

RAINE STUDY ASSESSMENTS

Gen2_25 - Personality, work and well-being survey (ARC 150103312)

Over 400 Raine Study participants completed a survey assessing personality type and working environment. Questionnaires were completed online and participants were provided with a detailed feedback report on their own results, and additional information on personal and professional development. All participants were invited to attend one of two interactive feedback meetings, facilitated by Professors Sharon Parker and Patrick Dunlop. These were well attended, enjoyable and informative. *"I really enjoyed this, it is great to actually get results explained to me!"*



Above: Sharon Parker – results presentation
Below right: Patrick Dunlop (researcher), Jenny Mountain (study manager), Annabelle Gabb (research assistant)
Below: Claire, Jess, Aislin (study participants.)



Gen1 Parents sleep study (NHMRC 1084947)

Raine Study parents originally recruited into the study, are participating in a follow-up assessment. They do an overnight sleep study in the Centre for Sleep Science, a lung function test, DXA scan, eye tests, anthropometry measures, 3D facial imaging, cognition test, complete 3 questionnaires and wear an activity monitor for a week. They also provide a blood sample. To date nearly 600 parents have participated in the study.

RAINE STUDY NOMENCLATURE

Gen0	Grandparents
Gen1	Mothers and partners originally recruited into the study
Gen2	Raine Study participants "the kids"
Gen2_25	Questionnaire follow-up of the participants at age 25 years
Gen2_27	Full assessment follow-up of the participants at 27 years of age
Gen2_30	Next planned follow-up
Gen3	Offspring of the participants

2016 ANNUAL SCIENTIFIC MEETING

Friday 30 September 2016, University Club UWA, 9 to 4 pm

All Raine Study researchers are invited to submit an abstract to present their research findings. Early career researchers and PhD students are encouraged to present on behalf of their research groups. The Raine Medical Research Foundation have kindly donated two prizes (\$750) for the best presentations by students and early career researchers.

The abstract submission form is available on the Raine Study Website <http://www.rainestudy.org.au/for-researchers/meetings-dates/> or from the Raine Study Manager.

- The deadline for abstract submission is the 31 August 2016
- Please RSVP to jenny.mountain@uwa.edu.au

Gen2_27 cohort follow-up (NHMRC 1102106)

Raine Study participants, currently around 27 years of age are invited to attend the cohort follow-up, at the Raine Study offices at UWA. The participants provide anthropomorphic measurements, have an eye test, a full body blood pressure assessment, complete questionnaires and provide biological samples. At a separate appointment, they have an MRI. The main research aim is to identify genetic and early life determinants of different ectopic fat depots, and their association with cardiometabolic outcomes.

The follow-up started in June and to date 45 participants have participated.

RECENT PUBLICATIONS

Ayonrinde OT, Adams LA, Doherty DA, et al. Adverse metabolic phenotype of adolescent girls with non-alcoholic fatty liver disease plus polycystic ovary syndrome compared with other girls and boys. *J Gastroenterol Hepatol*. 2016;31(5):980-7.

Black LJ, Burrows S, Lucas RM, et al. Serum 25-hydroxyvitamin D concentrations and cardiometabolic risk factors in adolescents and young adults. *British Journal of Nutrition*. 2016;115(11):1994-2002.

Coenen P, Smith A, Paananen M, Peter O'Sullivan P, Beales D, Leon Straker P. Trajectories of low-back pain from adolescence to young adulthood. *Arthritis Care Res* (Hoboken). 2016.

Hart RJ, Doherty DA, Keelan JA, et al. Early life events predict adult testicular function; data derived from the Western Australian (Raine) birth cohort. *J Clin Endocrinol Metab*. 2016;jc20161646.

Herbison CE, Henley D, Marsh J, et al. Characterization and novel analyses of acute stress response patterns in a population-based cohort of young adults: influence of gender, smoking, and BMI. *Stress*. 2016:1-12.

Howie EK, McVeigh JA, Smith AJ, Straker LM. Organized Sport Trajectories from Childhood to Adolescence and Health Associations. *Med Sci Sports Exerc*. 2016;48(7):1331-9.

Ing C, Wall MM, DiMaggio CJ, et al. Latent class analysis of neurodevelopmental deficit after exposure to anesthesia in early childhood. *J Neurosurg Anesthesiol*. 2016.

McVeigh J, Smith A, Howie E, Straker L. Trajectories of Television Watching from Childhood to Early Adulthood and Their Association with Body Composition and Mental Health Outcomes in Young Adults. *PLoS One*. 2016;11(4):e0152879.

Rauschert S, Uhl O, Koletzko B, et al. Lipidomics Reveals Associations of Phospholipids With Obesity and Insulin Resistance in Young Adults. *J Clin Endocrinol Metab*. 2016;101(3):871-9.

Gen3 'babies' (Autism CRC)

The assessment of Raine Study participants' offspring, aged 2 and over will start in September 2016. These children will provide information for a control group to an existing cohort of children with diagnosed autism, as well as forming part of the Raine Study.

Raine Study participants with children aged two years and above will be invited to the Telethon Kids Institute for a health assessment. This study is funded by the Autism CRC, Andrew Whitehouse et al.

RAINE STUDY RESTRUCTURE

The rapid growth of the Raine Study in the past few years means changes are required for the Raine Study to continue to grow and develop.

The Raine Study is moving towards a new formal collaborative structure for financial partners, an Unincorporated Joint Venture. This will formalise the highly successful collaborative relationships which currently exist.

The Raine Study organisational structure is also being revised to better suit the greatly expanded activities of the Raine Study. This will include greater engagement of participants and clearer portfolios.

Several aspects of the Raine Study data infrastructure are also being upgraded, to provide some information back to participants and make it easier and quicker for researchers to access data.

To better develop current research capacity and encourage more cross-discipline research the research activities will be aligned into Special Interest Groups (SIGs) within 5 overarching areas: (1) genetics, (2) phenotype, (3) behaviours, (4) environment, and (5) education and work – reflecting the life-course scientific framework of the Raine Study.

Further details will be provided at the Annual Scientific Meeting.