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Qualifications

Employment

ADJUNCT RESEARCH FELLOW

Paediatrics Monash Health
MONASH UNIVERSITY
1 Jan 2014 → present

NHMRC Early Career Research Fellow

Hudson Institute of Medical Research
Clayton, Australia
1 Jan 2013 → present

Research output

Age and autonomic control, but not cerebral oxygenation, are significant determinants of EEG spectral power in children
Walter, L. M., Tamanyan, K., Weichard, A. J., Biggs, S. N., Davey, M. J., Nixon, G. M. & Horne, R. S. C., 6 Sep 2019, In: Sleep. 42, 9, 11 p., zsz118.

The impact of central and obstructive respiratory events on cerebral oxygenation in children with sleep disordered breathing

Tamanyan, K., Weichard, A., Biggs, S. N., Davey, M. J., Nixon, G. M., Walter, L. M. & Horne, R. S. C., 1 May 2019, In: Sleep. 42, 5, p. 1-10 10 p.

Overweight and obese children with sleep disordered breathing have elevated arterial stiffness

Walter, L. M., Tamanyan, K., Limawan, A. P., Biggs, S. N., Weichard, A. J., Davey, M. J., Nixon, G. M. & Horne, R. S. C., 1 Aug 2018, In: Sleep Medicine. 48, p. 187-193 7 p.

Age effects on cerebral oxygenation and behavior in children with sleep-disordered breathing

Tamanyan, K., Walter, L. M., Weichard, A., Davey, M. J., Nixon, G. M., Biggs, S. N. & Horne, R. S. C., 1 Jun 2018, In: American Journal of Respiratory and Critical Care Medicine. 197, 11, p. 1468-1477 10 p.

Slow wave activity and executive dysfunction in children with sleep disordered breathing

Christiansz, J. A., Lappin, C. R., Weichard, A. J., Nixon, G. M., Davey, M. J., Horne, R. S. C. & Biggs, S. N., May 2018, In: Sleep and Breathing. 22, 2, p. 517-525 9 p.

Regional brain tissue changes and associations with disease severity in children with sleep-disordered breathing

Horne, R. S. C., Roy, B., Walter, L. M., Biggs, S. N., Tamanyan, K., Weichard, A., Nixon, G. M., Davey, M. J., Ditchfield, M., Harper, R. M. & Kumar, R., 1 Feb 2018, In: Sleep. 41, 2, 10 p., UNSP zsx203.

The impact of sleep disordered breathing on cardiovascular health in overweight children

Horne, R. S. C., Shandler, G., Tamanyan, K., Weichard, A. J., Odoi, A., Biggs, S. N., Davey, M., Nixon, G. M. & Walter, L. M., 1 Jan 2018, In: Sleep Medicine. 41, p. 58-68 11 p.

The impact of melatonin on the sleep patterns of women undergoing IVF: a double blind RCT

Fernando, S., Biggs, S. N., Horne, R. S. C., Vollenhoven, B., Lolatgis, N., Hope, N., Wong, M., Lawrence, M., Lawrence, A., Russell, C., Leong, K., Thomas, P., Rombauts, L. & Wallace, E. M., Dec 2017, In: Human Reproduction Open. 4, 1, 10 p., hox027.

Overweight and obesity add to behavioral problems in children with sleep-disordered breathing

Biggs, S. N., Tamanyan, K., Walter, L. M., Weichard, A. J., Davey, M. J., Nixon, G. M. & Horne, R. S. C., 1 Nov 2017, In: Sleep Medicine. 39, p. 62-69 8 p.

Periodic limb movements and restless legs syndrome in children with a history of prematurity

Cielo, C. M., DelRosso, L. M., Tapia, I. E., Biggs, S. N., Nixon, G. M., Meltzer, L. J., Traylor, J., Kim, J. Y. & Marcus, C. L., 1 Feb 2017, In: Sleep Medicine. 30, p. 77-81 5 p.

The relationship between sleep-disordered breathing severity and daytime adaptive functioning in children with Down Syndrome

Nixon, G. M., Biggs, S. N., Jitpiriyaraj, S. & Horne, R. S. C., 1 Nov 2016, In: CNS Neuroscience and Therapeutics. 22, 11, p. 936-937 2 p.

Association between slow-wave activity, cognition and behaviour in children with sleep-disordered breathing

Weichard, A. J., Walter, L. M., Hollis, S. L., Nixon, G. M., Davey, M. J., Horne, R. S. C. & Biggs, S. N., 1 Sep 2016, In: Sleep Medicine. 25, p. 49-55 7 p.

Validation of actigraphy in middle childhood

Meltzer, L. J., Wong, P., Biggs, S. N., Traylor, J., Kim, J. Y., Bhattacharjee, R., Narang, I. & Marcus, C. L., 1 Jun 2016, In: Sleep. 39, 6, p. 1219-1224 6 p.

Risk factors for obstructive sleep apnoea in Australian children

Tamanyan, K., Walter, L. M., Davey, M. J., Nixon, G. M., Horne, R. S. C. & Biggs, S. N., 1 May 2016, In: Journal of Paediatrics and Child Health. 52, 5, p. 512-517 6 p.

Improved long-term autonomic function following resolution of sleep-disordered breathing in preschool-aged children

Walter, L. M., Biggs, S. N., Nisbet, L. C., Weichard, A. J., Hollis, S. L., Davey, M. J., Anderson, V., Nixon, G. M. & Horne, R. S. C., 1 Mar 2016, In: Sleep and Breathing. 20, 1, p. 309-319 11 p.

Comparison of commercial wrist-based and smartphone accelerometers, actigraphy, and PSG in a clinical cohort of children and adolescents

Toon, E., Davey, M. J., Hollis, S. J., Nixon, G. M., Horne, R. S. C. & Biggs, S. N., 2016, In: Journal of Clinical Sleep Medicine. 12, 3, p. 343 - 350 8 p.

Sleep/Wake patterns and parental perceptions of sleep in children born preterm

Biggs, S. N., Meltzer, L. J., Tapia, I. E., Traylor, J., Nixon, G. M., Horne, R. S. C., Doyle, L. W., Asztalos, E., Mindell, J. A., Marcus, C. L. & Caffeine for Apnea of Prematurity-Sleep Study Group, 2016, In: Journal of Clinical Sleep Medicine. 12, 5, p. 711 - 717 7 p.

The efficacy of the OSA-18 as a waiting list triage tool for OSA in children

Walter, L. M., Biggs, S. N., Cikor, N., Rowe, K., Davey, M. J., Horne, R. S. C. & Nixon, G. M., 2016, In: Sleep and Breathing. 20, 2, p. 837-844 8 p.

Long-term cognitive and behavioral outcomes following resolution of sleep disordered breathing in preschool children

Biggs, S. N., Walter, L. M., Jackman, A. R., Nisbet, L., Weichard, A., Hollis, S., Davey, M. J., Anderson, V. A., Nixon, G. M. & Horne, R. S. C., 29 Sep 2015, In: PLoS ONE. 10, 9, 19 p., e0139142.

Augmented cardiovascular responses to episodes of repetitive compared with isolated respiratory events in preschool children with sleep-disordered breathing

Walter, L. M., Biggs, S. N., Nisbet, L., Weichard, A., Muntinga, M., Davey, M. J., Anderson, V. A., Nixon, G. M. & Horne, R. S. C., 2015, In: Pediatric Research. 78, 5, p. 560 - 566 7 p.

Culture, extracurricular activity, sleep habits, and mental health: a comparison of senior high school Asian-Australian and Caucasian-Australian adolescents

Lushington, K., Wilson, A., Biggs, S. N., Dollman, J., Martin, J. M. & Kennedy, D., 2015, In: International Journal of Mental Health. 44, 1, p. 139 - 157 19 p.

Long-term improvements in sleep and respiratory parameters in preschool children following treatment of Sleep Disordered Breathing

Walter, L. M., Biggs, S. N., Nisbet, L., Weichard, A., Hollis, S., Davey, M. J., Anderson, V. A., Nixon, G. M. & Horne, R. S. C., 2015, In: Journal of Clinical Sleep Medicine. 11, 10, p. 1143 - 1151 9 p.

Longitudinal impact of resolution of snoring in young children on psychosocial functioning

Biggs, S. N., Walter, L. M., Jackman, A. R., Nisbet, L. C., Weichard, A., Hollis, S., Davey, M. J., Anderson, V. A., Nixon, G. M. & Horne, R. S. C., 2015, In: The Journal of Pediatrics. 167, 6, p. 1272 - 1279 8 p.

Feasibility of comprehensive, unattended ambulatory polysomnography in school-aged children

Marcus, C. L., Traylor, J., Biggs, S. N., Roberts, R. S., Nixon, G. M., Narang, I., Bhattacharjee, R., Davey, M. J., Horne, R. S. C., Cheshire, M., Gibbons, K. J., Dix, J., Asztalos, E., Doyle, L. W., Opie, G. F., D'Ilario, J., Costantini, L., Bradford, R. & Schmidt, B., 2014, In: Journal of Clinical Sleep Medicine. 10, 8, p. 913 - 918 6 p.

Long-term changes in neurocognition and behavior following treatment of sleep disordered breathing in school-aged children

Biggs, S. N., Vlahandonis, A., Anderson, V., Bourke, R. S. B., Nixon, G. M., Davey, M. J. & Horne, R. S. C., 2014, In: Sleep. 37, 1, p. 77 - 84 8 p.

Long-term effects of caffeine therapy for apnea of prematurity on sleep at school age

Marcus, C. L., Meltzer, L. J., Roberts, R. S., Traylor, J., Dix, J., D'Ilario, J., Asztalos, E., Opie, G. F., Doyle, L. W., Biggs, S. N., Nixon, G. M., Narang, I., Bhattacharjee, R., Davey, M. J., Horne, R. S. C., Cheshire, M., Gibbons, K. J., Costantini, L., Bradford, R. & Schmidt, B., 2014, In: American Journal of Respiratory and Critical Care Medicine. 190, 7, p. 791-799 9 p.

Pediatric Sleep Survey Instrument--a screening tool for sleep disordered breathing

Biggs, S. N., Nixon, G. M., Davey, M. J., Navarro, D. C. C., Kennedy, J. D., Lushington, K. & Horne, R. S. C., 2014, In: Sleep and Breathing. 18, 2, p. 383 - 390 8 p.

Pulse transit time as a surrogate measure of changes in systolic arterial pressure in children during sleep

Vlahandonis, A., Biggs, S. N., Nixon, G. M., Davey, M. J., Walter, L. M. & Horne, R. S. C., 2014, In: Journal of Sleep Research. 23, 4, p. 406 - 413 8 p.

Sleep-disordered breathing does not affect nocturnal dipping, as assessed by pulse transit time, in preschool children: evidence for early intervention to prevent adverse cardiovascular effects?

Nisbet, L., Nixon, G. M., Yiallourou, S., Biggs, S. N., Davey, M. J., Trinder, J. A., Walter, L. M. & Horne, R. S. C., 2014, In: Sleep Medicine. 15, 4, p. 464 - 471 8 p.

The Children's Report of Sleep Patterns: validity and reliability of the Sleep Hygiene Index and Sleep Disturbance Scale in adolescents

Meltzer, L. J., Brimeyer, C. T., Russell, K. M. W., Avis, K. T., Biggs, S. N., Reynolds, A. C. & Crabtree, V. M., 2014, In: Sleep Medicine. 15, 12, p. 1500 - 1507 8 p.

The conundrum of primary snoring in children: what are we missing in regards to cognitive and behavioural morbidity?

Biggs, S. N., Nixon, G. M. & Horne, R. S. C., 2014, In: Sleep Medicine Reviews. 18, 6, p. 463 - 475 13 p.

The impact of recent changes to the respiratory scoring rules in pediatrics

Nixon, G. M., Hyde, M., Biggs, S. N., Walter, L. M., Horne, R. S. C. & Davey, M. J., 2014, In: Journal of Clinical Sleep Medicine. 10, 11, p. 1217 - 1221 5 p.

Actigraphy and sleep/wake diaries

Biggs, S. N. & Horne, R. S. C., 2013, *The Oxford Handbook of Infant, Child and Adolescent Sleep and Behaviour*. Wolfson, A. R. & Montgomery-Downs, H. E. (eds.). 1st ed. USA: Oxford University Press, p. 189 - 203 15 p.

Characterization of the acute pulse transit time response to obstructive apneas and hypopneas in preschool children with sleep-disordered breathing

Nisbet, L., Yiallourou, S., Nixon, G. M., Biggs, S. N., Davey, M. J., Trinder, J. A., Walter, L. M. & Horne, R. S. C., 2013, In: *Sleep Medicine*. 14, 11, p. 1123 - 1131 9 p.

Circadian rhythm disorders among adolescents: assessment and treatment options

Bartlett, D. J., Biggs, S. N. & Armstrong, S., 2013, In: *The Medical Journal of Australia*. 199, 8, p. S16 - S20 5 p.

Gender, socioeconomic, and ethnic differences in sleep patterns in school-aged children

Biggs, S. N., Lushington, K., Martin, A. J., van den Heuvel, C. J. & Kennedy, J. D., 2013, In: *Sleep Medicine*. 14, 12, p. 1304 - 1309 6 p.

Nocturnal autonomic function in preschool children with sleep-disordered breathing

Nisbet, L., Yiallourou, S., Nixon, G. M., Biggs, S. N., Davey, M. J., Trinder, J. A., Walter, L. M. & Horne, R. S. C., 2013, In: *Sleep Medicine*. 14, 12, p. 1310 - 1316 7 p.

Preschool children with obstructive sleep apnea: the beginnings of elevated blood pressure?

Nisbet, L., Yiallourou, S., Biggs, S. N., Nixon, G. M., Davey, M. J., Trinder, J. A., Walter, L. M. & Horne, R. S. C., 2013, In: *Sleep*. 36, 8, p. 1219 - 1226 8 p.

Sleep disordered breathing in early childhood: quality of life for children and families

Jackman, A. R., Biggs, S. N., Walter, L. M., Embuldeniya, U. S., Davey, M. J., Nixon, G. M., Anderson, V. A., Trinder, J. A. & Horne, R. S. C., 2013, In: *Sleep*. 36, 11, p. 1639 - 1646 8 p.

The Children's Report of Sleep Patterns (CRSP): a self-report measure of sleep for school-aged children

Meltzer, L. J., Avis, K. T., Biggs, S. N., Reynolds, A., Crabtree, V. M. & Bevans, K. B., 2013, In: *Journal of Clinical Sleep Medicine*. 9, 3, p. 235 - 245 11 p.

Psychometric properties of an omnibus sleep problems questionnaire for school-aged children

Biggs, S., Kennedy, J. D., Martin, A. J., van den Heuvel, C. & Lushington, K., 2012, In: *Sleep Medicine*. 13, 4, p. 390 - 395 6 p.

Sleep-disordered breathing in preschool children is associated with behavioral, but not cognitive, impairments

Jackman, A. R., Biggs, S. N., Walter, L. M., Embuldeniya, U. S., Davey, M. J., Nixon, G. M., Anderson, V. A., Trinder, J. A. & Horne, R. S. C., 2012, In: *Sleep Medicine*. 13, 6, p. 621 - 631 11 p.

The Children's Report of Sleep Patterns--Sleepiness Scale: a self-report measure for school-aged children

Meltzer, L., Biggs, S., Reynolds, A., Avis, K., Crabtree, V. & Bevans, K., 2012, In: *Sleep Medicine*. 13, 4, p. 385 - 389 5 p.

Time course of EEG slow-wave activity in pre-school children with sleep disordered breathing: a possible mechanism for daytime deficits?

Biggs, S. N., Walter, L. M., Nisbet, L., Jackman, A. R., Anderson, V. A., Nixon, G. M., Davey, M. J., Trinder, J. A., Hoffmann, R., Armitage, R. & Horne, R. S. C., 2012, In: *Sleep Medicine*. 13, 8, p. 999 - 1005 7 p.

Inconsistent sleep schedules and daytime behavioral difficulties in school-aged children

Biggs, S., Lushington, K., van den Heuvel, C., Martin, A. & Kennedy, J., 2011, In: *Sleep Medicine*. 12, 8, p. 780 - 786 7 p.

Working memory in children with sleep-disordered breathing: objective versus subjective measures

Biggs, S., Bourke, R., Anderson, V., Jackman, A., Killedar, A., Nixon, G., Davey, M., Walker, A., Trinder, J. & Horne, R. S. C., 2011, In: *Sleep Medicine*. 12, 9, p. 887 - 891 5 p.

Acute sleep restriction does not affect declarative memory in 10-year-old girls

Biggs, S., Bauer, K., Peters, J., Dorrian, J., Kennedy, J., Martin, A. & Lushington, K., 2010, In: Sleep and Biological Rhythms. 8, 3, p. 222 - 225 4 p.

Differences in parental attitudes towards sleep and associations with sleep-wake patterns in Caucasian and Southeast Asian school-aged children in Australia

Biggs, S., Pizzorno, V., van den Heuvel, C., Kennedy, J., Martin, A. & Lushington, K., 2010, In: Behavioral Sleep Medicine. 8, 4, p. 207 - 218 12 p.

The sensitivity of a PDA-based psychomotor vigilance task to sleep restriction in 10-year-old girls

Peters, J., Biggs, S., Bauer, K., Lushington, K., Kennedy, J., Martin, J. & Dorrian, J., 2009, In: Journal of Sleep Research. 18, 2, p. 173 - 177 5 p.

Chasing the silver bullet: measuring driver fatigue using simple and complex tasks

Baulk, S., Biggs, S., Reid, K., van den Heuvel, C. & Dawson, D., 2008, In: Accident Analysis and Prevention. 40, 1, p. 396 - 402 7 p.

Rethinking the youth weight debate: The 24 hour day

Dodd, G., Biggs, S., Agle, D., Dollman, J. & Lushington, K., 2008, In: ACHPER Australia Healthy Lifestyles Journal. 54, 4, p. 5 - 10 6 p.

Association between sleep, BMI and waist girth in children and adolescents: a retrospective analysis

Biggs, S. & Dollman, J., 2007, In: Acta Paediatrica. 96, 12, p. 1839 - 1840 2 p.

Perception of simulated driving performance after sleep restriction and caffeine

Biggs, S., Smith, A., Dorrian, J., Reid, K., Dawson, D., van den Heuvel, C. & Baulk, S., 2007, In: Journal of Psychosomatic Research. 63, 6, p. 573 - 577 5 p.

Awards

Optimising daytime function in children with Down Syndrome through the early identification of Obstructive Sleep Apnoea

Nixon, G., Biggs, S. & Horne, R.

Jack Brockhoff Foundation: AUD30,000.00

7/09/15 → 30/09/16