CURRICULUM VITAE
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Personal

Australian citizen

Education

1993 B App Sci (Mathematics), Queensland University of Technology, Brisbane.
1994 B App Sci (Hons - 1st Class), Queensland University of Technology, Brisbane
2003 PhD Statistics, Queensland University of Technology, Brisbane.

Honours and Special Awards

Ruby Payne-Scott Award, 2016
This CSIRO award provides support to staff to re-establish themselves and reconnect with the research underway in their field and related fields of research, or advancements in their professional area after taking extended (maternity) leave.

Abdel El-Shaarawi Young Researcher's Award, 2013
For significant interdisciplinary collaboration and impact, the promotion and development of cutting edge statistical methods in the environmental sciences, particularly in water quality, fisheries, and ecological research, and strong contributions to expert elicitation, Bayesian hierarchical modelling, and non-parametric regression.

Julius Award, 2010
CSIRO early career research award – 3yrs funding, $150K for travel and operating

CMIS @ the Table, 2010
CSIRO Divisional award for developing externally funded, collaborative projects in the Great Barrier Reef.

Best Poster, 2009 – The International Environmetrics Society (TIES) Meeting, Bologna, Italy
Estimating the abundance of gillnet fishes using gillnet catch data – a Bayesian approach

Best Poster, 2008 – International Biometrics Conference, Dublin, Ireland.
 Estimating the abundance of gillnet fishes using gillnet catch data – a Bayesian approach.

Research Interests
Spatio-temporal modelling; machine learning; Model emulation; Bayesian Hierarchical modelling; data assimilation; Markov Chain Monte Carlo methods; uncertainty analysis; water quality and quantity; pollutant loads; environmental modelling, monitoring and reporting; trophic studies and environmental impacts.

Invitations
- **2019**
    - Invited Talk, "*Harnessing the next generation of agricultural machinery: Beyond the Tractor*", International Biometric Society Invited Papers Session, ISI World Statistics Congress, KL Malaysia, 18-23 August 2019.
    - Invited Talk, "*Vizumap: An R package for visualising uncertainty in spatial data*", ISM Symposium on Environmental Statistics 2019, The Institute of Statistical Mathematics, Japan, 25-26 March 2019.
- **2018**
    - Invited Talk, "*The Provision and Utility of Science to Decision-Makers in the face of uncertainty*", Statistics Department, University of Wollongong, 26-27 September 2018.
    - Invited Session on "*Quantifying and Communicating Uncertainty in Agricultural Modelling*", International Biometrics Conference, Barcelona, 8-13 July 2018.
- **2016**
    - Theo Murphy High Flyers Think Tank: *An Interdisciplinary approach to living in a risky world*, Canberra on 20 - 22 July 2016.
    - Plenary Speaker, ANZIAM Applied Mathematics Conference, QT Hotel Canberra, February 2016.
- **2013 and older**
    - Session organiser for The International Environmetrics Society (TIES), 2013.
    - Reviewer for NSF Proposal on "*Quantifying Uncertainty in Ecosystem Studies*"
    - Invited lecture, Southwest Fisheries Science Center, California. April 2011.
    - Invited lecture, Statistics Department, University of Missouri, Columbia, April 2011.
    - Invited lecture, Statistics Department, The Ohio State University, Columbus, April 2011.
    - Invited lecture, Statistics Department, Duke University, Durham, May 2011.
    - Invited lectures, University of California, Santa Cruz, May2011.
    - Invited lecture, SCRIPPS Institution of Oceanography, San Diego, May 2011.
    - Session organiser (with Dan Pagendam) for the Modelling and Simulation (MODSIM) conference, December 2011.

o   Invited participant, Climate Impacts on Ocean Top Predators (CLIOTOP), Working Group 3: Trophic pathways in the open ocean ecosystems, 28 September – 2 October 2009, Sete, France.

Professional Experience:

2005 – Present   Principal Research Scientist, CSIRO Data61, Black Mountain, Canberra.

2004 – 2005   Senior Statistician, Water Sciences Unit, Environmental Protection Agency, Indooroopilly, QLD.

2002 – 2004   Postdoctoral Research Fellow, The Ecology Centre, The University of Queensland, St Lucia QLD.

1997 – 1999   Statistician, Epidemiology and Population Health Unit, Queensland Institute of Medical Research, Herston, QLD.

1995 – 1997   Statistician, CSIRO Division of Mathematics and Statistics, Macquarie University, North Ryde NSW.

Contributions to the Profession
Editorial Commitments:

- Associate Editor of Environmetrics (January 2013 – January 2015)
- Organiser of Special Issue in Environmetrics on "Physical-Statistical Modelling".

Journal Reviewer:

- Environmetrics, Conservation Biology, Environmental Modelling and Software, Fisheries Research, Australia and New Zealand Journal of Statistics

Committees:
- Abdel El-Shaarawi Young Researcher's Award – 2014

Conferences:
- Scientific Program Chair for the 2019 Biometrics Conference, Adelaide.

Research Collaboration and Funding

2019   Platforms for Open Data (PFOD): Enhanced Land Management Data for Australian Croplands, NISA Funding (AU$400,000)

2017-Present   Digiscape FSP funding to develop an Uncertainty Toolbox for Agriculture ($660,000)

2014   Cutting Edge Science Symposia, "Looking in, Looking Out: agriculture and informatics seeing and yielding the potential", 28-29 May 2014, Funded by the Office of the Chief Executive (OCE), CSIRO (AU$30,000)

2013-2016	Postdoc Funding – "Bayesian Hierarchical Modelling of Great Barrier Reef Catchments", 1 September 2013 – 31 August 2016, 3 years (AU$622,000)
2013-2014	Great Barrier Reef Marine Park Authority (GBRMPA) funding: "Assessment and Review of the GBR Marine Monitoring Program", 1 year funding (AU$150,000)
2011-2013	Reef Rescue funding: "Pollutant load estimation for Great Barrier Reef (GBR) catchments: Accounting for uncertainty", 3 year funding, (AU$924,344)
2008-2010	Marine and Tropical Sciences Research Facility (MTSRF) funding: "Analysis and Synthesis of Information for Reporting Credible Estimates of Loads for Compliance against Targets and Tracking Trends in Loads", 3 year funding (AU$300,000)

Professional Society Memberships

- Statistical Society of Australia (SSA)
- American Statistical Association (ASA)
- International Biometric Society (IBS)
- The International Environmetrics Society (TIES)

Supervision

Postdoc:	Tracy Huang, CSIRO funded (July 2017 – January 2019)
Postdoc:	Daniel Gladish, CSIRO funded (September 2013 – August 2016)
CSIRO Intern:	Patrick McDermott (University of Missouri, USA, 9 October – 3 November 2017)
	Lydia Lucchesi (University of Missouri, USA, 24 July – 18 August, 2017)
	William Leeds (University of Missouri, USA, April-May 2012)
PhD students:	Lydia Lucchesi (ANU, October 2019 - Present)
	Letitia Sabburg (QUT, Starting November 2019)
	Kristin Edwards (James Cook University, 2018 - Present)
	Zoe Bainbridge (James Cook University, 2011-2016)
	Marissa McBride (University of Melbourne, 2008-2011)
Masters students:	Leonie Payne (University of Technology Sydney, 2017) – co-supervised with Dr Kirst Kitto for iLab Session.
Honours:	Elliot Dovers (The University of Queensland, 2008)
Vacation Students:	Jing Xu (Macquarie University, Nov 2008-Feb 2009),
	Elliot Dovers (The University of Queensland, Nov 2007-Feb2008)

Visitors & Collaborators

Prof. Christopher Wikle   University of Missouri, Missouri USA
Prof. Noel Cressie   University of Wollongong, Australia
Dr Robert Olson   Inter-American Tropical Tuna Commission, San Diego USA
Prof. Alan Gelfand   Duke University, North Carolina USA
Dr John Logan   Massachusetts Division of Marine Fisheries, USA
Dr Valerie Allain   Secretariat of the Pacific Community, Noumea, New Caledonia
Prof. Mark Burgman   University of Melbourne, Australia

Referees:

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Prof. Chris Wikle
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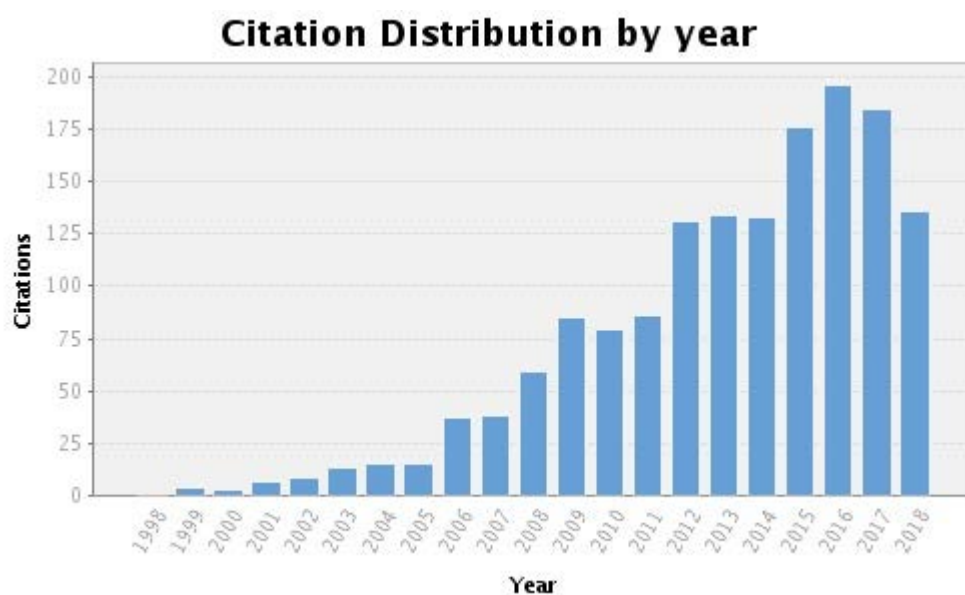Phone: +1 (573) 882-9659

Publications

Google Scholar H-Index = 24

Researcher ID H-Index = 18

Citation Distribution by year

Articles with citation data: 49

Average citations per article: 43.7

Last Updated: 03 September 2019

Refereed Scientific Publications

Quigley, M., Bennetts, L., Durance, P., **Kuhnert, P.M.**, Lindsay, M.D., Pembleton, K.G., Roberts, M.E. and White, C.J. (2019) The provision and utility of science and uncertainty to decision-makers: Synthesis and Key Findings, Environment Systems and Decisions, 39, 349-367.

Quigley, M., Bennetts, L., Durance, P., **Kuhnert, P.M.**, Lindsay, M.D., Pembleton, K.G., Roberts, M.E. and White, C.J. (2019) The provision and utility of science and uncertainty to decision-makers: Earth Science Case Studies, Environment Systems and Decisions, 39, 307-348.

Pethybridge, H., Choy, C.A., Logan, J.M., Allain, V., Lorrain, A., Bodin, N., Somes, C.J., Young, J., Menard, F., Langlais, C., Duffy, L., Hobday, A.J., **Kuhnert, P.M.**, Fry, B., Menkes, C., Olson, R.J. (2018) A global meta-analysis of marine predator nitrogen stable isotopes: Relationships between trophic structure and environmental conditions, *Global Ecology and Biogeography*, DOI: **10.1111/geb.12763**

Kuhnert, P.M., Pagendam, D.E., Bartley, R., Gladish, D.W., Lewis, S.E., Bainbridge, Z.T. (2018) Making management decisions in the face of uncertainty: a case study using the Burdekin catchment in the Great Barrier Reef, *Marine and Freshwater Research*, 10.1071/MF17237.

Kuhnert, P.M. (2018) Invited Comment: "Mission CO2ntrol: A statistical scientist's role in remote sensing of atmospheric carbon dioxide", *Journal of the American Statistical Association*, 113, 168-170.

Gladish, D.W., Pagendam, D.E., Peeters, L.J.M., **Kuhnert, P.M**. and Vaze, J. (2018) Emulation engines: choice and quantification of uncertainty for complex hydrological models, *Journal of Agricultural, Biological and Environmental Statistics*, 23, 39-62, DOI 10.1007/s13253-017-0308-3.

Duffy, L., **Kuhnert, P.**, Pethybridge, H., Young, J., Olson, R., Logan, J., Goni, N., Romanov, E., Allain, V., Simier, M., Hobday, A., Choy, A., Abecassis, M., Galvan-Magana, F., Staudinger, M., Potier, M., Menard, F. (2017) Global trophic ecology of yellowfin, bigeye and albacore tunas: can spatial analyses be used to hypothesize predation changes in a warming ocean?, *Deep-Sea Research Part II*, 140, 55-73.

Houssard, P., Lorrain, A., Tremblay-Boyer, L., Allain, V., Graham, B.S., Menkes, C.E., Pethybridge, H., Couturier, L., Point, D., Leroy, B., Receveur, A., Hunt, B., Vourey, E., Bonnet, S. Rodier, M., Raimbault, P., Feunteun, E., **Kuhnert, P.M.**, Munaron, J.M., Lebreton, B., Otake, T. and Letourneur, Y. (2017) Trophic position increases with thermocline depth in yellowfin and bigeye tuna across the Western and Central Pacific Ocean, *Progress in Oceanography*, 154, 49-63.

Kuhnert, P.M. (2017) Physical-statistical modelling (stat07863), *Wiley Statistics Reference Online*, DOI: 10.1002/9781118445112.stat07863.

Gladish, D.W., **Kuhnert, P.M.,** Pagendam, D.E., Wikle, C.K., Bartley, R., Searle, R.D., Ellis, R.J.,, Dougall, C., Turner, R.D.R., Lewis, S.E., Bainbridge, Z.T. and Brodie, J.E. (2016)

Spatio-temporal assimilation of modelled catchment loads with monitoring data in the Great Barrier Reef, *Annals of Applied Statistics,* 10, 1590-1618.

Pethybridge, H.R., Young, J., **Kuhnert, P.M.,** and Farley, J.H. (2015) Using stable isotopes of albacore tuna and predictive models to characterize biogregions and investigate ecological changes in the south-west Pacific Ocean, *Progress in Oceanography*, 134, 293-303.

Duffy, L.M., Olson, R.J., Lennert-Cody, C.E., Galvan-Magana, F., Bocanegra-Castillo, N. and **Kuhnert, P.M.** (2015) Foraging ecology of silky sharks, *Carcharhinus falciformis*, captured by the tuna purse-seine fishery in the eastern Pacific Ocean, *Marine Biology*, DOI 10.1007/s00227-014-2606-4

Young, J.W., Olson, R.J., Menard, F., **Kuhnert, P.M.,** Duffy, L.M., Allain, V., Logan, J., Lorrain, A., Goni, N., Somes, C.J., Graham, B., Pethybridge, H., Simier, M., Potier, M., Romanov, E., Pagendam, D., Hannides, C. and Choy, A. (2015) Setting the stage for a global-scale trophic analysis of marine top predators: a multi-workshop review, *Reviews in Fish Biology and Fisheries*, *DOI 10.1007/s11160-014-9368-4*.

Bainbridge, Z.T., Lewis, S.E., Smithers, S.G., **Kuhnert, P.M.,** Henderson, B.L. and Brodie, J.E. (2014) Fine suspended sediment and water budgets for a large, seasonally-dry tropical catchment: Burdekin River catchment, Queensland Australia, *Water Resources Research*, 50, 9067-9087.

Kuhnert, P.M. (2014) Physical-statistical modelling, *Environmetrics*, Special Issue - Editorial, 25: 201-202.

Pagendam, D.E., **Kuhnert, P.M.,** Leeds, W.B., Wikle, C.K., Bartley, R. and Peterson, E.E. (2014) Assimilating catchment processes with monitoring data to estimate sediment loads to the Great Barrier Reef, *Environmetrics*, Special Issue, 25: 214-229.

Olson, R.J., Duffy, L.M., **Kuhnert, P.M.,** Galvan-Magana, F., Bocanegra-Castillo, N. and Alatorre-Ramirez, V. (2014) Decadal diet shift in yellowfin tuna *Thunnus albacares* suggests broad-scale food web changes in the eastern tropical Pacific Ocean, *Marine Ecology Progress Series*, 497, 157-178.

Lewis, S.E., Bainbridge, Z.T., **Kuhnert, P.M.**, Sherman, B.S., Henderson, B., Dougall, C., Cooper, M. and Brodie, J.E. (2013) Calculating sediment trapping efficiencies for reservoirs in tropical settings: a case study from the Burdekin Falls Dam, NE Australia, *Water Resources* Research, 49, 1017-1029.

Martin, T.G., Arcese, P., **Kuhnert, P.M.,** Gaston, A.J., Martin, J-L. (2013) Prior information reduces uncertainty about the consequences of deer overabundance on forest birds, *Biological Conservation*, 165, 10-17.

Clifford, D., **Kuhnert, P.,** Dobbie, M., Baldock, J., Harch, B., McKenzie, N., Wheeler, I. and McBratney (2012) The effect of preferential sampling on sampling variance, In: Minasny, B.,

B.P. Malone and A.B. McBratney (eds) Digital Soil Assessments and Beyond: Proceedings of the Fifth Global Workshop on Digital Soil Mapping, Sydney Australia, 10-13 April 2012, CRC Press.

Kuhnert, P.M. (2012) Invited Review of "Recursive Partitioning and Applications. By H.Zhang and B.H. Singer", New York: Springer. 2010, *Australian and New Zealand Journal of Statistics*, DOI: 10.1111/j.1467-842X.2012.00684.x.

Kuhnert, P.M., Henderson, B.L., Lewis, S.E., Bainbridge, Z.T., Wilkinson, S.N. and Brodie, J.E. (2012) Quantifying total suspended sediment export from the Burdekin River catchment using the loads regression estimator tool, *Water Resources Research*, 48,DOI: 10.1029/2011WR011080.

Kuhnert, P.M., Duffy, L.M., Young, J.W. and Olson, R.J. (2012) Predicting fish diet composition using a bagged classification tree approach: a case study using yellowfin tuna (Thunnus albacores), *Marine Biology* 159, 87-100.

Darnell, R., Henderson, B. Kroon, F.J. and **Kuhnert, P.** (2012) Statistical power of detecting trends in total suspended sediment loads to the Great Barrier Reef, *Marine Pollution Bulletin*, 65, 203-209.

Kroon, F.J., **Kuhnert, P.M.,** Henderson, B.L., Wilkinson, S.N., Kinsey-Henderson, A., Abbott, B., Brodie, J.E. and Turner, R.D.R. (2012) River loads of suspended solids, nitrogen, phosphorus and herbicides delivered to the Great Barrier Reef lagoon, *Marine Pollution Bulletin*, 65, 167-181.

Martin, T.G., Burgman, M.A., Fidler, F., **Kuhnert, P.M.,** Low-Choy, S., McBride, M. and Mengersen (2012) Eliciting expert knowledge in conservation science, *Conservation Biology* 26, 29-28.

Kuhnert, P.M. (2011) Four case studies in using expert opinion to inform priors, Environmetrics, DOI: 10/1002/env.1115.

Kuhnert, P.M., Griffiths, S.P. and Brewer, D. (2011) Assessing population changes in bycatch species using fishery-dependent catch rate data, *Fisheries Research*, 108, 15-21.

Wang, Y., **Kuhnert, P.M.** and Henderson, B. (2011) Load estimation with uncertainties from opportunistic sampling data – a seminparametric approach, *Journal of Hydrology*, 396, 148-157.

Kuhnert, P.M., Martin, T.G., Griffiths, S.P. (2010) A guide to eliciting and using expert knowledge in Bayesian ecological models, *Ecology Letters*, 13, 900-914.

Kuhnert, P.M., Henderson, A-K, Bartley, R. and Herr, A. (2010) Incorporating uncertainty in gully erosion calculations using the Random Forests modelling approach, *Environmetrics*, 21, 493-509.

Griffiths, S.P., Fry, G.F., **Kuhnert, P.M.** and Manson, F.J (2009,) Temporal and size-related variation in the diet, consumption rate and daily ration of mackerel tuna (Euthynnus affinis) in the neritic regime of eastern Australia. *Journal of Fish Biology*, 66, 720-733.

Kuhnert P.M. and Hayes, K. (2009) How believable is your BBN? , In: Anderssen, R.S., R.D. Braddock and L.T.H. Newham (eds) 18th World IMACS Congress and MODSIM09 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand and International Association for Mathematics and Computers in Simulation, July 2009, pp. 4319-4325. ISBN:978-0-9758400-7-8,http://www.mssanz.org.au/modsim09/J3/kuhnert_J3.pdf.

Kuhnert P.M., Hayes, K., Martin, T.G. and McBride M. (2009) Expert opinion in statistical models, In: Anderssen, R.S., R.D. Braddock and L.T.H. Newham (eds) 18th World IMACS Congress and MODSIM09 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand and International Association for Mathematics and Computers in Simulation, July 2009, pp. 4262-4268. ISBN:978-0-9758400-7-8. http://www.mssanz.org.au/modsim09/J2/kuhnert_J2.pdf.

Wang, Y-G., **Kuhnert P.M.,** Henderson, B. and Stewart, L. (2009) Reporting credible estimates of river loads with uncertainties in Great Barrier Reef catchments. , In: Anderssen, R.S., R.D. Braddock and L.T.H. Newham (eds) 18th World IMACS Congress and MODSIM09 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand and International Association for Mathematics and Computers in Simulation, July 2009, pp. 4262-4268. ISBN:978-0-9758400-7-8. http://www.mssanz.org.au/modsim09/I4/wang_y-g.pdf.

Griffiths, S.P., **Kuhnert, P.M.,** Venables, W.N. and Blaber, S.J.M. (2007) Estimating abundance of pelagic fishes using gillnet catch data in data-limited fisheries: a Bayesian approach, *Canadian Journal of Fisheries and Aquatic Sciences*, 64, 1019-1033.

Herr, A. and **Kuhnert, P.M.** (2007) Assessment of uncertainty in Great Barrier Reef Catchment models, *Water Science Technology*, 56, 181-188.

Heales, D.S., Brewer, D.T., **Kuhnert, P.M.** and Jones, P.N. (2007) Detecting declines in catch rates of diverse trawl bycatch species and implications for monitoring, *Fisheries Research*, 84, 153-161.

Graham P., **Kuhnert P.M.,** Cook D. and Mengersen K. (2006) Improving the quality of patient care using reliability measures: A classification tree approach, *Statistics in Medicine*, 26, 184-196.

Caley, P. and **Kuhnert P.M.** (2006) Application and evaluation of classification trees for screening unwanted plants, *Austral Ecology*, 31, 647-655.

Martin T.G., Wintle B.A., Rhodes J.R., **Kuhnert P.M.,** Field S.A., Low Choy S.J., Tyre A.J. and Possingham H.P. (2005) Zero tolerance ecology: improving ecology inference by modeling the source of zero observations, *Ecology Letters*, 8, 1235-1246.

Kuhnert, P.M., Martin, T., Mengersen, K.L. and Possingham, H.P. (2005) Assessing the Impacts of Grazing Levels on Bird Density in Woodland Habitat: A Bayesian approach using expert opinion. *Environmetrics*, 16, 717-747.

Martin T.G., **Kuhnert P.M.,** Mengersen K. & Possingham H.P. (2005) The power of expert opinion in ecological models: A Bayesian approach examining the impact of livestock grazing on birds. *Ecological Applications*, 15 (1), 266-280.

Kuhnert P.M., and Do K-A. (2003), Fitting Genetic Models to Twin Data with Binary and Ordered Categorical Responses: A Comparison of Structural Equation Modelling and Bayesian Hierarchical Models, *Behavior Genetics*, 33 (4), 441-454.

Kuhnert P.M., Mengersen K. and Tesar P. (2003), Bridging the gap between different statistical approaches: An integrated approach to modeling, *International Statistical Review*, 71 (2), 335-368.

Kuhnert P.M. and Mengersen, K. (2003), Reliability Measures for Local Nodes Assessment in Classification Trees, *Journal of Computational and Graphical Statistics*, 12 (2), 398-416.

Kirk, K.M., Bellamy, N., O'Gorman, L., **Kuhnert, P.M.,** Klestov, A., Muirden, K., Tesar, P., Walker, D. and Martin, N.G. (2002) The Validity and Heritability of Self-Report Osteoarthritis in an Australian Older Twin Sample, *Twin Research*, 5(2), pp 98-106.

Kuhnert P.M., Do K-A and McClure R. (2000) Combining Non-parametric Models with Logistic Regression: An Application to Motor Vehicle Injury Data, *Computational Statistics and Data Analysis*, 34(3), pp 371-386.

Do K-A, Broom B.M., **Kuhnert P.M.,** Todorov A.A., Duffy D.L., Treloar S.A. and Martin N.G. (2000) Genetic Analysis of the Age at Menopause by using Estimating Equations and Bayesian Random Effects Models, *Statistics in Medicine*, 19(9), pp 1217-1235.

Bellamy N., Klestov A., Muirden K., **Kuhnert P.M.,** Do K-A, O'Gorman L. and Martin N. (1999) Perceptual Variation in Categorizing Individuals According to American College of Rheumatology Classification Criteria for Hand, Knee and Hip Osteoarthritis: Observations Based on an Australian Twin Registry Study of Osteoarthritis. *The Journal of Rheumatology*, 26(Dec), pp 2654-2658.

Bellamy N., Tesar P., Walker D., Klestov A., Muirden K., **Kuhnert P.M.,** Do K-A, O'Gorman L. and Martin N. (1999) Perceptual Variation in Grading Hand, Hip and Knee Radiographs: Observations Based on an Australian Twin Registry Study of Osteoarthritis, *Annals of the Rheumatic Diseases*, 58(12), pp 766-769.

Bellamy N., Klestov A., Muirden K., **Kuhnert P.M.,** Do K-A, O'Gorman L. and Martin N. (1999) Perceptual Variation in Categorizing Individual Peripheral Joints for the Presence or Absence of Osteoarthritis using a Standard Homunculus: Observations Based on an Australian Twin Registry Study of Osteoarthritis. *Inflammopharmacology*, 7(1), pp 37-46.

Khan S., Do K-A, **Kuhnert P.M.,** Pillay S.P., Papadimos D., Conrad R. and Jass J.R. (1998) Diagnostic Value of p53 Immunohistochemistry in Barret's Oesophagus: An Endoscopic Study, *Pathology*, 30(2), pp 136-140.

Gill R.W., Warren P.S., **Kuhnert P.M.,** Stone G. and Roberts, A. (1996) Improvement of Cost-effectiveness in Prenatal US through Multiparameter Fetal Risk Assessment, *Radiology*, 201, 180-180 Suppl. S, November.

Software:

Kuhnert, P.M. and Lucchesi, L. (2018) Vizumap: An R package for visualizing uncertainty in spatial data, Version v1.1.0, November 2018, DOI: 10.5281/zenodo.1479951