# Joshua F. Wiley

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Present Appointment: Lecturer (tenure-track), Monash University

# **EDUCATION**

Doctor of Philosophy – University of California, Los Angeles	2010 - 24  March  2015
Master of Arts – University of California, Los Angeles	2010 - 2011
Bachelor of Arts – University of California, Riverside (with honors)	2006 - 2010
General Coursework – Riverside Community College	2002 - 2005

# ACADEMIC SUMMARY

Lecturer at Monash University; 4 years post PhD; >\$3 million AUD in grant funding; 5 primary, 1 co-supervised doctoral students; 2 Associate/Statistical editorial positions at journals; NHMRC panel member; 11 first/last & 28 co-author peer reviewed articles; 4 books; 9 other pubs; 24 first/last & 25 co-author peer reviewed abstracts; 9 invited presentations; 6 software packages developed.

#### WORK EXPERIENCE

Monash University	June 2016 – Present	
Monash Institute of Cognitive and Clinical Neurosciences, School of Psychological Sciences		
Lecturer (tenure-track Assistant Professor)	-	
Australia Catholic University	January 2015 – June 2016	
Post Doctoral Research Fellow		
University of California, Los Angeles	June 2010 – June 2015	
Doctoral Student and Researcher: Stress & Coping Lab		
Graduate researcher: My Year After Study (1R01 CA133081)	July 2013 – March 2015	
Programmer analyst: IDRE Statistical Consulting Group	August 2011 – June 2013	
Elkhart Group Llc.	December $2016 - 2019$	
Senior adviser		
Elkhart Group Ltd.	$June\ 2013-December\ 2016$	
Senior Partner / Advisor from 2015		

Honors student and research assistant: Professor Howard Friedman's Laboratory

University of California, Riverside

# PROFESSIONAL SERVICE

September 2008 – June 2010

Associate Editor: International Journal of Behavioral Medicine	2019 - current	
Chair: Society for Health Psychology Early Career Professional Council	2019 - current	
NHMRC Investigator Grant Panel Member	2019	
Statistical Editor: Sleep	2017 - current	
Associate Editor: Frontiers in Psychology (health)	2018 - 2019	
Academic Editor: PLoS ONE	2017 - 2019	
Vice Chair: Society for Health Psychology Research Council	2015 - 2019	
Ad hoc reviewer	2015 - current	
60+ reviews for 13 journals; 97th%tile for reviews by Publons (https://publons.com/author/1340813/)		

Reviewed for grant schemes (NHMRC) & conferences (Society for Health Psych., Am. Psychosom. Society)

Member: organizing committee: useR! 2014 international conference 2014 – 2014

#### RESEARCH SUMMARY

I study the roles of risk and protective factors in the psychological and biological response to stress and cancer. Specifically, I am interested in sleep and affective science and understanding the protective role of emotion regulation factors such as approach and avoidance-oriented coping processes. I study whether and how these factors promote adjustment and health to stressful experiences including cancer and life stress. To understand how psychosocial factors lead to better health, I examine behavioral (e.g., sleep, physical activity) and physiological mechanisms (e.g., cortisol, inflammation). Examples of questions my research addresses are:

- (1) What are the trajectories of health in response to stress and are these predicted by resources or coping strategies?
- (2) What are the behavioral/physiological mechanisms linking psychosocial factors with health?
- (3) What are the characteristics of people who are resilient to or recover quickly from adverse events?

#### PEER REVIEWED PUBLICATIONS

# In Preparation

- 43. Wiley, J. F. & Crosswell, A. D. (in prep). Multi-dimensional stress index predicts all-cause mortality: Evidence from the MIDUS prospective cohort study.
- 42. MacDonald, A., Rice-Lacy, R., Yap, Y. Y., Brown, L., & Wiley, J. F. (in prep). Bi-directional association between stress and affect: An ecological momentary assessment study.
- 41. Yap, Y. Y., Shen, L., Bei, B., & Wiley, J. F. (in prep). Bi-directional relations between stress and sleep: An intensive daily study.
- 40. Wiley, J. F., Seeman, T. E., Bower, J. E., Gruenewald, T. L., & Stanton, A. L. (under review). Testing the Reserve Capacity Model in MIDUS: Biopsychosocial mechanisms linking early-life and adulthood SES to medical conditions.

#### In Press

- 39. Weihs, K. L., McConnell, M. H., Wiley, J. F., Crespi, C. M., Sauer-Zavala, S., & Stanton, A. L. (in press). A Preventive Intervention to Modify Depression Risk Targets after Breast Cancer Diagnosis: Design and Single-Arm Pilot Study. *Psycho-Oncology*.
- 38. Kane, H. S., **Wiley, J. F.**, Dunkel Schetter, C., & Robles, R. F. (in press). The effects of interpersonal emotional expression, partner responsiveness, and emotional approach coping on stress responses. *Emotion*.
- 37. Stinesen Kollberg, K. M., Wiley, J. F., Ross, K. M., Jorge, A., Hammen, C., Weihs, K. L., & Stanton, A. L. (in press). Chronic stress in vocational and intimate partner domains as predictors of depressive symptoms after breast cancer diagnosis. *Annals of Behavioral Medicine*. doi: 10.1093/abm/kay045

# 2018

- 36. Hallquist, M. N. & Wiley, J. F. (2018). MplusAutomation: An R package for facilitating large-scale latent variable analyses in Mplus. *Structural Equation Modeling*, 25(4), 621-638. doi: 10.1080/10705511.2017.1402334
- 35. Wiley, J. F., Chan, Y.-K., Ahamed, Y., Ball, J., Carrington, M. J., Riegel, B., & Stewart, S. (2018). Multimorbidity and the risk of all cause 30-day readmission in the setting of multidisciplinary management of chronic heart failure: A retrospective analysis of 830 hospitalized patients in Australia. *Journal of Cardiovascular Nursing*, 33(5), 437-445. doi: 10.1097/JCN.00000000000000391

- 34. Ortiz, M. S. & Wiley, J. F. (2018). Psychological distress predicts HbA1c trajectories among type 1 diabetic adolescents. *Universitas Psychologica*, 17(3), 1-8. doi: 10.11144/Javeriana.upsy17-3.pdpt
- Stanton, A. L., Wiley, J. F., Krull, J. K., Crespi, C. M., & Weihs, K. L. (2018). Cancer-related coping processes as predictors of depressive symptoms, trajectories, and episodes. *Journal of Consulting and Clinical Psychology*, 86 (10), 820-830.
- 32. Bower, J. E., Wiley, J. F., Petersen, L., Cole, S. W., & Ganz, P. A. (2018). Fatigue after breast cancer treatment: Biobehaioral predictors of fatigue trajectories. *Health Psychology*, 37(11), 1025-1034.
- 31. Nguyen, T.-N.-N., Spencer-Smith, M., Haebich, K. M., Burnett, A., Scratch, S. E., Cheong, J. L. Y., Doyle, L. W., Wiley, J. F., & Anderson, P. J. (2018). Language trajectories of children born very preterm and full term from early to late childhood. *Journal of Pediatrics*, 202, 86-91. doi: 10.1016/j.jpeds.2018.06.036
- Ball, J., Lochen, M.-J., Carrington, M. J., Wiley, J. F., & Stewart, S. (2018). Impact of body mass index on mortality and hospitalisation of patients with atrial fibrillation. European Journal of Cardiovascular Nursing, 17(7), 627-636. doi: 10.1177/1474515118772446
- 29. Ball, J., Lochen, M.-J., Carrington, M. J., Wiley, J. F., & Stewart, S. (2018). Mild cognitive impairment impacts health outcomes of atrial fibrillation patients undergoing a disease management intervention. *Open Heart*. doi: 10.1136/openhrt-2017-000755
- 28. Weihs, K., L. Wiley, J. F., Crespi, C. M., Krull, J. L., & Stanton, A. L. (2018). Predicting future major depression and persistent depressive symptoms: Development of a prognostic screener and PHQ4 cutoffs in breast cancer patients. *Psycho-Oncology*, 27, 420-426. doi: 10.1002/pon.4472

#### 2017

- 27. Bei, B., Seeman, T. E., Carroll, J. E., & Wiley, J. F. (2017). Sleep and physiological dysregulation: a closer look at sleep intraindividual variability. Sleep, 40(9). doi: 10.1093/sleep/zsx109
- 26. Bauer, M. R., Wiley, J. F., Weihs, K. L., & Stanton, A. L. (2017). Stuck in the spin cycle: Avoidance and intrusions following breast cancer diagnosis. *British Journal of Health Psychology*, 22(3), 609-626. doi: 10.1111/bjhp.12252
- 25. Harris, L. N., Bauer, M. R., **Wiley, J. F.**, Hammen, C., Krull, J. L., Crespi, C. M., Weihs, K. L., & Stanton, A. L. (2017). Chronic and episodic stress predict physical symptom bother following breast cancer diagnosis. *Journal of Behavioral Medicine*, 40(6), 875-885. doi: 10.1007/s10865-017-9855-x
- 24. Rapp, D. E., Dolat, M. E., **Wiley, J. F.**, & Rowe, B. (2017). Effect of concurrent prolapse repair on stress urinary incontinence outcomes following TVTO. Female Pelvic Medicine & Reconstructive Surgery, 23(4), 244-249.. doi: 10.1097/SPV.000000000000364
- 23. Wiley, J. F., Bei, B., Bower, J. E., & Stanton, A. L. (2017). Relations of psychosocial resources with allostatic load: A Systematic review. *Psychosomatic Medicine*, 79(3), 283-292. doi: 10.1097/PSY.0000000000000395
- 22. Carrington, M. J., Cohen, N., & Wiley, J. F. (2017). Blood glucose levels and glycaemic burden in 76,341 patients attending primary care: Bittersweet findings from a 9-year cohort study. *Diabetes Research and Clinical Practice*, 127, 89-96. doi: 10.1016/j.diabres.2017.02.030
- 21. Bei, B., Manber, R., Trinder, J. & Wiley, J. F. (2017). Too long, too short, or too variable? Sleep intraindividual variability and its associations with perceived sleep quality and mood in adolescents during naturalistically unconstrained sleep. Sleep, 40(2). doi: 10.1093/sleep/zsw067

# 2016

- 20. Stewart, S., Wiley, J. F., McDermott, C. J., & Thompson, D. R. (2016). Is the last "man" standing in comedy the least funny? A retrospective cohort study of elite stand-up comedians versus other entertainers. *International Journal of Cardiology*, 220. 789-793. doi: 10.1016/j.ijcard.2016.06.284
- 19. Wiley, J. F. & Carrington, M. J. (2016). A metabolic syndrome severity score: A tool to quantify cardio-metabolic risk factors. *Preventive Medicine*, 88, 189-195. doi: 10.1016/j.ypmed.2016.04.006
- Wiley, J. F., Gruenewald, T. L., Karlamangla, A. S., & Seeman, T. E. (2016). Modeling Multisystem Physiological Dysregulation. *Psychosomatic Medicine*, 78(3), 290-301. doi: 10.1097/PSY.0000000000000288

- 17. Wiley, J. F., Cleary, E. H., Karan, A., & Stanton, A. L. (2016). Disease controllability moderates the effect of coping efficacy on positive affect. *Psychology & Health*, 31(4), 498-508. doi: 10.1080/08870446.2015.1094570.
- 16. Bei, B., Wiley, J. F., Trinder, J. & Manber, R. (2016). Beyond the mean: A systematic review on the correlates of daily intraindividual variability of sleep/wake patterns. *Sleep Medicine Reviews*, 28, 104-120. doi: 10.1016/j.smrv.2015.06.003.
- Bauer, M. R., Harris, L. N., Wiley, J. F., Crespi, C. M., Krull, J. L., Weihs, K. L., & Stanton, A. L. (2016). Dispositional and situational avoidance and approach as predictors of physical symptom bother following breast cancer diagnosis. *Annals of Behavioral Medicine*. doi: 10.1007/s12160-015-9763-7.
- 14. Stewart, S., Wiley, J. F., Ball, J., Chan, Y.-K., Ahamed, Y., Thompson, D. R., & Carrington, M. J. (2016). Impact of nurse-led, multidisciplinary home-based intervention on event-free survival across the spectrum of chronic heart disease: Composite analysis of health outcomes in 1226 patients from 3 randomized trials. *Circulation*, 133, 1867-1877. doi: 10.1161/CIRCULATIONAHA.116.020730.

#### 2015

- 13. Menkin, J. A., Robles, T. F., Wiley, J. F., & Gonzaga, G. C. (2015). Online dating across the lifespan: Users' relationship goals. *Psychology and Aging*, 30(4), 987-993. doi: 10.1037/a0039722
- Stanton, A. L., Wiley, J. F., Krull, J. L., Crespi, C. M., Hammen, C., Allen, J. J. B., Barron, M. L., Jorge, A., & Weihs, K. L. (2015). Depressive episodes, symptoms, and trajectories in women recently diagnosed with breast cancer. Breast Cancer Research and Treatment, 154(1), 105-115. doi: 10.1007/s10549-015-3563-4
- Neville, T. H., Wiley, J. F., Yamamoto, M. C., Flitcraft, M., Anderson, B., Curtis, J. R., & Wenger, N. S. (2015). Concordance of nurses and physicians on whether critical care patients are receiving futile treatment. *American Journal of Critical Care*, 24(5), 403-410. doi: 10.4037/ajcc2015476
- 10. Hale, T. S., Wiley, J. F., Tung, K., Kaminski, O., McGough, J. M., McCracken, J. T., Loo, S. K. (2015). A parietal biomarker for ADHD liability: As predicted by The Distributed Effects Perspective Model of ADHD. *Frontiers in Psychiatry*, 63(6), 1-19. doi: 10.3389/fpsyt.2015.00063.
- 9. Bei, B., Wiley, J. F., Allen, N. & Trinder, J. (2015). A cognitive vulnerability model of sleep and mood in adolescents under naturalistically restricted and extended sleep opportunities. *Sleep*, 38(3), 453-461. doi: 10.5665/sleep.4508
- 8. Neville, T. H., **Wiley, J. F.**, Holmboe, E. S., Tseng, C-H, Vespa, P. M., Kleerup, E. C. & Wenger, N. S. (2015). Differences between attendings' and fellows' perceptions of futile treatment in the intensive care unit at one academic health center: Implications for training. *Academic Medicine*, 90(3), 324-330. doi: 10.1097/ACM.0000000000000017

# 2014

- 7. Brown, L. A., Wiley, J. F., Wolitzky-Taylor, K., Roy-Byrne, P., Sherbourne, C., Stein, M. B., ... Craske, M. G. (2014). Changes in self-efficacy and outcome expectancy as predictors of anxiety outcomes from the CALM study. *Depression and Anxiety*, 31(8), 678-689. doi: 10.1002/da.22256
- 6. Ortiz Parada, M., Wiley, J. F., & Chiang, J. J. (2014). How stress gets under the skin o Como el estrés psicológico se mete bajo tu piel. Revista Médica de Chile, 142(6). 767-774.
- Hale, T. S., Kane, A. M., Kaminsky, O., Tung, K. L., Wiley, J. F., McGough, J. J., Loo, S. K., & Kaplan, J. T. (2014). Visual Network Asymmetry and Default Mode Network Function in ADHD: An fMRI Study. Frontiers in Psychiatry, 5(81), 1-20. doi: 10.3389/fpsyt.2014.00081.
- Dour, H. J., Wiley, J. F., Roy-Byrne, P., Stein, M. B., Sullivan, G., Sherbourne, C. D., Bystritsky, A., Rose, R. D., & Craske, M. G. (2014). Perceived social support mediates anxiety and depressive symptom changes following primary care intervention. *Depression and Anxiety*, 31(5), 436-442. doi: 10.1002/da.22216
- 3. Langley, A. K., Falk, A., Peris, T., Wiley, J. F., Kendall, P. C., Ginsburg, G., Birmaher, B., March, J., Albano, A. M. & Piacentini, J. (2014). The Child Anxiety Impact Scale: Examining parent- and child-reported impairment in child anxiety disorders. *Journal of Clinical Child & Adolescent Psychology*, 43(4), 579-591. doi: 10.1080/15374416.2013.817311

# 2013

- Huynh, T. N., Kleerup, E. C., Wiley, J. F., Savitsky, T. D., Guse, D., Garber, B. J. & Wenger, N. S. (2013). The Frequency and cost of treatment perceived to be futile in critical care. *JAMA Internal Medicine*, 173 (20), 1887-1894. doi: 10.1001/jamainternmed.2013.10261
- 1. Wiley, J. F., Laird, K., Beran, T. M., McCannel, T. A., & Stanton, A. L. (2013). Quality of life and cancer-related needs in patients with choroidal melanoma. *British Journal of Ophthalmology* 97(11), 1471-1474. doi: 10.1136/bjophthalmol-2013-303635

#### OTHER PUBLICATIONS

# **Book Chapters/Sections**

- 3. Moreno, P. I., **Wiley, J. F.**, & Stanton, A. L. (in press). Coping through emotional approach: Emerging evidence for the utility of processing and expressing emotions in responding to stressors. in S. J. Lopez, L. Edwards, & S. Marques (Eds.) Oxford Handbook of Positive Psychology (3rd ed.). New York: Oxford University Press. doi: 10.1093/oxfordhb/9780199396511.013.19
- 2. Wiley, J. F., Gruenewald, T. L., & Seeman, T. E., (2019). Psychosocial resources and physiological dysregulation. in C. D. Ryff & R. F. Krueger (Eds.) Oxford Handbook of Integrative Health Science. Oxford University Press. 10.1093/oxfordhb/9780190676384.013.13
- 1. Wiley, J. F. & Stanton, A. L. (2016). Cancer and Mental Health. In Howard S. Friedman (Editor in Chief), *Encyclopedia of Mental Health*. 2nd edition, Vol 1, Waltham, MA: Academic Press, 2016, pp. 228-232. doi: 10.1016/B978-0-12-397045-9.00150-6

#### **Books**

- 4. Wiley, M. & Wiley, J. F. (2019). Advanced R Statistical Programming and Data Models, Apress. ISBN: 978-1-4842-2871-5.
- 3. Wiley, M. & Wiley, J. F. (2016). Advanced R: Data Programming and the Cloud, 1st edition, Apress. ISBN: 978-1-4842-2076-4. doi: 10.1007/978-1-4842-2077-1
- 2. Wiley, J. F. (2016). R Deep Learning Essentials, Packt. ISBN: 978-1-785280-58-0
- 1. Wiley, J. F. & Pace, L. (2015). *Beginning R: An Introduction to Statistical Programming*, 2nd edition, Apress. ISBN: 978-1-484203-74-3. doi: 10.1007/978-1-4842-0373-6

#### Commentaries/Letters to the Editor

- 6. Wiley, J. F. (2019). Is it time for clinical trials on indoor temperature and blood pressure? *Journal of Hypertension*. doi: 10.1097/HJH.0000000000002031.
- 5. Wiley, J. F. (2017). Birth Cohort or Measurement Protocol Differences? *Journal of Hypertension*. doi: 10.1097/HJH.000000000001273.
- 4. Wiley, J. F. (2017). Leveraging nationwide health databases to strengthen research on risk factors. *Journal of Hypertension*, 35 (4), 713-714. doi: 10.1097/HJH.000000000001273.
- 3. Wiley, J. F., Gruenewald, T. L, Karlamangla, A. S., & Seeman, T. E. (2017). Pursuing the Optimal Operationalization of Allostatic Load. *Psychosomatic Medicine*, 79(1), 119-121. doi: 10.1097/PSY.000000000000416.
- 2. Wiley, J. F. (2016). Beyond the mean: The future of cohort studies in cardiovascular disease. *Journal of Hypertension*, 34(10), 1945-1947. doi: 10.1097/hjh.000000000001061.
- 1. Wiley, J. F. (2014). Growth Curve Analysis and Visualization Using R. Journal of Statistical Software, Book Reviews, 58(2). URL: http://www.jstatsoft.org/v58/b02

#### **SOFTWARE**

6. MplusAutomation: Co-developer of MplusAutomation cited by >40 papers. Available online at http://cran.r-project.org/package=MplusAutomation
Source code at https://github.com/michaelhallquist/MplusAutomation/

- For a list of papers citing MplusAutomation, see: https://github.com/michaelhallquist/MplusAutomation/wiki/Publications-with-MplusAutomation
- 5. varian: Developer and maintainer of the R package, varian, to quantify and model variability as a latent variable using Bayesian models. Available online from https://github.com/ElkhartGroup/varian.
- 4. pscore: Developer and maintainer of the R package, pscore, a supplement to the Standardizing Physiological COmposite Risk, Endpoints (SCORE) Project, to facilitate creation and comparison of various biomarker composites. Available online from http://score-project.org.
- 3. JWileymisc: Developer and maintainer of the R package, JWileymisc, that provides utility functions facilitate data checking and visualization of assumptions as a first step to further data analyses. Available online from https://github.com/JWiley/JWileymisc.
- 2. pai: Developer and maintainer of the R package, pai, to estimated a personalized advantage index (PAI) using multiply imputed data with cross-validation, and optionally bootstrapping to construct confidence intervals.. Available online from https://github.com/JWiley/pai. Citation: Wiley, J. F. (2014). pai: Calculate bootstrapped and cross-validated personalized advantage index. R package version 0.1. doi: 10.5281/zenodo.13011.
- 1. postMCMCglmm: Developed the R package postMCMCglmm to calculate average marginal probabilities from multilevel Bayesian models. Available online from https://github.com/jwiley/postMCMCglmm. Citation:
  - Wiley, J. F. (2013). postMCMCglmm: Average marginal predicted probabilities from Bayesian ordered probit models. R package version 0.1-2. doi: 10.5281/zenodo.11461.

#### PEER REVIEWED ABSTRACTS, PRESENTATIONS, & SYMPOSIA

# First/Last Author (\* denotes student first author)

- 24. Wiley, J. F., Kogan, A. V., Allen, J. J. B., Stanton, A. L., & Weighs, K. L. (2019). Heart Rate Variability Interacts with Contextual Life Stress and Coping to Predict Depressive Symptom Trajectories: A Prospective Cohort Study in Women with Breast Cancer. Oral Symposium presentation at the Annual Meeting of the American Society.
- 23. \*Yap, Y. Y., \*Shen, L., \*Rice-Lacy, R. C., Bei, B., & Wiley, J. F. (2018). Daily Coping Moderates the Relations of Stress and Sleep: A daily study over 12 days. Oral presentation at the Annual Meeting of the Australasian Sleep Association.
- 22. \*Yap, Y. Y., \*Shen, L., \*Rice-Lacy, R. C., Bei, B., & Wiley, J. F. (2018). Daily Coping Moderates the Relations of Stress and Sleep: A daily study over 12 days. Oral presentation at the Annual Meeting of the Australasian Sleep Association.
- 21. \*Yap, Y. Y., \*Shen, L., \*Rice-Lacy, R. C., Bei, B., & Wiley, J. F. (2018). Bi-directional Relations between Daily Stress and Sleep: An Intensive Daily Study. Poster and discussion at the Annual Meeting of the Australasian Sleep Association..
- 20. \*Shen, L., \*Yap, Y. Y., \*Rice-Lacy, R. C., Bei, B., & Wiley, J. F. (2018). Daily sleep and affect: Examining the bidirectional relationship through ecological momentary assessment. Poster and discussion at the Annual Meeting of the Australasian Sleep Association.
- 19. \*Yap, Y. Y., \*Rice-Lacy, R. C., Bei, B., & Wiley, J. F. (2018). Coping Moderates the Relations of Stress and Sleep: A 12-day Study. Oral presentation at the Annual Meeting of the Associated Professional Sleep Societies.
- 18. \*Yap, Y. Y., \*Rice-Lacy, R. C., Bei, B., & Wiley, J. F. (2018). Bidirectional Relations Between Stress and Sleep: An Intensive Daily Study. Poster presentation at the Annual Meeting of the Associated Professional Sleep Societies.
- 17. Wiley, J. F., \*Rice-Lacy, R. C., \*Yap, Y. Y., \*Tuck, D., Stanton, A. L., & Bei, B. (2018). Coping Moderates the Relationship between Stress and Negative Affect: A 12-day Diary Study. Poster presentation at the Annual Meeting of the American Psychosomatic Society.

- 16. \*Rice-Lacy, R. C., \*Yap, Y. Y., & Wiley, J. F.. (2018). Daily Stress and Physical Activity Predict Positive and Negative Affect: A 12-day Ecological Momentary Assessment Study in Young Adults. Citation Poster at the Annual Meeting of the American Psychosomatic Society.
- 15. Wiley, J. F., Kogan, A. V., Allen, J. J. B., Stanton, A. L., & Weighs, K. L. (2018). Heart Rate Variability Interacts with Contextual Life Stress and Coping to Predict Depressive Symptom Trajectories: A Prospective Cohort Study in Women with Breast Cancer. Oral Symposium presentation at the Annual Meeting of the American Psychosocial Oncology Society.
- 14. Wiley, J. F., Bower, J. E., Petersen, L., & Ganz, P. A. (2017). Trajectories of C-reactive protein in the year after breast cancer treatment. Poster presentation at the Annual Meeting of the PsychoNeuroImmunology Research Society.
- 13. Wiley, J. F. (2017). Lifespan Trajectories of Sleep Quality Predict Mortality in the Midlife in the United States Study. Oral presentation at the Annual Meeting of the Associated Professional Sleep Societies.
- 12. Wiley, J. F. (2017). A matter of life and death: Psychosocial stress predicts all-cause mortality over 20 years. Oral presentation at the American Psychosomatic Society.
- 11. Wiley, J. F. (2016). Stress and sleep: Are all stressors equal?. Oral presentation at the Annual Meeting of the Associated Professional Sleep Societies.
- 10. Wiley, J. F., Seeman, T. E., Bower, J. E., & Stanton, A. L. (2016). Testing the Reserve Capacity Model in the Midlife in the United States study. Oral presentation at the Annual Meeting of the American Psychosomatic Society.
- 9. Wiley, J. F., Weihs, K. L., Crespi, C. M., Krull, J. L., Allen, J. J.B., & Stanton, A. L. (2016). *Intraindividual variability in cancer-related avoidance coping predicts depressive symptoms*. Poster presentation at the Annual Meeting of the American Psychosomatic Society.
- 8. Wiley, J. F. & Carrington, M. J. (2016). A metabolic syndrome severity score: A tool to quantify cardio-metabolic risk. Poster presentation at the Annual Meeting of the American Psychosomatic Society.
- 7. Wiley, J. F., Bei, B., Trinder, J., & Manber, R. (2015). Daily sleep variability quantified: A reliable and flexible approach. Oral presentation at the Annual Meeting of the Associated Professional Sleep Societies.
- 6. Wiley, J. F., Gruenewald, T. L., Karlamangla, A., Stanton, A. L., & Seeman, T. E. (2015). A Constellation of Psychosocial Resources are Associated with Lower Allostatic Load. Oral Symposium presentation at the Annual Meeting of the American Psychosomatic Society.
- 5. Wiley, J. F., Cleary, L., Karan, A., & Stanton, A. L. (2015). Effects of Approach- and Avoidance-Oriented Coping Depend on Disease Controllability. Poster presentation at the Annual Meeting of the American Psychosomatic Society.
- 4. Wiley, J. F., Gruenewald, T. L. & Seeman, T. E. (2014). Measurement of allostatic load in adults aged 34-84 in the Midlife in the United States Study. Poster presented at the Annual Meeting of the American Psychosomatic Society.
- 3. Wiley, J. F., Huynh, T. N., & Wenger, N. S. (2013). Methods for intuitive presentations of hierarchical categorical models: An example predicting futile treatment in critical care. Poster presented at Modern Modeling Methods.
- 2. Wiley, J. F., Kane, H. S., Dunkel Schetter, C., & Robles, T. (2013). Social constraint and romantic partner support predict salivary cortisol and alpha-amylase trajectories during an acute social stressor. Poster presented at the Annual Meeting of the Society for Behavioral Medicine.
- 1. Wiley, J. F., Laird, K., Beran, T. M., McCannel, T. A., & Stanton, A. L. (2012). Quality of Life and Cancer-Related Needs in Choroidal Melanoma Survivors. Poster presented at the Annual Meeting of the Society for Behavioral Medicine.
- 0. Wiley, J. F. (2010). Relations of Personality and Occupation with Alcohol Consumption. Oral presentation at the annual UC Riverside Symposium for Undergraduate Research, Scholarship and Creative Activity.

# Co-Authored

25. Weihs, K. L., Krull, J. K., Crespi, K., Wiley, J. F., & Stanton, A. L. (2018). Brief Psychotherapy Increases Acceptance and Emotional Expression Shortly after Breast Cancer Diagnosis. Brief paper at the Annual Meeting of the International Society for Psychotherapy Research.

- 24. Nguyen, T., Spencer-Smith, M., Doyle, L., Haebich, K., Wiley, J. F., & Anderson, P. J. (2018). Developmental trajectories of language in children born very preterm and full term. Oral presentation at the Annual Congress of the Perinatal Society of Australia and New Zealand.
- 23. Huynh, T. N., Yamamoto, M., Wiley, J. F., & Wenger, N. S. (2017). Resource Utilization and Description of Patients Perceived as having Received Inappropriate Critical Care. Poster presentation at the University of California Los Angeles Department of Medicine Research Day.
- 22. Bauer, M. R., Wiley, J. F., Weihs, K. L., & Stanton, A. L. (2017). Stuck in the spin cycle: Avoidance and intrusions following breast cancer diagnosis. Poster presentation at the annual meeting of the Society for Behavioral Medicine.
- 21. Bei, B., Wiley, J. F., Carroll, J. E., & Seeman, T. E. (2016). *Intraindividual variability in actigraphy-assessed sleep is related to allostatic load*. Oral presentation at the Annual Meeting of the American Psychosomatic Society.
- 20. Hertz, K. L., Wiley, J. F., Jorge, A., Beran, T. M., McCannel, T. A., & Stanton, A. L. (2016). Prospective predictors of post-traumatic growth in patients with ocular melanoma. Poster presentation at the Annual Meeting of the American Psychosomatic Society.
- 19. Ball, J., Wiley, J. F., Carrington, M. J., Løchen, M., & Sewart, S. (2016). Effectiveness of Disease Management in Atrial Fibrillation Patients is Modulated by Mild Cognitive Impairment. Cardiac Society of Australia and New Zealand.
- 18. Stewart, S., Wiley, J. F., Chan, Y.K., Ball, J., Thompson, D. R., & Carrington, M. J. (2015). Prolonged event-free survival in more complex cases of heart disease: Outcome data from 1,226 patients from 3 randomised tirals of nurse-led multidisciplinary home-based intervention. Oral presentation at the European Society of Cardiology Congress.
- 17. Bei, B., Wiley, J. F., Trinder, J., & Manber, R. (2015). Beyond the mean: A systematic review on the correlates of daily sleep variability. Poster presentation at the Australasian Sleep Association.
- 16. Bei, B., Wiley, J. F., Allen, N., Manber, R., & Trinder, J. (2015). Too long, too short, or too variable? Variability of daily actigraphy sleep, perceived sleep quality, and negative mood in adolescents. Poster presentation at the Australasian Sleep Association.
- 15. Bei, B., Wiley, J. F., Trinder, J., & Manber, R. (2015). Beyond the mean: A systematic review on the correlates of daily sleep variability. Poster presentation at the Annual Meeting of the Associated Professional Sleep Societies.
- 14. Bei, B., Wiley, J. F., Allen, N., Manber, R., & Trinder, J. (2015). Too long, too short, or too variable? Variability of daily actigraphy sleep, perceived sleep quality, and negative mood in adolescents. Poster presentation at the Annual Meeting of the Associated Professional Sleep Societies.
- 13. Kane, H. S., Wiley, J. F., Dunkel-Schetter, C., & Robles, T. F. (2015). The Effect of Emotional Approach Coping, Social Support and Emotional Expression on Stress Reactivity: An Experimental Test. Oral presentation at the Annual Meeting of the American Psychosomatic Society.
- 12. Weihs, K. L., Kogan, A. V., **Wiley, J. F.**, Stanton, A. L., & Allen, J. J. B. (2015). Cardiac Vagal Control and Coping Strategies as Predictors of Depression in Breast Cancer. **Oral** presentation at the Annual Meeting of the American Psychosomatic Society.
- 11. Harris, L. N., Bauer, M. R., **Wiley, J. F.**, Weihs, K. L., & Stanton, A. L. (2015). Coping in context: Examining predictors of physical symptoms in breast cancer patients. Poster presentation at the Annual Meeting of the American Psychosomatic Society.
- 10. Herts, K. L., Wiley, J. F., McCannel, T. A., & Stanton, A. L. (2015). A Test of the Impact-Engagement Model of Post-Traumatic Growth in Patients with Ocular Melanoma. Poster presentation at the Annual Meeting of the Society for Behavioral Medicine.
- 9. Bauer, M. R., Hanover, L. N., Wiley, J. F., Weihs, K. L., & Stanton, A. L. (2015). Role of Situational and Dispositional Coping in Physical Health-Related Adjustment to Breast Cancer. Poster presentation at the Annual Meeting of the Society for Behavioral Medicine.
- 8. Bei, B., Wiley, J. F., Allen, N. & Trinder, J. (2014). Testing a cognitive vulnerability model on sleep and mood in adolescents under restricted and extended sleep opportunities. Oral Presentation at the Australasian Sleep Association.
- 7. Neville, T. N., Wiley, J. F., Flitcraft, M., Anderson, B., Yamamoto, M, Curtis, J. R., & Wenger, N. S. (2014). Nurse and physician concordance on whether critical patients are receiving treatment perceived to be futile: Opportunity for collaboration. Poster presentation at the Annual Meeting of the American Society for Bioethics and Humanities.

- 6. Dour, H. J., Cohen, Z. D., Mesri, B., Wiley, J. F., Niles, A. N, DeRubeis, R. J., & Craske, M. G. (2014). To ACT or to CBT? Using prediction models to identify which treatment to implement for an anxious patient. Oral presentation at the annual meeting of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.
- 5. Bauer, M. R., Wiley, J. F., Weihs, K. L., & Stanton, A. L. (2014 May). Situational and Dispositional Avoidance Coping in Adjustment to Breast Cancer. Poster presented at 26th annual meeting of the Association for Psychological Science, San Francisco, CA.
- 4. Huynh, T. H., Wiley, J. F., Tseng, C-H., Vespa, P. M., Kleerup, E. C. & Wenger, N. S. (2014). Differences between attendings' and fellows' perceptions of inappropriate treatment in the intensive care unit. Oral presentation in the ICU Utilization and Outcomes symposium at the Annual Meeting of the American Thoracic Society. American Journal of Respiratory Critical Care Medicine, 189, pp. A2187.
- 3. Weihs, K. L., Wiley, J. F. & Stanton, A. L. (2014). Acceptance of Emotions Buffers Chronic Stress and Predicts Decline in Depressive Symptoms after Breast Cancer Diagnosis. Poster presented at the Annual Meeting of the American Psychosomatic Society.
- 2. Weihs, K. L., Wiley, J. F. & Stanton, A. L. (2013). Prospective, Longitudinal study of Emotion Acceptance and Stress Effects on Depression after Breast Cancer. Poster Presentation for the Frontiers in Science Colloquium, Arizona Health Sciences Center, Tucson, AZ. October 29, 2013.
- 1. Huynh, T. N., Wiley, J. F., Kleerup, E. C., & Wenger, N. S. (2013). The Frequency and Cost of Futile Treatment in Critical Care. Oral presentation at the Annual Meeting of the American Society for Bioethics and Humanities.

### INVITED ABSTRACTS, PRESENTATIONS, & SYMPOSIA

- 9. Wiley, J. F. symposium chair (2018). Utilizing Personalized Medicine Concepts in Evidence-Based Practice at the Annual Meeting of the American Psychological Association.
- 8. Wiley, J. F. (2018). *Remote Monitoring of Behavior*. Invited **oral presentation** at the International Biomarkers Workshop on Wearables in Sleep and Circadian Science at Baltimore, MD, USA.
- 7. Wiley, J. F. (2018). *Modern Missing Data Models*. Invited oral workshop presentation at the Treatment Selection Idea Lab 2018 Annual Meeting at the University College London.
- 6. Wiley, J. F. (2017). Stress & Health in MIDUS. Invited oral presentation at the MIDUS Meeting at the University of Wisconsin-Madison.
- 5. Wiley, J. F. (2016). Computational Interfaces. Oral presentation at the Treatment Selection Idea Lab 2016 Annual Meeting on "New Directions in Treatment Selection" at the University of Pennsylvania.
- 4. Wiley, J. F. (2016). Stress, coping resources, and pathways to health: Testing the biopsychosocial model. Colloquium presented to post doctoral researchers at the Mary MacKillop Institute for Health Research, Australian Catholic University.
- 3. Wiley, J. F. (2016). Testing the Biopsychosocial Model: The Intersection of Health Psychology and Quantitative Science. Colloquium presented to faculty and staff at the Brown University Department of Psychiatry and Human Behavior.
- 2. Wiley, J. F. (2013). *Mplus Automation: Dynamic Models & Documents with R.* Invited guest lecture at Modern Modeling Methods post conference workshop with Dr. Bengt Muthén. Available from: https://www.youtube.com/watch?v=Rm77PTrq6VY
- 1. Wiley, J. F. (2012). An integrative approach to psychosocial resources and health. Presentation at the University of California Los Angeles Health Psychology Colloquium.

#### GRANTS

8. 2019 - 2023. Australian Research Council.

Grant number:

PI (CIA): Shanthakumar Rajaratnam

Total: \$673,043 AUD

Role: chief investigator (CIC)

7. **2019 - 2020**. Military Suicide Research Consortium.

Grant number: NA PI: Lily Brown

Total: \$1,200,000 USD Role: co-investigator

6. 2018 - 2021. National Institutes of Health, National Institute of Nursing Research.

Grant number: 1R01NR017186-01A1

PIs: Johanna Czamanski-Cohen (contact), PHD and Karen L Weihs, MD.

Project Period: 09/26/2018 - 06/30/2021

Federal Award Date: 09/26/2018

Year 1: \$319,759 USD Year 2: \$324,543 USD Year 3: \$316,807 USD Total: \$961,109 USD Role: co-investigator.

- 5. 2018. Health Behavior International Collaboration Award \$3,000 USD (\$4,000 AUD).
- 4. **2017**. Ian Potter Foundation Travel Award \$1500 AUD (\$1,132 USD)
- 3. **2015**. Pilot Awardee, NIH Stress Measurement Network. \$5,000 USD (\$6,786 AUD).
- 2. **2011 2013**. Health Psychology-Population Sciences Training Grant (NIGMS T32GM084903). approx. \$73,164 USD (\$99,159 AUD).
- 1. **2011**. Graduate Summer Research Mentorship Award, UC Los Angeles. \$2,500 USD (\$3,389 AUD).

# **HONORS & AWARDS**

Jenny Redman Publication Prize for Psychological Sciences \$1,000 AUD	2018
Australasian Sleep Association Peer Prize in Sleep Research \$500 AUD (\$377 USD)	2017
American Psychosomatic Society Young Investigators Colloquium Award \$1370 USD (\$1,936 AU	(D) 2016
Second Place, Early Career Competition, MMIHR, ACU (\$500 AUD)	2016
Accepted and funded to attend the Stanford Workshop in Biodemography	2013
Chancellor's Award for Excellence in Undergraduate Research, UC Riverside	2010
Upper Division Honor's Program, UC Riverside 200	09 & 2010
Chancellor's List, UC Riverside 200	09 & 2010
Dean's Academic Distinction Award, UC Riverside 200	09 & 2010
Dean's List, UC Riverside	008 - 2010
Summer Academy for Advanced High School Students (with Honors), UC Riverside 20	006 - 2008
President's Honor Recital, Riverside Community College	2005

# **MEMBERSHIPS**

Society for Health Psychology (APA Division 38)	2011
Society for Behavioral Medicine	2011
American Psychosomatic Society	2013
Sleep Research Society	2016
Psycho-Oncology Collaborative Research Group	2016
Australasian Society of Behavioural Health and Medicine	2016

#### REVIEWING

Ad Hoc Reviewer

National Health and Medical Research Council (NHMRC) project grants.

Psychosomatic Medicine; Health Psychology; SLEEP; American Journal of Preventive Medicine; Journal of Hypertension; Journal of Consulting and Clinical Psychology; Journal of Affective Disorders; Translational Psychiatry; Royal Society Open Science; Journal of Health Psychology; PLoS ONE; International Journal of Cardiology; European Journal of Cardiovascular Nursing; Frontiers in Psychology; R Journal; Xie, Y. (2013). Dynamic Documents with R and knitr. Chapman & Hall/CRC Press; Packt Publishing (R Graph Cookbook, 2nd ed.; Statistical Analysis with R). Society for Health Psychology & American Psychosomatic Society Annual Meetings.

#### TEACHING AND SUPERVISION

## Monash University

current Lecturer and chief examiner for Honours Statistics (PSY4210), 2019 - present

current Lecturer into Doctoral Statistics (PSY6161 & PSY6103), 2019 - present

current Lecturer into Psychological Assessment (PSY4270), 2016 - present

current Lecturer into Psychological Assessment (PSY4270), 2016 - present

current Lecturer into Mental Health & Illness (PSY4120), 2016 - present

current Lecturer into Introductory Psychology (PSY1022)), 2016 - present

Lecturer and chief examiner for Research Methods & Theory (PSY3062), 2016 - 2019

# Doctoral Students, \*primary supervisor

current Jordan Macorra\*, Monash University, 1 January 2019 - present

90% load, Doctorate by Research (Doctorate of Philosphy), Clinical

Project Title: Cognitive Behaviour Therapy for Insomnia and Bright Light Therapy in Cancer.

current Isabelle Smith\*, Monash University, 1 January 2019 - present

80% load, Doctorate by Research (Doctorate of Philosphy), Clinical

Project Title: Emotion Regulation Intervention in Cancer.

current Yan Tung\*, Monash University, 1 January 2018 - present

75% load, Doctorate by Research (Doctorate of Philosphy), Clinical

Project Title: Impact of Family Environment on Naturalistic and Laboratory Stress Reactivity.

current Yi Yang Yap\*, Monash University, 1 January 2018 - present

70% load, Doctorate by Research (Doctorate of Philosphy)

Project Title: Links Between Stress and Sleep and the Moderating Role of Coping Processes.

current Helena Bean\*, Monash University, 1 January 2017 - present

80% load, Doctorate by Research (Doctorate of Clinical Psychology),

Project Title: Cognitive Behavioural and Bright Light Therapy for Better Sleep and Wellbeing in Breast Cancer: A Randomized Controlled Trial during Cancer Treatment.

current Lin Shen, Monash University, 1 January 2017 - present

10% load, Doctorate by Research (Doctor of Philosophy),

Project Title: Sleep, affect, and daytime functioning: A naturalistic study of adolescents' daily experiences.

# TECHNICAL SKILLS

# Statistical & Mathematical

Mastery of mixed effects and latent variable models

Biostatistics experience: randomized controlled trials (randomization, intention-to-treat analysis, methods oversight), survival models, ROC analysis, propensity scores

Last Updated: February 2019

Missing data experience: multiple imputation, full information maximum likelihood, joint models, non ignorable missingness with latent class/mixture analysis

Psychological experience: latent variable models for factor analysis, structural equation models, growth models, parallel process models

Machine learning experience: random forests (including for survival), gradient boosting machines, gradient boosting machines, deep and convolutional neural networks, lasso, support vector machines Specialty Topics: Bayesian factor analysis and SEM, location and scale models for modeling intraindividual variability in intensive longitudinal studies

Mastery of R and Mplus

Proficient with major packages including SAS Analytics, Stata, IBM SPSS Statistics Experience with specialty analytics software including STAN, JAGS, OpenMx Doctorate level statistics coursework in biostatistics, statistics, and quantitative psychology

#### Software

Mastery of R: A language and environment for statistical computing LATEX, BibTeX, HTML5, CSS, php bash, git, GNU Emacs, JSON, SQL, Microsoft Office, Visio Novice in Python, Matlab, Julia Windows, Ubuntu