagrant.org/2023-graduate-fellows>
3. *NOAA Mississippi-Alabama Sea Grant – Greater Amberjack (*Seriola dumerili*) Research in U.S. Waters in the South Atlantic and Gulf of Mexico Regions Consortium Grant*, 2021 competition: 2021–2023. [tinyurl.com/GAJAward](https://tinyurl.com/GAJAward); [tinyurl.com/4smehsx4](https://tinyurl.com/4smehsx4); [tinyurl.com/GAJRFP](https://tinyurl.com/GAJRFP)
4. *NOAA National Marine Fisheries Service (NMFS) – Sea Grant Population and Ecosystem Dynamics PhD Fellowship for A.C. Hyman*, 2021 competition: 2021–2024. <https://tinyurl.com/mr2bjj8p>
5. *U.S. Dept. of Agriculture – Natural Resources Conservation Service 2020 Soil Science Collaborative Research Grant*, 2020 competition: 2020–2022. [grants.gov/search-results-detail/326575](https://grants.gov/search-results-detail/326575)
6. *Virginia Institute of Marine Science Start-up Grant*: 2019–2023.
7. *Ian Potter Foundation Research Grant*, 2016 competition: 2017–2021. <https://tinyurl.com/netw2z5k>; <http://goo.gl/4yehUZ>
8. *IBISWorld Industrial Grant*, 2015 competition: 2016–2018. <http://goo.gl/onHTy5>
9. *Australian National University Res Sch of Social Sciences Cross College Grant*: 2018. [tinyurl.com/yb654gl4](https://tinyurl.com/yb654gl4)
10. *Sustainable Farming Practices Pilot project*: 2016.
11. *ANU College of Business and Economics Start-up Grant*: 2015–2017.
12. *Research Subgrant from CSIRO Agriculture Flagship “Root Phenotyping Project”*: September–December 2015.
13. *CSIRO Water for a Health Country Flagship Appropriation Project*: 2012–2014.
14. *CSIRO Earth Observation Informatics Transformational Capability Platform Project*: January 2013 competition.
15. *CSIRO eResearch Accelerated Computing Project*: June 2012 competition; December 2012 competition.
16. *CSIRO Office of the Chief Executive (OCE) Cutting Edge Science Symposium*: 2011 competition. [goo.gl/kiZS4](http://goo.gl/kiZS4)
17. *CSIRO Water for a Health Country Flagship – Healthy Water Ecosystems Theme – Strategic Project*: 2011–2012.
18. *Natural Sciences and Engineering Research Council of Canada (NSERC) Strategic Network Grant*: 2008–2013.<sup>1</sup>
19. *NSERC Strategic Project Grant*: 2008–2010.
20. *NSERC Discovery Grant*: 2005–2008; 2008–2010.
21. *Fields Institute Scientific Activity Grant for Summer 2007*. <http://www.fields.utoronto.ca/programs/scientific/07-08/environmetrics/>
22. *University of Waterloo Faculty of Mathematics Start-up Grant*: 2005–2007.

<sup>1</sup>Terminated in 2010 due to resignation from U of Waterloo.

## Professional Awards and Achievements

1. *2024 Faculty Excellence in Mentoring Award*. William & Mary's Batten School and Virginia Institute of Marine Science. <https://go.wm.edu/1Z508Y> <https://go.wm.edu/xZwgp6>
2. *Influencer for a Class of 2022 Graduate*. William & Mary. <http://tinyurl.com/mwpvyz6m>
3. *Influencer for a Class of 2021 Graduate*. William & Mary. <http://tinyurl.com/bef9xn3f>
4. *Young Investigator Award 2012*. American Statistical Association – Section on Statistics and the Environment. <http://community.amstat.org/ENVR/RecognitionandAwards/DistinguishedAchievementAwards>
5. *Elected Membership* November 2011. International Statistical Institute.
6. *Theo Murphy High Flyers Think Tank Membership 2011*. Australian Academy of Science. <https://www.science.org.au/news-and-events/events/think-tanks>
7. *Pierre Robillard Award 2003* (for best Statistics Ph.D. thesis from 2002). Statistical Society of Canada (SSC). <https://ssc.ca/en/award/pierre-robillard-award>
8. *NSERC Postdoctoral Fellowship Competition 2002*.
9. *Postdoctoral Fellowship Competition 2002*. Pacific Institute for the Mathematical Sciences (PIMS).
10. *First Prize Winner — Student Paper Competition* June 2002. Western North American Region (WNAR) of the International Biometric Society.
11. *President's Ph. D. Research Stipend* Summer 2001. Simon Fraser University (SFU).
12. *Graduate Fellowship* Summer 2000. SFU.
13. *NSERC Postgraduate Scholarship — PGS B* 1999 - 2001.
14. *Bert Henry Memorial Scholarship* for graduate studies 1998 - 1999. SFU.
15. *NSERC — PGS B* 1996 - 1998. (Declined.)
16. One of two *Gertrude M. Cox Scholarships in Statistics* 1995. American Statistical Association Committee on Women in Statistics and the Caucus for Women in Statistics.
17. *NSERC — PGS A* 1994 - 1996.
18. *Stanley W. Nash Medal* for excellence in undergraduate statistics 1994. Department of Statistics, University of British Columbia (UBC). <https://www.stat.ubc.ca/nash-medal?page=1>
19. *British Columbia Cancer Foundation Studentship* 1993. British Columbia Cancer Foundation.
20. *Charles and Jane Banks Scholarship* 1993 - 1994. UBC.
21. *Science Scholar* 1991 - 1992, 1992 - 1993, 1993 - 1994. Faculty of Science, UBC.
22. *University of British Columbia Scholarship* 1991 - 1992, 1992 - 1993, 1993 - 1994.

## Publications

### Computer Software

1. Chiu, G. (2008–2022). `bentcableAR`: Bent-cable regression for independent data or autoregressive time series. Distributed by *The R Project for Statistical Computing*. [CRAN.R-project.org/package=bentcableAR](https://CRAN.R-project.org/package=bentcableAR)
2. Sutton, M., Clifford, S., Chiu, G., Westveld, A., *et al.* (2017). `sourdough`: Scatterplots Of Unselected Regression Dimensions Ostensibly Uncovering Group Hierarchies. Developed during Bayes on the Beach 2017 Workshop on Bayesian Variable Selection Methods. <https://tinyurl.com/yxfeq6wc>

## Data Products

1. [Chiu, G.](#) (2014). Murray-Darling Basin stream gauge daily data from 1990 to 2011, NetCDF format. CSIRO Data Collection. DOI: [10.4225/08/540F118D48DCB](https://doi.org/10.4225/08/540F118D48DCB)

## Peer Reviewed Journal Articles

1. Hyman, A.C., [Chiu, G.S.](#), Seebo, M.S., Smith, A., Saluta, G.G., Lipcius, R.N. (2024). “Ontogenetic patterns in juvenile blue crab density: effects of habitat and turbidity in a Chesapeake Bay tributary,” *Marine Ecology Progress Series* **729**, 135–150. DOI: [10.3354/meps14490](https://doi.org/10.3354/meps14490)
2. [Chiu, G.S.](#), Mitchell, M., Herman, J., Longo, C., Davis, K. (2023). “Enhancing assessments of Blue Carbon stocks in marsh soils using Bayesian mixed-effects modeling with spatial autocorrelation — proof of concept using proxy data,” *Frontiers in Marine Science* **9**, Issue 1056404. DOI: [10.3389/fmars.2022.1056404](https://doi.org/10.3389/fmars.2022.1056404)
3. Hyman, A.C., [Chiu, G.S.](#), Fabrizio, M.C., Lipcius, R.N. (2022). “Spatiotemporal modeling of nursery habitat using Bayesian inference: environmental drivers of juvenile blue crab abundance,” *Frontiers in Marine Science* **9**, Issue 834990. DOI: [10.3389/fmars.2022.834990](https://doi.org/10.3389/fmars.2022.834990)
4. [Chiu, G.S.](#) (2021). “Handbook of Environmental and Ecological Statistics,” *Journal of the American Statistical Association* **116**, 453–455. DOI: [10.1080/01621459.2021.1880232](https://doi.org/10.1080/01621459.2021.1880232)
5. Vuong, H.B., [Chiu, G.S.](#), Smouse, P.E., Fonseca, D.M., Brisson, D., Morin, P.J., Ostfeld, R.S. (2017). “Influences of host community characteristics on *Borrelia burgdorferi* infection prevalence in blacklegged ticks,” *PLoS One* **12**, Issue 1, e0167810. DOI: [10.1371/journal.pone.0167810](https://doi.org/10.1371/journal.pone.0167810)
6. Wasson, A.P., [Chiu, G.S.](#), Zwart, A.B., Binns, T.R. (2017). “Differentiating wheat genotypes by Bayesian hierarchical nonlinear mixed modeling of wheat root density,” *Frontiers in Plant Science* **8**, Issue 282. DOI: [10.3389/fpls.2017.00282](https://doi.org/10.3389/fpls.2017.00282)
7. [Chiu, G.S.](#), Westveld, A.H. (2014). “A statistical social network model for consumption data in trophic food webs.” *Statistical Methodology* **17** (Special Issue: Modern Statistical Methods in Ecology), 139–160. DOI: [10.1016/j.stamet.2013.09.001](https://doi.org/10.1016/j.stamet.2013.09.001)
8. Khan, S.A., [Chiu, G.S.](#), Dubin, J.A. (2013–2014). “Therapeutic hypothermia: quantification of the transition of core body temperature using the flexible bent-cable model for mixture longitudinal data,” *Australian and New Zealand Journal of Statistics* **55**, 369–385. DOI: [10.1111/anzs.12047](https://doi.org/10.1111/anzs.12047)
9. [Chiu, G.S.](#), Lehmann, E.A., Bowden, J.C. (2013). “A spatial modelling approach for the blending and error characterization of remotely sensed soil moisture products.” *Journal of Environmental Statistics* **4**, Issue 9. <http://www.jenvstat.org/v04/i09>
10. [Chiu, G.S.](#), Wu, M.A., Lu, L. (2013). “Model-based assessment of estuary ecosystem health using the latent health factor index, with application to the Richibucto estuary,” *PLoS One* **8**, Issue 6, e65697.<sup>2</sup> DOI: [10.1371/journal.pone.0065697](https://doi.org/10.1371/journal.pone.0065697)
11. [Chiu, G.S.](#), Westveld, A.H. (2011). “A unifying approach for food webs, phylogeny, social networks, and statistics.” *Proceedings of the National Academy of Sciences of the USA* **108**, 15881–15886. DOI: [10.1073/pnas.1015359108](https://doi.org/10.1073/pnas.1015359108)  
— Erratum. *Proceedings of the National Academy of Sciences of the USA* **109**, 14278–14279.  
DOI: [10.1073/pnas.1212275109](https://doi.org/10.1073/pnas.1212275109)
12. [Chiu, G.S.](#), Guttorp, P., Westveld, A.H., Khan, S.A., Liang, J. (2011). “Latent health factor index: a statistical modeling approach for ecological health assessment,” *Environmetrics* **22**, 243–255. DOI: [10.1002/env.1055](https://doi.org/10.1002/env.1055)  
<http://faculty.washington.edu/gchiu/Articles/LHFI-environmetrics.pdf>

<sup>2</sup>Errata: See <http://www.plosone.org/annotation/listThread.action?root=67179>.

13. Chiu, G.S., Gould, J.M. (2010). "Statistical inference for food webs with emphasis on ecological networks via Bayesian melding," *Environmetrics* **21**, 728–740. DOI: [10.1002/env.1035](https://doi.org/10.1002/env.1035)  
<http://faculty.washington.edu/gchiu/Articles/ENA-environmetrics.pdf>
14. Chiu, G.S., Lockhart, R.A. (2010). "Bent-cable regression with autoregressive noise," *Canadian Journal of Statistics* **38**, 386–407. DOI: [10.1002/cjs.10070](https://doi.org/10.1002/cjs.10070)  
<http://faculty.washington.edu/gchiu/Articles/bentcable-cjs.pdf>
15. Khan, S.A., Chiu, G., Dubin, J.A. (2009b). "Atmospheric concentration of chlorofluorocarbons: addressing the global concern with the longitudinal bent-cable model," *Chance* **22**, Issue 3, 8–17. DOI: [10.1007/s00144-009-0026-x](https://doi.org/10.1007/s00144-009-0026-x)
16. Chiu, G., Lockhart, R., Routledge, R. (2006). "Bent-cable regression theory and applications," *Journal of the American Statistical Association* **101**, 542–553.<sup>3</sup> DOI: [10.1198/016214505000001177](https://doi.org/10.1198/016214505000001177)  
manuscript: <http://faculty.washington.edu/gchiu/Articles/bentcable-jasa.pdf>
17. Chiu, G., Guttorp, P. (2006). "Stream health index for the Puget Sound Lowland," *Environmetrics* **17**, 285–307. DOI: [10.1002/env.744](https://doi.org/10.1002/env.744)  
<http://faculty.washington.edu/gchiu/Articles/shipls1.pdf>
18. Chiu, G., Lockhart, R., Routledge, R. (2005). "Asymptotic theory for bent-cable regression — the basic case," *Journal of Statistical Planning and Inference* **127**, 143–156. DOI: [10.1016/j.jspi.2003.09.007](https://doi.org/10.1016/j.jspi.2003.09.007)  
<http://faculty.washington.edu/gchiu/Articles/basic.pdf>
19. Chiu, G., Lockhart, R., Routledge, R. (2002). "Bent-cable asymptotics when the bend is missing," *Statistics and Probability Letters* **59**, 9–16. DOI: [10.1016/S0167-7152\(02\)00138-4](https://doi.org/10.1016/S0167-7152(02)00138-4)  
<http://faculty.washington.edu/gchiu/Articles/cube-root.pdf>

## Peer Reviewed Book Chapters

1. Chiu, G.S. (2012). "Food web modeling." In El-Shaarawi, A.H. and Piegorsch, W.W. (eds), *Encyclopedia of Environmetrics Second Edition*, Wiley: Chichester, pp. 1063–1066.<sup>4</sup>  
DOI: [10.1002/9780470057339.vnn156](https://doi.org/10.1002/9780470057339.vnn156)
2. Chiu, G.S. (2012). "Species interaction networks." In El-Shaarawi, A.H. and Piegorsch, W.W. (eds), *Encyclopedia of Environmetrics Second Edition*, Wiley: Chichester, pp. 2595–2599.  
DOI: [10.1002/9780470057339.vnn142](https://doi.org/10.1002/9780470057339.vnn142)

## Peer Reviewed Conference Papers

1. Chiu, G.S., Westveld, A.H. (2013). "Physical statistics or statistical physics? A brief overview of Bayesian melding." In Piantadosi, J., Anderssen, R.S. and Boland J. (eds), *MODSIM2013, 20th International Congress on Modelling and Simulation*. Modelling and Simulation Society of Australia and New Zealand, December 2013, pp. 352–358. ISBN: 978-0-9872143-3-1. [www.mssanz.org.au/modsim2013](http://www.mssanz.org.au/modsim2013)
2. Henderson, B.L., Barry, S., Chiu, G., Frost, A., Jin, W., Lehmann, E.A., Renzullo, L.J., Stenson, M.P., van Dijk, A.I.J.M. (2012). "Balancing models and data: model data fusion for improved continental water resource assessment." In *Proceedings of the Water Information Research and Development Alliance (WIRADA) Science Symposium*. WIRADA, August 2011, pp. 330–337. ISBN: 978-0-643-10825-7.  
<http://trove.nla.gov.au/version/170447993>

<sup>3</sup>Erratum: See manuscript.

<sup>4</sup>Erratum: First sentence under subheading *Ecological Network Flows*: "The article (see **Habitat survey and sampling designs Network ecology**) presents a comprehensive overview of concepts related to the study of nutrient and energy flow within a food-web network or ecological network."

3. Chiu, G.S., Lehmann, E.A. (2011). "Bayesian hierarchical modelling: incorporating spatial information in water resources assessment and accounting." In Chan, F., Marinova, D. and Anderssen, R.S. (eds), *MODSIM2011, 19th International Congress on Modelling and Simulation*. Modelling and Simulation Society of Australia and New Zealand, December 2011, pp. 3349–3355. ISBN: 978-0-9872143-1-7. [www.mssanz.org.au/modsim2011](http://www.mssanz.org.au/modsim2011)
4. Khan, S.A., Chiu, G., Dubin, J.A. (2009). "Flexible bent-cable models for mixture longitudinal data," Distinguished Student Paper Awards 2010, Eastern North American Region (ENAR) of the International Biometric Society. Presenter: Khan. <https://tinyurl.com/262auua3>
5. Chiu, G., Routledge, R., Lockhart, R. (2002). "Using the bent cable to assess an abrupt change in species abundance and other phenomena," Winning Paper. Student Paper Competition 2002, Western North American Region (WNAR) of the International Biometric Society.  
<http://faculty.washington.edu/gchiu/Articles/wnar2002.pdf>

## Peer Reviewed Posters / Abstracts

*Presenter = Chiu unless otherwise indicated*

1. Ahmadian, M., Boone, E.L., Chiu, G.S (2024). "A new perspective to fish trajectory imputation: A methodology for spatiotemporal modeling of acoustically tagged fish data," Refereed Abstract, 2024 ASA Symposium on Data Science & Statistics (SDSS). Presenter: Ahmadian
2. Ahmadian, M., Boone, E.L., Chiu, G.S (2023). "A Bayesian perspective to fish trajectory imputation," Winning Poster, ASA Virginia Chapter Conference 2023. Presenter: Ahmadian
3. Kuh, F.S., Chiu, G.S., Westveld, A.H. (2018). "Model-based socio-economic health measures using causal modelling," *JSM 2018*. Winning Poster, ASA Social Statistics Section Poster Competition. Presenter: Kuh
4. Chiu, G.S., Bunn, S.E., Sheldon, F. (2014). "Redefining the concept of ecological health: Assessment and prediction of health as model parameters at multiple spatial scales across a continental-scale river basin," 99th Ecological Society of America Annual Meeting, August 2014, Poster Abstract #46663.  
<http://eco.confex.com/eco/2014/webprogram/Paper46663.html>
5. Chiu, G.S., Westveld, A. H. (2013). "Integrating food webs, phylogeny, social networks, and statistics," First Global Conference on Research Integration and Implementation, September 2013, Digital Poster #602.  
<https://tinyurl.com/ynr68jm5>

## Graduate Theses

1. Evans, M.C., Chiu, G.S., Macintosh, A.K., Gibbons, P. (2017). "Quantitative evaluation of regulatory policies for reducing deforestation in Queensland, Australia." In Evans, M.C. (ed), *Public policy for biodiversity conservation: evaluating outcomes, opportunities and risks (Ph.D. Thesis by Compilation)*. Australian National University: Canberra, pp. 54–76.
2. Chiu, G.S. (2002). "Bent-cable regression for assessing abruptness of change," *Pierre Robillard Award* Winning Ph. D. Thesis. Department of Statistics and Actuarial Science, Simon Fraser University. [goo.gl/DjdyCo](http://goo.gl/DjdyCo)
3. Chiu, G.S. (1996). "Effects of misspecified response correlation in regression analysis," M. Sc. Thesis. Department of Statistics, University of British Columbia. [goo.gl/T28BKb](http://goo.gl/T28BKb)

## Invited Articles

1. Chiu, G. (2016). Review of Newlands, N. *Future Sustainable Ecosystems: Complexity, Risk, and Uncertainty*. Chapman and Hall/CRC. [goo.gl/kJfdDg](http://goo.gl/kJfdDg)
2. Bengston, C., Chiu, G. (2012). “Fish as friends not food in sharks’ social networks,” *ECOS*, **170**, EC12263.
3. Chiu, G. (2012). “Commentary: using Bayesian mixture models to better understand Parkinson’s disease.” *The Statistical Society of Australia News*, **139**, 22. <https://tinyurl.com/w2s86hpn>
4. Morrison, T., Harford, A., Chiu, G., Ford, T., Game, E., Keppel, G., Kopittke, P., Lymburner, L., Marshall, N., Northey, J., Scheepers, K., Seabrook, L., White, D., Young, F. (2011). “Bowen and Surat Basins, Queensland.” In *Stressed Ecosystems: Better Decisions for Australia’s Future (Recommendations from Theo Murphy High Flyers Think Tank 2011)*, Australian Academy of Science, pp. 3–7. <https://www.science.org.au/files/userfiles/events/documents/thinktank-2011-recommendations.pdf>

## Technical and Client Reports

1. Chiu, G.S., Westveld, A.H., Albins, M.A., Boswell, K.M., Hoenig, J.M., Powers, S.P., Stokes, S.L., White, A.L. (2025). “Model-based calibration of gear-specific fish abundance survey data as a change-of-support problem.” arXiv:????????
2. Ahmadian, M., Boone, E.L., Chiu, G.S. (2024). “A new perspective to fish trajectory imputation: A methodology for spatiotemporal modeling of acoustically tagged fish data.” arXiv:2408.13220
3. Mitchell, M., Herman, J., Chiu, G. (2023). “Final Report on ‘Characterizing geospatial variation of Blue Carbon stocks across tidal marshes at different scales to improve predictive soil type relations’ (Award USDA-NRCS-NHQ-SOIL-20-NOFO0001003).” Project Report prepared for the Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA). Virginia Institute of Marine Science: Gloucester Point.
4. Hyman, A.C., Chiu, G.S., Seebo, M.S., Smith, A., Saluta, G.G., Lipcius, R.N. (2023). “Ontogenetic patterns in juvenile blue crab density: effects of habitat and turbidity in a Chesapeake Bay tributary.” bioRxiv / DOI: [10.1101/2023.06.05.543724](https://doi.org/10.1101/2023.06.05.543724)
5. Kuh, F.S., Chiu, G.S., Westveld, A.H. (2020–2023). “Latent causal socioeconomic health index.” arXiv:2009.12217v2
6. Hyman, A.C., Chiu, G.S., Fabrizio, M.C., Lipcius, R.N. (2021). “Spatiotemporal modeling of nursery habitat using Bayesian inference: environmental drivers of juvenile blue crab abundance.” arXiv:2201.06926v1
7. Chiu, G.S., Treier, S., Westveld, A.H., Erskine, N. (2019). “Progress Report on ‘Evidence-based inference for network relations using latent space network modelling: Case studies from the Australian political landscape.’ ” Report prepared for ANU College of Arts and Social Sciences. Australian National University: Canberra.
8. Evans, M.C., Chiu, G.S., Gibbons, P., Macintosh, A.K. (2019). “Quantitative evaluation of regulatory policies for reducing deforestation using the bent-cable regression model.” arXiv:1906.09365v1
9. Kuh, F.S., Chiu, G.S., Westveld, A.H. (2019). “Modeling national latent socioeconomic health and examination of policy effects via causal inference.” arXiv:1911.00512v1
10. Kuh, F.S., Chiu, G.S., Westveld, A.H. (2018). “Preliminary causal modelling of latent socio-economic health and results.” Report prepared for IBISWorld. Australian National University: Canberra.
11. Wasson, A.P., Chiu, G.S., Zwart, A.B., Binns, T.R. (2016). “Root density differentiates wheat genotypes through Bayesian modeling.” bioRxiv: [089078](https://doi.org/10.1101/089078) / DOI: [10.1101/089078](https://doi.org/10.1101/089078)

12. Overton, I.C., Pollino, C.A., Roberts, J., Reid, J.R.W., Bond, N.R., McGinness, H.M., Gawne, B., Stratford, D.S., Merrin, L.E., Barma, D., Cuddy, S.M., Nielsen, D.L., Smith, T., Henderson, B.L., Baldwin, D.S., Chiu, G.S., Doody T.M. (2014). "Development of the Murray-Darling Basin Plan Sustainable Diversion Limits (SDL) Adjustment Ecological Elements Method." Report prepared for the Murray-Darling Basin Authority. CSIRO, Canberra. <http://www.mdba.gov.au/publications/independent-reports/development-murray-darling-basin-plan-sdl-adjustment-ecological>
13. Lehmann, E.A., McVicar, T.R., Chiu, G.S., Emelyanova, I.V., Van Niel, T.G., Bakar, K.S., Henderson, B.L. (2013). "Blending methodologies for multiple earth observation products: activity report to CSIRO's EOI TCP." Client Report [EP138192](#), CSIRO Earth Observation Informatics Transformational Capability Platform.
14. Overton, I.C., Pollino, C.A., Roberts, J., Bond, N., Reid, J., Gawne, B., Baldwin, D., Barma, D., Henderson, B., Nielsen, D., McGinness, H., Merrin, L.E., Cuddy, S.M., Chiu, G., Smith, T. (2013). "Sustainable diversion limits (SDL) adjustment ecological elements — Stage 1 report." Client Report. CSIRO Water for a Healthy Country Flagship.
15. Khan, S.A., Chiu, G.S., Dubin, J.A. (2012). "Therapeutic hypothermia: quantification of the transition of core body temperature using the flexible bent-cable model for mixture longitudinal data." arXiv:[1210.3087](#) / CSIRO ePublish manuscript EP128195.
16. Wu, M., Chiu, G.S., Lu, L. (2012). "Assessing the health of Richibucto Estuary with the latent health factor index." arXiv:[1208.5311](#).
17. Chiu, G.S. (2011). "Statistical model-based alternatives to integrate and evaluate soil moisture products." Technical Report No. CMIS2011-[EP11722](#), CSIRO Mathematics, Informatics and Statistics.
18. Henderson, B., Chiu, G., Jin, W., Lehmann, E., Barry, S. (2011). "AWRA model-data fusion: evaluation, error characterisation and blending." Client Report, CSIRO Water for a Health Country Flagship.
19. Henderson, B., Renzullo, L., van Dijk, A., Barry, S., Chiu, G., Gouweleeuw, B., Jin, W., Lehmann, E., Lerat, J., Paydar, Z., Stenson, M. (2011). "Road map for AWRA-L model-data fusion." Client Report, CSIRO Water for a Health Country Flagship.
20. Chiu, G.S., Westveld, A.H. (2010). "A statistical social network model for consumption data in food webs." arXiv:[1006.4432v2](#)/Technical Report No. CMIS2010-EP103049, CSIRO Mathematics, Informatics and Statistics.
21. Reynolds, P.S., Chiu, G.S. (2010). "Understanding thermoregulatory transitions during haemorrhage by piecewise regression." arXiv:[1006.5117](#) / CSIRO ePublish manuscript EP103334.
22. Khan, S.A., Chiu, G., Dubin, J.A. (2009). "Atmospheric concentration of chlorofluorocarbons: addressing the global concern with the longitudinal bent-cable model." Working Paper Series No. 2009-04, Department of Statistics and Actuarial Science, University of Waterloo. <https://goo.gl/9UA8MS>
23. Chiu, G.S. (2008). "On identifiability of covariance components in hierarchical generalized analysis of covariance models," Working Paper Series No. 2008-09, Department of Statistics and Actuarial Science, University of Waterloo. <https://goo.gl/oJWPnj>
24. Chiu, G.S., Gould, J.M. (2008). "Statistical inference for food webs with emphasis on ecological networks via Bayesian melding," Working Paper Series No. 2008-07, Department of Statistics and Actuarial Science, University of Waterloo. <https://goo.gl/a3nUoa>
25. Chiu, G.S., Guttorp, P., Westveld, A.H., Khan, S.A., Liang, J. (2008). "A latent health factor index modelling approach via generalized linear mixed models, with application to ecological health assessment," Working Paper Series No. 2008-08, Department of Statistics and Actuarial Science, University of Waterloo. <https://goo.gl/c1P11f>
26. Chiu, G., Lockhart, R. (2008). "Some Mathematical and Algorithmic Details for Bent-Cable Regression with  $AR(p)$  Noise," Working Paper Series No. 2006-07, Department of Statistics and Actuarial Science, University of Waterloo. <https://goo.gl/vnyUbc>

27. Chiu, G.S., Guttorp, P., Khan, S.A., Liang, J., Westveld, A.H. (2007). “An ecological latent health factor index via a random-effects model for taxa richness and composition,” Working Paper Series No. 2006-02, Department of Statistics and Actuarial Science, University of Waterloo. <https://goo.gl/8uY2wk>
28. Chiu, G., Lockhart, R. (2006). “Bent-Cable Regression with AR( $p$ ) Noise: Preliminary Theory and Applications,” 2006 Proceedings of the American Statistical Association, Statistical Computing Section [CD-ROM], Alexandria, VA: American Statistical Association: pp. 2027–2034.  
<http://faculty.washington.edu/gchiu/Articles/jsmproceedings06.pdf>
29. Chiu, G., Guttorp, P. (2004a). “New Developments involving the Stream Health Index for the Puget Sound Lowland,” Technical Report Series No. 79, National Research Center for Statistics and the Environment (NRCSE), University of Washington. [www.nrcse.washington.edu/pdf/trs79.pdf](http://www.nrcse.washington.edu/pdf/trs79.pdf)
30. Chiu, G., Guttorp, P. (2004b). “Stream Health Index for the Puget Sound Lowland,” Technical Report Series No. 78, NRCSE, University of Washington. [www.nrcse.washington.edu/pdf/trs78.pdf](http://www.nrcse.washington.edu/pdf/trs78.pdf)

## Articles Submitted / In Progress

1. Chiu, G.S., Westveld, A.H., Dawkins, M. (submitted). “Bayesian melding for statistical inference to unify experimental data and agent-based models.”
2. Chiu, G.S., Sherman, B., Bowden, J.C., Baker, C., Davis, K., Rutherford, K.M. (in progress). “Bayesian melding for the integrated revised universal soil loss equation applied to Australian subcatchments.”
3. Kuh, F.S., Chiu, G.S., Westveld, A.H. (under revision). “LACSH index: Modeling national latent socioeconomic health and examination of policy effects.”
4. Waterhouse, L., Hoenig, J., Chiu, G.S., da Silva, G., Ailloud, L. (in progress). “BRIAN: Bayesian imputation of missing growth rings in fish spines and mollusk shells, with application to Yellowfin tuna (*Thunnus albacares*).”
5. Wolff, M., Dobra, A., Westveld, A.H., Chiu, G.S. (in progress). “A symmetric matrix-variate Gaussian graphical mixture model with applications to human mobility data.”
6. Wolff, M., Dobra, A., Westveld, A.H., Chiu, G.S. (in progress). “Lévy flight cluster model for inference of human mobility and contact networks.”

## Media Interviews and Other Communications

### Interviews

1. “Scientist brings the rigor of data science to the marine environment.” In *Impact* (Spring 2021 Newsletter), Virginia Institute of Marine Science. <http://tinyurl.com/impactSp2021>
2. “Making sense of a social stomach.” *Maths and Stats by Email*, February 10, 2015. <http://goo.gl/cbMb8d>
3. “Making new food chain friends.” CSIROpod, November 11, 2011. <https://tinyurl.com/yydclj25>
4. “Understanding the World — Mathematically.” In *2007 Report*, Office of the Dean, Faculty of Mathematics, University of Waterloo. <https://tinyurl.com/4n6b73bu>

### Communications

1. Chiu, G. (2013). “Fat causes bad health? Fat Chance.” Letter to the Editor. *Significance* **10**, Issue 1, 44–45. DOI: [10.1111/j.1740-9713.2013.00641.x](https://doi.org/10.1111/j.1740-9713.2013.00641.x)

## Presentations

### Invited Talks

*Presenter = Chiu unless otherwise indicated*

- Chiu, G.S., Westveld, A.H., Albins, M.A., Boswell, K.M., Hoenig, J.M., Powers, S.P., Stokes, S.L., White, A. (2025). “Model-based calibration of fishery resource survey data as a change-of-support problem.”
  1. Statistics Seminar (April 24, 2025), University of Illinois Urbana-Champaign. [go.wm.edu/Kf5F80](http://go.wm.edu/Kf5F80)
  2. Statistics Colloquium (March 27, 2025), Virginia Polytechnic Institute and State University. <https://go.wm.edu/K25tDP>
- Griffin, M.D., Chiu, G.S., Mann, R., Southworth, M. (2024–2025). “A data-driven algorithmic approach for monitoring oyster cohorts in Chesapeake Bay.”
  3. 10th HBCU Climate Change Conference (March 1, 2025). Poster presenter: Griffin
  4. Biomathematics Seminar (November 22, 2024), William & Mary. Presenter: Griffin
- 5. Westveld, A.H., Chiu, G.S., Dawkins, M. (2024). “Bayesian melding for agent based stochastic models.” The International Environmetrics Society (TIES) 2024 Conference, Session 9B (December 5, 2024). <https://www.isi-next.org/conferences/37/programme/> Presenter: Westveld
- Kuh, F.S., Chiu, G.S., Westveld, A.H. (2019–2024). “LaCSH: A spatial and causal framework for modeling socio-economic health.”
  6. Department of Statistics Seminar (November 13, 2024), University British Columbia.
  7. Conference on Applied, Bayesian, Computational, Demographic and Environmental Statistics (ABCDE) to Celebrate the Career of Adrian Raftery (August 9, 2024), University of Washington. <https://sites.uw.edu/tayholl> Presenter: Westveld
  8. Research-in-Progress Seminar Series (October 11, 2023), Global Research Institute, William & Mary.
  9. Statistics Seminar (October 5, 2023), Virginia Commonwealth University.
  10. IPS194 (July 20, 2023), ISI World Statistics Congress 2023. <https://tinyurl.com/8jnk6jdb>
  11. Statistics Seminar (October 1, 2021), NUMBAT Research Group, Monash University. Presenter: Kuh. [numbat.space](http://numbat.space)
  12. Department of Mathematics Applied Statistics Seminar (November 11, 2019), William & Mary. Presenter: Kuh
  13. Department of Statistics Seminar (July 24, 2019), University of Auckland. Presenter: Kuh [tinyurl.com/yxgbdvbn](http://tinyurl.com/yxgbdvbn)
- 14. Chiu, G.S. (2024). “Nature’s Complexity vs. Hi-res Data,” Statistical Learning for Large Scale Data: A Conference Celebrating the 70th Birthday of Richard Lockhart (June 19, 2024). Department of Statistics and Actuarial Science, Simon Fraser University. [pims.math.ca/events/240621-sslflsdc](http://pims.math.ca/events/240621-sslflsdc)
- Hyman, A.C., Chiu, G.S., Lipcius, R.N. (2023). “Modeling of blue crab population dynamics in the Chesapeake Bay: A state-space approach.”
  15. Session EO530 (Dec 17, 2023), 16th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2023). <https://tinyurl.com/yc7u627u>
  16. Session 20 (July 27, 2023), TIES 2023 Regional Conference. Presenter: Hyman. <https://tinyurl.com/mtfjjz5d>
- 17. Mitchell, M. Herman, J., Chiu, G. (2023). “Sea level rise and carbon accumulation in wetlands.” North Carolina Natural and Working Lands (NWL) Coastal Habitats Greenhouse Gas Work Group (May 2023). Presenter: Mitchell
- 18. Chiu, G.S. (2022). “From RUSLE to iRUSLE: Using Bayesian melding to enhance catchment soil loss predictions.” Biomathematics Seminar (November 18, 2022), William & Mary.

- Hyman, A.C., Chiu, G.S., Lipcius, R.N., Fabrizio, M.C. (2021–2022). “Spatiotemporal modeling of nursery habitat using Bayesian inference: environmental drivers of juvenile blue crab abundance.”
- 19. Symposium on Advances in Ecosystem & Population Dynamics, and Marine Resource Economics (August 22–23), American Fisheries Society 152nd Annual Meeting (August 21–25, 2022). Presenter: Hyman. <http://tinyurl.com/3vjnpudw>
- 20. R. Clifton Bailey Statistics Seminar Series (April 15, 2022), George Mason University. <https://tinyurl.com/3yfhpuww>
- 21. Biomathematics Seminar (March 4, 2022), William & Mary. Presenter: Hyman.
- 22. Southern Regional Council on Statistics 2021 Conference (October 3–6, 2021). [tinyurl.com/25ks7tkr](http://tinyurl.com/25ks7tkr)
- 23. WNAR/IMS Conference 2021 (June 11–16, 2021). <http://tinyurl.com/h22bpa6>
- 24. Gross, J., Chiu, G.S., Hoenig, J. (2022). “Recruitment predictions we *can* make: predicting poor, rather than good, recruitment.” Seminar (June 15, 2022), Dauphin Island Sea Lab. Presenter: Gross.
- 25. Chiu, G.S. (2021). “Coming full circle: my journey as a computational Bayesian,” Virginia Women in High Performance Computing Inaugural Meeting (virtual on October 6, 2021).
- Chiu, G.S. and Westveld, A.H. (2017–2021). “Bayesian melding from the deterministic case to the stochastic case.”
- 26. IPS211 (July 16, 2021), ISI World Statistics Congress 2021. <https://tinyurl.com/38m6f4a3>
- 27. Special Biostatistics Seminar (April 29, 2019), University of California, Los Angeles.
- 28. Computational Biology Tech Fest (November 12–13, 2018), ANU Research School of Biology.
- 29. Biostatistics Seminar (August 29, 2018), College of Public Health, University of Arizona.
- 30. Statistics Seminar (May 18, 2018), Department of Econometrics and Business Statistics, Monash University. <http://tinyurl.com/y7u6vnnb>
- 31. Statistical Society of Australia – Canberra Branch Meeting (May 1, 2018). [tinyurl.com/ydy9ntea](http://tinyurl.com/ydy9ntea)
- 32. Statistics Seminar (December 15, 2017), University of Texas, Austin. [tinyurl.com/mwz6wevd](http://tinyurl.com/mwz6wevd)
- 33. Chiu, G.S. (2020). “LHFI: statistical model-based inference for stream health.” Stream Health Workgroup, Chesapeake Bay Program. [https://www.chesapeakebay.net/what/event/stream\\_health\\_workgroup\\_meeting10](https://www.chesapeakebay.net/what/event/stream_health_workgroup_meeting10)
- Chiu, G.S. (2018–2019). “Transdisciplinary Statistical Science.”
- 34. Seminar (July 3, 2019), VIMS Research Experiences for Undergraduates Internship Program, Virginia Institute of Marine Science, College of William & Mary.
- 35. Statistics Seminar (October 18, 2018), University of Technology Sydney.
- 36. Statistics and Data Science Seminar (September 21, 2018), Queensland University of Technology.
- Chiu, G.S. et al. (2017–2018). “Unifying empirical and theoretical perspectives of food web structure.”
- 37. Environmental Statistics Seminar (August 14, 2018), Virginia Institute of Marine Science, College of William & Mary.
- 38. Statistics Seminar (April 10, 2017), Portland State University.
- Chiu, G.S. et al. (2017–2018). “Longitudinal modelling of crop root physiology as a breed-specific spatial response to environmental conditions.”
- 39. Statistics Seminar (May 18, 2018), NUMBAT Research Group, Monash University. [numbat.space](http://numbat.space)
- 40. Biostatistics Seminar (April 17, 2018), School of Public Health, University of Texas, Houston.
- 41. Statistics Seminar (December 1, 2017), Simon Fraser University Dept. of Statistics and Act. Sci.
- 42. Statistics Seminar (October 31, 2017), ANU Res. Sch. of Finance, Actuarial Studies and Statistics.
- 43. Session on Recent Advances in Temporal Analysis of Environment Related Changes, The International Environmetrics Society (TIES) – GRASPA Conference 2017 (July 24–26). <http://meetings3.sis-statistica.org/index.php/graspa2017/tiesgraspa2017>
- 44. Challenges in the Statistical Modeling of Stochastic Processes for the Natural Sciences (July 9–14, 2017), Banff International Research Station workshop 17w5107 in honor of Peter Guttorp. <http://www.birs.ca/events/2017/5-day-workshops/17w5107/videos/watch/201707101526-Chiu.html>

- Chiu, G.S. (2014–2017). “Understanding Food Webs: Twitter, Critters, Bugs, Python, and more.”
  45. Seminar (November 22, 2017), Centre for Social Research & Methods, ANU College of Arts and Social Sciences. <https://goo.gl/vCszmx>
  46. Statistics Seminar (December 9, 2016), University of Queensland.
  47. Biostatistics Seminar (March 16, 2015), University of Toronto.
  48. Biostatistics Research Group (BRG) Seminar (August 19, 2014), University of British Columbia. <http://stat.ubc.ca/Seminars/index.php?year=2014&month=08>
- 49. Chiu, G.S. et al. (2017). “Deciphering messy data on plant root physiology to improve breeding practices.” Special session on Statistics (September 25–26, 2017), Women in Mathematics Special Interest Group (WIMSIG) Conference 2017. <https://tinyurl.com/4dbd5d7m>
- Evans, M.C., Chiu, G.S. et al. (2015–2016). “Is no net loss possible? Evaluating policy instruments for reducing deforestation with a growing economy.”
  50. Session on Quantifying Environmental Benefits, The International Environmetrics Society (TIES) Conference 2016 (July 19).
  51. 27th International Congress for Conservation Biology (August 2–6). Presenter: Evans.
- Chiu, G.S. (2014). “Assessment and prediction of health as model parameters at multiple spatial scales across a continental-scale river basin.”
  52. Seminar (October 3, 2014), National Institute for Applied Statistics Research Australia (NIASRA), University of Wollongong. <https://www.uow.edu.au/niasra/events--seminars>
  53. Biostatistics Seminar (August 25, 2014), University of California Los Angeles. <https://publications.csiro.au/rpr/pub?pid=csiro:EP147033>
- Chiu, G.S. (2011; 2014). “Twitter, Facebook, CSIRO, and fish: beyond just friends.”
  54. Computer Science Students’ Association Tech Talk (May 1, 2014), Australian National University. <https://pinvents.com/event/613290505426404/cssa-tech-talk>
  55. CSIRO Public Seminars in Canberra (May 18, 2011). <http://preview.tinyurl.com/7ckeqja>
- 56. Chiu, G.S. (2013). “Spatial latent health factor index (LHFI) using compositional data,” Session on Compositional Data Analysis in Ecological Studies, The International Environmetrics Society (TIES) Conference 2013 (June 11).
- 57. Chiu, G.S. (2013). “Bayesian hierarchical modelling for soil moisture,” CSIRO Earth Observation Informatics Workshop on Blending Methodologies for Multiple EO Products (April 22, 2013).
- 58. Chiu, G.S. (2013). “Bayesian Melding: Physical Statistics or Statistical Physics?” CMIS Sydney Seminar (April 8, 2013).
- 59. Chiu, G.S. (2012). “Modelling: An Overview,” CSIRO Office of the Chief Executive Cutting Edge Symposium on Systems Biology and Network Science (December 10, 2012). <http://goo.gl/5KwZV>
- 60. Chiu, G.S. (2012). “Inference for ecosystem health as a statistical inverse problem via LHFI modelling,” CMA Special Year on Inverse Problems One-Day Seminar 4 — Statistical Aspects of Inverse Problems, Australian National University Centre for Mathematics and its Applications (September 14, 2012). <http://maths.anu.edu.au/events/inference-ecosystem-health>
- Chiu, G.S., Westveld, A.H. (2012). “Food webs, phylogeny, social networks, and statistics: What is the common thread?”
  61. Statistics Seminar, University of New South Wales (August 24, 2012).
  62. Statistics Graduate Interdisciplinary Program (GIDP) Colloquium, University of Arizona (Feb 1, 2012).
  63. School of Information: Science, Technology, and Arts (SISTA) Colloquium, University of Arizona (Jan 30, 2012).

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64. Chiu, G.S., Lehmann, E.A. (2012). "Making use of multiple soil moisture products through spatial modelling," Session on Modern Spatiotemporal Tools for Environmental Data, TIES Conference 2012.
  65. Chiu, G.S., Lehmann, E.A. (2011). "A spatial model for soil moisture," CMIS Acton Brown Bag Seminar (October 21, 2011).
    - Chiu, G.S., Khan, S.A., Dubin, J.A. (2011). "Mixture longitudinal bent-cable regression for assessing the effects of shocks."
  66. Statistical Society of Australia Inc. – Canberra Branch Meeting (August 30, 2011).
  67. Biostatistics Seminar, College of Public Health, University of Arizona (June 1, 2011).
  68. Chiu, G. (2011). "Hybridizing physics and statistics for mass balance using Bayesian melding," Bayesian Working Group (June 7, 2011), Center for Applied Mathematics and Statistics, University of Nevada Las Vegas.
  69. Chiu, G., Westveld, A. (2011). "Understanding predator-prey relations in food webs using statistical social-network models," CSIRO-CMIS Divisional Conference 2011.
  70. Chiu, G., Gould, J., Westveld, A. (2010). "Statistical inference for food webs," The American Statistical Association Joint Statistical Meetings (JSM) 2010.
  71. Chiu, G., Westveld, A. (2010). "Statistical social network modelling of trophic relations in food webs," Workshop on CMAR (CSIRO Marine and Atmospheric Research) Trophicdynamics — Questions, Methods and Collaborations (April 14, 2010).
  72. Chiu, G.S., Khan, S.A., Dubin, J.A. (2009). "Understanding hemorrhagic shock in a rat model using flexible longitudinal bent-cable regression," Center for Devices and Radiological Health, Division of Biostatistics, US Food and Drug Administration.
    - Chiu, G., Guttorp, P., Westveld, A. (2008–2009). "Gauging Ecosystem Health with Latent Health Factor Models." <http://faculty.washington.edu/gchiu/Talks/unlv2009.pdf>
  73. Zoology / Centre for Physiological and Behavioural Ecology Seminar (March 10, 2009), University of New England, NSW, Australia.
  74. Seminar (February 26, 2009), Commonwealth Scientific and Industrial Research Organisation (CSIRO) Mathematical and Information Sciences, Indooroopilly, Queensland, Australia.
  75. Statistics Seminar (February 6, 2009), University of Nevada Las Vegas.
  76. Environmental Statistics Session (May 28, 2008), Statistical Society of Canada 2008 Conference.
  - Chiu, G., Gould, J. (2008–2009). "Statistical Inference for Food Webs, Part I: Bayesian Melding." <http://faculty.washington.edu/gchiu/Talks/bio08.pdf>
  77. Department of Statistical and Actuarial Sciences Colloquium, University of Western Ontario (May 7, 2009).
  78. Statistics Seminar (April 16, 2009), University of Waterloo.
  79. CSIRO Marine and Atmospheric Research Science Seminar (March 6, 2009), Hobart, Tasmania, Australia.
  80. Statistics Seminar (January 23, 2009), University of Victoria.
  81. Statistics Seminar (December 11, 2008), Dalhousie University.
  82. Harvest Fisheries Seminar (December 3, 2008), Bedford Institute of Oceanography.
  - Chiu, G., Lockhart, R. (2006–2009). "Bent-cable regression with autoregressive noise." <http://faculty.washington.edu/gchiu/Talks/bentAR-talk.pdf>
  83. Canberra Applied Statistics Workshop (February 20, 2009), CSIRO / Australian National University.
  84. Statistics Seminar (February 14, 2008), Department of Statistics, University of California Riverside.
  85. Statistics Seminar (December 3, 2007), Department of Statistics, University of Idaho.
  86. Applied Statistics and Computation Seminar (March 9, 2007), Washington University in St. Louis.
  87. Statistics Seminar (April 7, 2006), York University.
  88. Statistics Seminar (March 21, 2006), McMaster University.

89. Seminar (March 8, 2006), Women in Mathematics Committee, University of Waterloo.  
<http://faculty.washington.edu/gchiu/Talks/wim06.pdf>
- Chiu, G. (2008). "Food web modeling: why consider longitudinal social networks and Bayesian melding?"  
<http://faculty.washington.edu/gchiu/Talks/ties08.pdf>
90. Marine Ecology Session (June 12, 2008), TIES Conference 2008.  
 91. University of Guelph Biomathematics and Biostatistics Seminar / Statistics Colloquium (April 1, 2008).
92. Chiu, G. (2008). "Environmetrics: integrating statistical research with environmental sciences," Interdisciplinary Centre on Climate Change Scoping Workshop (April 30, 2008), University of Waterloo.  
<http://faculty.washington.edu/gchiu/Talks/ic3-08.pdf>
93. Chiu, G. (2007). "Where's the statistician? A collage of high profile environmental issues" (multimedia presentation with commentaries), Fields Institute Summer Workshop on Environmetrics 2007.
94. Chiu, G. (2007). "Bringing statistical sophistication to structurally simple problems in the biological sciences," University of Waterloo Statistics Club Lecture (March 22, 2007).  
<http://faculty.washington.edu/gchiu/Talks/uwstatsclub07.pdf>
- Chiu, G., Guttorp, P. (2004). "SHIPSL: A new health index for Puget Sound Lowland streams."  
<http://faculty.washington.edu/gchiu/Talks/corvallis.pdf>
95. Seminar (April 13, 2004), US Environmental Protection Agency (USEPA) Western Ecology Division.  
 96. Statistics Seminar (February 24, 2004), University of British Columbia.
97. Chiu, G., Guttorp, P. (2003). "A Statistician's take on the benthic index of biotic integrity," Statistics Seminar (September 22, 2003), Simon Fraser University.
- Chiu, G., Routledge, R., Lockhart, R. (2003). "Bent-cable regression for assessing abruptness of change."  
<http://faculty.washington.edu/gchiu/Talks/robillard.pdf>
98. Seminar (June 3, 2004), Groupe d'études et de recherche en analyse des décisions (GERAD), Montréal.  
 99. Statistics Seminar (December 1, 2003), University of Washington.  
 100. Statistics Seminar (September 25, 2003), University of Waterloo.  
 101. Pierre Robillard Award Winner Presentation (June 11, 2003), Statistical Society of Canada Meeting.
- Chiu, G., Routledge, R., Lockhart, R. (2002). "Bent-cable regression — Why fish don't like kinks."
102. Statistics Seminar (February 28, 2003), University of Toronto.  
 103. Biostatistics Research Group (BRG) Seminar (October 10, 2002), University of British Columbia.

## Invited Discussions

1. CCI Roundtable on Climate and Health. November 3, 2017. ANU [Climate Change Institute](#).
2. Long-Term Intervention Monitoring Analysis Workshop. September 18, 2013. Murray-Darling Freshwater Research Centre.
3. "Career options and challenges," August 7, 2012. STATMOS Ten Lectures on Statistical Climatology by Douglas Nychka (August 6–10, 2012).
4. "Life as a non-academic statistician," November 16, 2011. Statistics 688 (Statistical Consulting course), University of Arizona.
5. Panel on "Training for a Career in Environmetrics." TIES Conference 2008.
6. Panel on "Implementing Graduate Programs in Environmetrics." Fields Institute Summer Workshop on Environmetrics 2007.
7. Panel on "How to find a Ph.D. Advisor?," February 11, 2004. Vertical Integration of Research and Education in the Mathematical Sciences (VIGRE), University of Washington.

## Contributed Talks / Posters

*Presenter = Chiu unless otherwise indicated*

1. Griffin, M., Chiu, G., Mann, R., Southworth, M. (2025). "A data-driven approach for monitoring oyster cohorts in Chesapeake Bay," Student Poster Session (March 8, 2025), 10th HBCU Climate Change Conference. Presenter: Griffin. <https://dscej.org/ccc-2025>
- Ahmadian, M., Boone, E.L., Chiu, G.S. (2024). "A New Methodology for Spatiotemporal Modeling of Fish Trajectory Imputation."
  2. SIAM Washington-Baltimore Section Fall Meeting 2024 (December 6, 2024). Presenter: Ahmadian. <https://math.gmu.edu/~hantil/SIAM/Fall12024>
  3. NSF Workshop on Data-driven Modeling and Prediction of Rare and Extreme Events (November 22, 2024), Institute for Mathematical and Statistical Innovation. Presenter: Ahmadian. <https://go.wm.edu/GLTm8S>
- Ahmadian, M., Boone, E.L., Chiu, G.S. (2024). "A New Perspective to Fish Trajectory Imputation: A Methodology for Spatiotemporal Modeling of Acoustically Tagged Fish Data."
  4. Session on Fish Movement, Tags, and Tagging (September 18, 2024), Annual Meeting of the American Fisheries Society (AFS) 2024. Presenter: Ahmadian. <https://go.wm.edu/8q1Pc6>
  5. Session on Real World Applications (June 6, 2024), ASA Symposium on Data Science and Statistics 2024. Presenter: Ahmadian. [www2.amstat.org/meetings/sdss/2024/scheduleatagance.cfm](http://www2.amstat.org/meetings/sdss/2024/scheduleatagance.cfm)
6. Kuh, F.S., Chiu, G.S., Westveld, A.H. (2023). "LACSH index: Modelling National Latent Socioeconomic Health and Examination of Policy Effects," Poster 220, [2023 Australian Statistical Conference](#). Presenter: Kuh. <http://hdl.handle.net/1885/313115>
7. Kuh, F.S., Westveld, A.H., Chiu, G.S. (2023). "Joint modelling of multiple treatment variable types through copula-based latent formulations of propensity," [Bayesian Nonparametrics Networking Workshop 2023](#). Presenter: Kuh. <http://hdl.handle.net/1885/313116>
8. Mitchell, M., Herman, J., Chiu, G. (2023). "Assessing variability of blue carbon stocks across scales and their fate under sea level rise," Coastal & Estuarine Research Federation (CERF) Conference 2023. Presenter: Mitchell. <https://tinyurl.com/53nb7vww>
9. Gross, J.M., Deroba, J., Chiu, G., Hoenig, J.M. (2021). "Predicting bad recruitment with implications for stock projections," [Theme session G](#), ICES Annual Science Conference 2021. Presenter: Gross
10. Gross, J., Chiu, G., Hoenig, J. (2020). "A novel way to predict recruitment from environmental variables," [American Fisheries Society Meeting 2020](#). Presenter: Gross
11. Dawkins, M., Chiu, G.S., Westveld, A.H. (2018). "Melded Bayesian inference for stochastic theoretical models with applications in agent based modelling," [JSM 2018](#). Presenter: Dawkins
12. Kuh, F.S., Chiu, G.S., Westveld, A.H. (2017). "Latent socio-economic health and causal modelling," [Bayes on the Beach 2017](#). Presenter: Kuh. <http://hdl.handle.net/1885/134344>
13. Kuh, F.S., Westveld, A.H., Chiu, G.S. (2015). "Social network analysis on food web and dispute data," [University of Auckland 2015 Postgraduate Poster Competition](#). Presenter: Kuh. <http://hdl.handle.net/1885/95008>
14. Chiu, G., Bunn, S., Sheldon, F. (2014). "Redefining the concept of ecological health: Assessment and prediction of health as model parameters at multiple spatial scales across a continental-scale river basin," [F1000Posters 2014](#), **5:1335 (poster)**.
- Chiu, G.S., Lehmann, E.A. (2011). "Bayesian hierarchical modelling: incorporating spatial information in water resources assessment and accounting."
15. TIES 2012

## 16. MODSIM 2011

17. Chiu, G.S., Lehmann, E.A. (2011). "Bayesian hierarchical modelling: incorporating spatial information in the AWRA framework," WIRADA Symposium 2011.
18. Chiu, G. (2011). "Hybridizing physics and statistics for mass balance using Bayesian melding," Catchment-to-Coast Community of Practice 2011 Workshop: integrating C2C models with observations, including data assimilation.
19. Chiu, G., Westveld, A. (2010a). "Understanding predator-prey relations in food webs using statistical social-network models," Australian Statistical Conference 2010.
20. Chiu, G., Westveld, A. (2010b). "Statistical social network modelling of trophic relations in food webs: current state and beyond," CSIRO-CMIS Canberra Science Day 2010.
21. Chiu, G., Westveld, A. (2010c). "Statistical social network modelling of trophic relations in food webs," Techfest 2010.
22. Chiu, G.S., Westveld, A.H., Gould, J.M. (2010). "Inference for Food Webs via Statistical Models," Statistical Modelling and Inference Conference to celebrate Murry Aitkin's 70th birthday.
23. Chiu, G., Gould, J. (2009). "Statistical Inference for Food Webs / Ecological Networks via Bayesian Melding," JSM 2009. <http://faculty.washington.edu/gchiu/Talks/jsm09.pdf>
24. Khan, S.A., Chiu, G., Dubin, J.A. (2009). "Monitoring Atmospheric Chlorofluorocarbons by the Longitudinal Bent-Cable Model," TIES Conference 2009.
25. Chiu, G.S., Guttorp, G., Westveld, A.H. (2007). "Latent Health Factor Modeling for Monitoring Ecosystem Health," TIES Conference 2007. [faculty.washington.edu/gchiu/Talks/ties07.pdf](http://faculty.washington.edu/gchiu/Talks/ties07.pdf)
26. Chiu, G., Guttorp, P., Westveld, A. (2006). "A Latent Health Factor Index from a Hierarchical Model of Aquatic Species and Abundance," TIES Conference 2006. [faculty.washington.edu/gchiu/Talks/ties06.pdf](http://faculty.washington.edu/gchiu/Talks/ties06.pdf)
27. Chiu, G., Lockhart, R. (2006). "Bent-Cable Regression with AR( $p$ ) Noise," JSM 2006. <http://faculty.washington.edu/gchiu/Talks/jsm06.pdf>
  - Chiu, G., Guttorp, P. (2005). "Beyond SHIPSL: Some New Directions for Gauging Ecological Health." <http://faculty.washington.edu/gchiu/Talks/ties2005.pdf>
28. TIES Conference 2005. Presenter: Dr. Bronwyn Harch of CSIRO.
29. The National Program on Complex Data Structures (NPCDS) Workshop 2005.
30. WNAR / IMS Conference 2005.
31. Chiu, G., Guttorp, P. (2004). "Why SHIPSL? — Issues on How Stream Health is Gauged," WNAR / IMS Conference 2004. <http://faculty.washington.edu/gchiu/Talks/wnar2004.pdf>
32. Chiu, G., Guttorp, P. (2003). "A Statistician's take on the benthic index of biotic integrity," TIES Conference 2003. <http://faculty.washington.edu/gchiu/Talks/ties2003.pdf>
33. Chiu, G., Lockhart, R., Routledge, R. (2002). "Using the bent cable to assess an abrupt change in species abundance and other phenomena," Winning Paper. Student Paper Competition 2002, WNAR.
34. Chiu, G., Routledge, R., Lockhart, R. (2001). "Abrupt change or not? — From the broken stick to the bent cable," SSC Conference 2001.

## Professional Affiliation History

1. **Professor**, 2020 –. Virginia Institute of Marine Science (VIMS), COLLEGE OF WILLIAM AND MARY, Gloucester Point, VA, USA.
  - **Founder and Director**, Environmental Statistics and Transdisciplinary Data Science (ESTDatS) Lab. <https://www.vims.edu/research/units/labgroups/estdats>
  - Courses taught: **MSCI 697** (Aug–Dec2024); **MSCI 690** (Aug2024); **MSCI 679** (Jan–May2024/2023/2022/2021); **MSCI 556** (Jan–May2024/2023); **MSCI 676** (Jul2023); **MSCI 497** (Jan–May2022; Aug–Dec2021; Jul–Aug2020); **MSCI 504** (Aug–Dec2021/2019; Aug–Nov2020); **MSCI 698** (Aug2022; Jul2021; Jun2020; Jan–May2020; Aug–Dec2019;<sup>5</sup> May–Jul2019).
2. **Affiliate Professor**, 2020 –. Department of Statistical Sciences and Operations Research, VIRGINIA COMMONWEALTH UNIVERSITY, Richmond, USA.
3. **Affiliate Faculty**, 2019 –. Computational & Applied Mathematics & Statistics (CAMS), WILLIAM & MARY, Williamsburg, USA.
4. **Adjunct Professor**, 2019 –. Department of Statistics and Actuarial Science, UNIVERSITY OF WATERLOO, Waterloo, ON, Canada.
5. **Honorary Associate Professor** (Level D),<sup>6</sup> 2019 – 2023. Institute for Climate, Energy & Disaster Solutions (formerly Climate Change Institute), AUSTRALIAN NATIONAL UNIVERSITY, Canberra, ACT, Australia.
  - **Founding International Partner** (1 of 2 from ANU)<sup>7</sup> of [Foundations of Data Science for Industry and Enterprise](#) (a [Science Foundation Ireland's Centre for Research Training](#))
6. **Associate Professor**, 2019 – 2020. VIMS.
7. **Affiliate Associate Professor**,<sup>8</sup> 2016 –. Department of Statistics, UNIVERSITY OF WASHINGTON, Seattle, WA, USA.
8. **Senior Lecturer** (Level C),<sup>9</sup> 2015 – 2018. [Research School of Finance, Actuarial Studies and Statistics](#),<sup>10</sup> AUSTRALIAN NATIONAL UNIVERSITY, Canberra, ACT, Australia.
  - **Master of Applied Data Analytics Program Manager (CBE)** (2018).
  - **Founding Member** (1 of 10+) of ANU Sustainable Farming Initiative (2017 – 2018).
  - **Founding Member** (1 of 9) of ANU CBE Scholarship of Technology Enhanced Learning, Methods of Technology Enhanced Learning (SoTEL MoTEL) (August 2017 – December 2018).
  - Member of [Climate Change Institute](#) (May 2017 – December 2018).
  - Member of [Energy Change Institute](#) (May 2017 – December 2018).
  - Courses taught: **Stat 7001** (August to October, 2017; May to July, 2018); **Stat 7026** (March to May, 2018); **Stat 6039** (January to March, 2018); **Stat 3032/4072/7042/8003** (February to June, 2016; 2017); **Stat 1003** (February to June, 2015; 2016); **Stat 3016/7016** (November, 2015).
9. **Adjunct Associate Professor**, 2013 – 2019. Department of Statistics and Actuarial Science, UNIVERSITY OF WATERLOO, Waterloo, ON, Canada.
10. **Senior Research Scientist** (Level 6),<sup>11</sup> 2009 – 2015. [CSIRO](#) Digital Productivity Flagship (formerly CSIRO Mathematics, Informatics and Statistics), Acton, ACT, Australia.

<sup>5</sup>1 of 2 co-instructors

<sup>6</sup>Australian Level D is equivalent to North American Full Professor — see [this Wikipedia entry](#).

<sup>7</sup>Through formal arrangement between the Centre's leaders and me as an ANU statistician prior to resignation from ANU RSFAS in Dec 2018.

<sup>8</sup>Promotion required full application and review.

<sup>9</sup>Equivalent to North American Associate Professor. See [this Wikipedia entry](#) for details on Australian and New Zealand academic titles.

<sup>10</sup>2018 ranking of universities for Statistics: 2nd in Australia, 36th in world

<sup>11</sup>Equivalent to Australian academic Level C and North American Associate Professor.

11. **Adjunct Assistant Professor**, 2009 – 2012. Department of Statistics and Actuarial Science, UNIVERSITY OF WATERLOO, Waterloo, ON, Canada.
12. **Affiliate Assistant Professor**, 2006 – 2016. Department of Statistics, UNIVERSITY OF WASHINGTON, Seattle, WA, USA.
13. **Assistant Professor**, 2005 – 2009. Department of Statistics and Actuarial Science, UNIVERSITY OF WATERLOO.
  - **Founding Member** (1 of 35) of UWaterloo Interdisciplinary Centre on Climate Change (2008 – 2012).
  - Courses taught: **Stat 231** and **Stat 371** (September to December, 2006 & 2007); **Stat 202/204** and **Stat 430/830** (September – December, 2005).
14. **Postdoctoral Fellow and Lecturer**, 2004 – 2005. Department of Statistics, UNIVERSITY OF WASHINGTON, Seattle.  
Courses taught: **Stat 220** (June to August, 2004), **Stat 311** (September to December, 2004; April to June, 2005).
15. **Visiting Scholar**, 2003. Department of Statistics, UNIVERSITY OF WASHINGTON, Seattle.
16. **Postdoctoral Fellow**, 2003. Pacific Institute for the Mathematical Sciences (PIMS) and Department of Statistics and Actuarial Science, SIMON FRASER UNIVERSITY, Burnaby, B.C., Canada.
17. **Sessional Instructor**, May – August 2003 (**Statistics 201**); September – December 2000 (**Statistics 330**); January – April 1997 (**Statistics 280**).  
Department of Statistics and Actuarial Science, SIMON FRASER UNIVERSITY.
18. **Research Assistant**, 2001 – 2002. Department of Statistics and Actuarial Science, SIMON FRASER UNIVERSITY.
19. **Department Head**, 1997 – 1998. Department of Mathematics, Statistics, and Computer Science, COQUITLAM COLLEGE.
20. **Statistics Instructor**, 1996 – 2000. Department of Mathematics and Statistics, COQUITLAM COLLEGE, Coquitlam, B.C., Canada. Courses taught: **Stat 101** (September 1996 – April 2000), **Busi Stat 200** (May 1997 – July 1998), and **Stat 270** (May – July 1998).
21. **Statistics 200 Course Instructor**, May – July 1997; July – August 1996.  
Department of Statistics, UNIVERSITY OF BRITISH COLUMBIA, Vancouver.
22. **Instructional Support Person**, September – December 1996.  
Department of Statistics, UNIVERSITY OF BRITISH COLUMBIA, Vancouver. Responsibilities included **Statistics 203 Head TA** duties; compiling information about online interactive statistical resources on the World Wide Web; designing and implementing such resources for the UBC Statistics Department; assisting in the application of the **Teaching and Learning Enhancement Fund** for the department.
23. **Graduate Teaching Assistant**, September 1994 – April 1996. Department of Statistics, UNIVERSITY OF BRITISH COLUMBIA, Vancouver.
24. **Student Consultant**, January – April 1995. Statistics Consulting and Research Laboratory (SCARL), Department of Statistics, UNIVERSITY OF BRITISH COLUMBIA, Vancouver.
25. **Research Assistant**, May – September 1994. Department of Statistics, UNIVERSITY OF BRITISH COLUMBIA, Vancouver.
26. **Student Researcher/Consultant**, May – August 1993. BRITISH COLUMBIA CANCER AGENCY, Vancouver, B.C.
27. **Undergraduate Teaching Assistant**, January – April 1993. Department of Statistics, UNIVERSITY OF BRITISH COLUMBIA, Vancouver.

## Short-term Positions

1. **Visiting Faculty**, July 2019 – February 2020; December 2017. Department of Statistics and Data Sciences, UNIVERSITY OF TEXAS, Austin, TX.
2. **Visiting Fellow**, November 2014 – June 2015. Research School of Finance, Actuarial Studies and Applied Statistics, AUSTRALIAN NATIONAL UNIVERSITY, Acton, ACT, Australia.  
Course taught: **Statistics 1003** (February – June, 2015).
3. **Visiting Research Scholar**, November 2011 – October 2012. Graduate Inter-Disciplinary Program in Statistics, UNIVERSITY OF ARIZONA, Tucson, AZ.
4. **Visiting Research Scientist**, February – March, 2009. CSIRO Mathematical and Information Sciences (various locations), Australia.
5. **Visiting Statistics Faculty**, October – December, 2008. Department of Mathematics and Statistics, DALHOUSIE UNIVERSITY, Halifax, NS.

## Editorial and Other Service History

### Scientific Community: Editorial Service

1. **Associate Editor**, *J Am Stat Assoc.* 2019–. [tandfonline.com/toc/uasa20/current](http://tandfonline.com/toc/uasa20/current)
2. **Associate Editor**, *Environmetrics.* January 2009 –. DOI: [10.1002/\(ISSN\)1099-095X](https://doi.org/10.1002/(ISSN)1099-095X)
3. **Co-director of MODSIM 2013 Session A7** on “Combining mechanistic and statistical modelling approaches,” the 20th International Congress on Modelling and Simulation.  
<http://www.mssanz.org.au/modsim2013/papersbysession.html>
4. **Referee**. ~20 journals, 1 compendium, 2 textbooks, 1 conference proceedings, 1 government science research support organization (in Europe). [*Titles withheld for confidentiality*].

### Scientific Community: Other Service

1. **Founding Committee Member**, Virginia Women in High Performance Computing. 2021–. [va-whpc.org](http://va-whpc.org)
2. **Program Chair** (elected), EnviBayes Section of the International Society for Bayesian Analysis (ISBA). 2021–2022. <https://bayesian.org/sections/chapters/environmental-sciences>
3. **TIES Membership Committee Member**, 2014 – 2018.
4. **Australian Representative for the ASA Friends of Australasia**, 2010 – 2018.
5. **Data Science Inaugural Session Coordinator and Primary Presenter**, Australian National Youth Science Forum Year 12 Program, January 24, 2018. <http://www.nysf.edu.au/programs/year-12-program>
6. **TIES 2016 Scientific Committee Member**, October 2015 – May 2016. <http://goo.gl/k0ignv>
7. **ASA Nomination Committee for International Representative to ASA**, February – May 2015.
8. **TIES Webmaster**, September 2006 – September 2013. <http://www.environmetrics.org/>  
and **TIES Representative for the Webpage Committee of the International Statistical Institute**, September 2009 – May 2010.
9. **Co-leader of Roundtable Luncheon** “Do you wish to visit Australasia?” JSM 2012.
10. **Organizer of Invited Session** “What’s the Buzz on Hierarchical Modeling in Environmetrics?” TIES 2010.

11. **Leading Organizer of 2007 Summer Workshop on Environmetrics**, Fields Institute.  
<http://www.fields.utoronto.ca/programs/scientific/07-08/environmetrics/>
12. **Organizer and Chair of Environmetrics Session**, SSC 2006.
13. **Regional Advisory Board Member**, July 2002 – July 2004.  
Western North American Region (WNAR) of the International Biometric Society.
14. **Pierre Robillard Award Committee Member**, July 2003 – June 2004.  
Statistical Society of Canada (SSC).

#### Service within William & Mary

1. **Member**, VIMS Undergraduate Curriculum Committee. 2025–.
2. **Member**, VIMS Quantitative Skills Committee. 2019– (At-large Member: 2022–; Biological Sciences Department Representative: 2019–2021).
3. **STLI Advisory Council Member**, W&M Studio for Teaching & Learning Innovation. 2020–2023.
4. **Committee Member**, VIMS Bay Data Strategic Planning. 2021.
5. **Committee Member**, VIMS Staff Salary Competitiveness Strategic Planning. 2021.
6. **Mentor**, W&M Women's Mentoring. 2019–2021.
7. **Founder, Director, Principal Consultant**, VIMS Environmental Statistics and Transdisciplinary Data Science (ESTDatS) Research Lab. 2019 –. [www.vims.edu/research/units/labgroups/estdat](http://www.vims.edu/research/units/labgroups/estdat)

#### Service within Australian National University

1. **Master of Applied Data Analytics Program Manager (CBE)**. January – December 2018.
2. **Mentor**, [ANU Network of Early Career Teachers, Academics and Researchers](#) (NECTAR). April – December 2018.
3. **Acting CBE Representative**, ANU College of Health & Medicine and College of Science Education Committee, March – July 2018.
4. **Hiring Committee Deputy Chair**, ANU Sustainable Farms Initiative Postdoctoral Statistician. 2017–2018.
5. **Hiring Committee Member**, ANU-CSIRO Centre for Genomics, Metabolomics and Bioinformatics. 2017.
6. **Hiring Committee Member**, RSFAS Postdoctoral Statistician. 2017.
7. **RSFAS Office Renovations ad hoc Committee**. 2015–2016.
8. **RSFAS Summer Research Scholarship ad hoc Committee**. 2015.

#### Service within CSIRO

1. **Site Representative**, Division Staff Consultative Committee. April 2013 – June 2015.
2. **Adjudication Panel Member**, CSIRO OCE Cutting Edge Symposium Grant Proposals. October – November 2014; October – November 2013.
3. **Hiring Committee Member**, Digital Productivity Flagship–Data Analytics Program 2014.
4. **Hiring Committee Member**, CMIS Environmental Informatics Program 2011.

5. **Division Internal Referee** [various articles per year].
6. **Co-organizer**, CSIRO OCE Cutting Edge Symposium: Integrating Systems Biology and Network Science with the Rich Data of the CSIRO National Biological Collections. December 10–12, 2012, Canberra. [goo.gl/kiZS4](http://goo.gl/kiZS4)
7. **Organizing Committee**, Bayesian workshops by Dr. Sujit Sahu, November 2011, Canberra. [goo.gl/zGkAWh](http://goo.gl/zGkAWh)

### Service within University of Waterloo

1. **Statistics Seminars Committee** 2008 – 2009.
2. **Statistics and Actuarial Science Department Webpage Committee** 2008 – 2009.
3. **Statistics and Actuarial Science Programs Committee** 2006 – 2008.
4. **Faculty of Mathematics Library Committee** 2006 – 2008.
5. **Statistics Comprehensive Examination Committee** 2005 – 2006.

## Student Supervision

### Graduate

1. Committee member for **David Parrish**, September 2023 –. VIMS Ph.D. program.
2. Advisor of **Madison Griffin**, August 2023 –. VIMS M.S. bypass program. Recipient of 2024 Chesapeake Bay Trust-Chesapeake Oyster Alliance – Chesapeake Oyster Innovation Award. [go.wm.edu/IHDRpz](http://go.wm.edu/IHDRpz)
3. Co-Advisor of **Julie Gross**, July 2022 – 2025. VIMS Ph.D. program. Recipient of 2024 VIMS Zeigler Student Achievement Award. <https://go.wm.edu/xZwgp6>
4. Co-Advisor of **Mahshid Ahmadian**, August 2021 –. VCU Ph.D. program. Recipient of 2022 Virginia Sea Grant Graduate Fellowship. <https://vaseagrant.org/2023-graduate-fellows>
5. Reading Committee member for **Malcolm Wolff**, October 2020 –. UWashington Ph.D. program.
6. Co-Advisor of **Challen Hyman**, September 2019 – July 2023. VIMS Ph.D. program. Dissertation title: *Empirical valuation of primary and alternative nursery habitats for the blue crab Callinectes sapidus in Chesapeake Bay*. DOI: [10.25773/v5-67a4-wq53](https://doi.org/10.25773/v5-67a4-wq53)
7. Committee member for **Julie Gross**, July 2020 – June 2022. VIMS Ph.D. program.
8. Co-primary Supervisor of **Fui Swen Kuh**, ANU Ph.D. program, May 2016 – May 2022. Thesis title: *A holistic Bayesian framework for modelling latent socio-economic health*. DOI: [10.25911/2EWY-WV46](https://doi.org/10.25911/2EWY-WV46)
9. Committee member for **Evan Flynn**, VIMS M.S. program, January 2020 – August 2021. Thesis title: *Sediment and terrestrial organic carbon budgets for the offshore Ayeyarwady Delta, Myanmar: Establishing a baseline for future change*.
10. Co-primary Supervisor of **Mark Dawkins**, ANU Honours program. February – December 2017. Graduated with High Honours. Thesis title: *Melded Bayesian Inference for Stochastic Theoretical Models with Applications in Agent Based Modelling*. <http://hdl.handle.net/1885/147060>
11. Co-supervisor of **Megan C. Evans**, ANU Ph.D. program, April 2014 – Nov 2017. Thesis title: *Public policy for biodiversity conservation: evaluating outcomes, opportunities and risks*. <http://hdl.handle.net/1885/133677>
12. Co-supervisor of **Shahedul A. Khan**, U Waterloo Ph.D. program, October 2009 – June 2010. Thesis title: *Flexible Bent-Cable Models for Mixture Longitudinal Data*. <https://uwspace.uwaterloo.ca/handle/10012/5092>

13. Primary Supervisor<sup>12</sup> of **Shahedul A. Khan**, U Waterloo Ph.D. program (co-supervised by Joel Dubin), April 2006 – September 2009.
14. Secondary Supervisor of **Sheena Y. Zhang**, U Waterloo Ph.D. program (co-supervised by Christopher Small), September 2007 – September 2009 (supervision ended due to resignation from U Waterloo).
15. Committee member for **Ryan Browne**, U Waterloo Ph.D. program, October 2007 – August 2009. Thesis title: *Leveraged Plans for Measurement System Assessment*.
16. Supervisor of **Margaret Wu**, U Waterloo **M.Math. program**, May 2008 – May 2009. Research Thesis title: *A Latent Health Factor Model for Estimating Estuarine Ecosystem Health*.  
<https://uwspace.uwaterloo.ca/handle/10012/4425>
17. Supervisor of **Joshua Gould**, U Waterloo **M.Math. program**, September 2007 – October 2008. Research Essay title: *An Application of Bayesian Melding to Ecological Networks*.  
<http://faculty.washington.edu/gchiu/Articles/gould-mmath-essay.pdf>
18. Second Reader for **Fei Yuan**, U Waterloo **M.Math. program**, March – May 2006. Research Essay title: *The Comparison of Three Machine-Learning Algorithms for the Screening of Chemical Compounds*.

## Undergraduate

1. Supervisor of **Kate Davis**, Undergraduate Research Assistant, VIMS, June–August, 2022.
2. Advisor of **Christian Longo**, William & Mary Computational & Applied Mathematics & Statistics (CAMS) Applied Statistics Honors program, 2021 – 2022. Thesis title: *Bayesian Spatial Model Development of Soil Core Organic Matter as a proxy for Blue Carbon Stocks within the Chesapeake Bay*. <https://scholarworks.wm.edu/honorsthesis/1824>
3. Advisor of **Caleb Baker**, William & Mary CAMS Honors program in Applied Statistics (inaugural student), 2020 – 2021. Thesis title: *A Diagnosis of the Computational Implementation of Bayesian Melding for the Integrated Revised Universal Soil Loss Equation (iRUSLE) Applied to Australian Subcatchments*. <https://scholarworks.wm.edu/honorsthesis/1597>
4. Supervisor of **Kayla Rutherford**, VIMS Research Experiences for Undergraduates Summer Internship, May – August 2019.
5. Primary Supervisor of **Timothy Binns**, CSIRO Agriculture Flagship Summer Vacation Studentship, December 2014 – February 2015.
6. Secondary Supervisor of **Fui Swen Kuh**, Australian National University Summer Research Scholarship, November 2014 – January 2015.
7. Primary Supervisor of **Seoyoon Cho**, CSIRO Industrial Trainee from Korea University, July – August 2014.
8. Primary Supervisor of **Hyangki Lee**, CSIRO Industrial Trainee from Korea University, July – August 2014.
9. Supervisor of **Joslin Goh**, U Waterloo Undergraduate Research Internship, January – April 2007; U Waterloo International Work Study Program, May – August 2007.

<sup>12</sup>Primary supervisor status ended due to resignation from U Waterloo.