

Ageing and Aged Care publication list January 2021

(MACH Care of the Ageing Committee members' **bolded**)

1. The App NL-G-F mouse retina is a site for preclinical Alzheimer's disease diagnosis and research. *Acta Neuropathologica Communications, Volume 9, Issue 1, December 2021, Article number 6.*

Vandenabeele M., Veys L., Lemmens S., Hadoux X., Gelders G., Masin L., Serneels L., Theunis J., Saito T., Saido T.C., Jayapala M., De Boever P., De Strooper B., Stalmans I., **van Wijngaarden P.**, Moons L., De Groef L.

About the Research: In this study, we report the results of a comprehensive phenotyping of the retina of the AppNL-G-F mouse. We demonstrate that soluble A β accumulation is present in the retina of these mice early in life and progresses to A β plaque formation by midlife.

[Link to publication](#)

2. In utero exposure to maternal stressful life events and risk of polycystic ovary syndrome in the offspring: The Raine Study. *Psychoneuroendocrinology, Volume 125, March 2021, Article number 105104.*

Koch T., Doherty D.A., Dickinson J.E., Juul A., Hart R., Bräuner E.V., **Hickey M.**

About the Study: PCOS is the most common endocrine disorder in reproductive age women. The origins of PCOS are unknown but experimental and limited human evidence suggests that greater prenatal exposure to androgens may predispose to PCOS. Experimental evidence suggests that maternal stressors may affect reproductive function in the offspring via changes in prenatal androgen exposure. In this present study, we aim to investigate whether maternal stressful life events during pregnancy are associated with polycystic ovary morphology (PCOM) or polycystic ovary syndrome (PCOS) in adolescent offspring.

[Link to Publication](#)

3. No association between COVID-19 related liver injury and the course of disease: a retrospective study. *Scandinavian Journal of Gastroenterology, Volume 56, Issue 1, 2021, Pages 68-71.*

Sikkema B.J., Sint Nicolaas J., **van Wijngaarden P.**

About the Study: Several studies have reported on liver injury during COVID-19. However, the definition and timing of liver injury is different among the published articles. The aim of the

present study is to evaluate whether COVID-19 related liver injury at the time of first presentation is associated with the course of the disease.

[Link to Publication](#)

4. Nutrients to mitigate osteosarcopenia: the role of protein, vitamin D and calcium. Current opinion in clinical nutrition and metabolic care. Volume 24, Issue 1, 1 January 2021, Pages 25-32.

Kirk B., Prokopidis K., **Duque G.**

About the Research: Osteosarcopenia (the joint loss of bone density and muscle mass and function) is an emerging geriatric syndrome, which associates with poor health outcomes. Several nutrients including protein, vitamin D and calcium interact (directly or through absorption properties) to regulate muscle and bone metabolism. We provided an update on the efficacy of these nutrients on musculoskeletal outcomes in older adults with, or at risk of, osteosarcopenia.

[Link to Publication](#)

5. Pilates for low risk pregnant women: Study protocol for a randomized controlled trial. Journal of Bodywork and Movement Therapies, Volume 25, January 2021, Pages 240-247.

Mazzarino, M., **Morris, M.E.**, Kerr, D.

About the Research: Pilates has growing appeal to pregnant women, as a form of exercise and relaxation. It is purported to benefit lumbo-pelvic stability, as well as motor control, strength and endurance. Some suggest that modified Pilates exercises may assist low risk pregnant women to enjoy a healthier pregnancy and prepare for the physical demands of labour and birth. The feasibility and safety of Pilates during pregnancy is poorly understood. We describe the protocol for a feasibility study designed to compare a midwife-led 6-week community-based Pilates intervention with standard antenatal care.

[Link to Publication](#)

6. Unblinded by the light: amyloid-related imaging abnormalities in Alzheimer's clinical trials (Letter). European Journal of Neurology, Volume 28, Issue 1, January 2021, Page e1.

Gleason A., Ayton S., **Bush A.I.**

[Link to Publication](#)

7. Effective implementation approaches for healthy ageing interventions for older people: A rapid review. *Archives of Gerontology and Geriatrics, Volume 92, January - February 2021, Article number 104263.*

Owusu-Addo E., Ofori-Asenso R., **Batchelor F.**, Mahtani K., Brijnath B.

About the Research: Systematic reviews on healthy ageing interventions have primarily focused on assessing their effectiveness, not the implementation processes underpinning them, and the factors influencing program effectiveness. This has created a knowledge gap about what are effective implementation approaches, and how to scale up such interventions at the population level. Our aim in this rapid review was to synthesise the evidence on implementation of effective healthy ageing interventions, and to identify the factors that influence population-level implementation of these interventions.

[Link to Publication](#)

8. Orthostatic blood pressure recovery associates with physical performance, frailty and number of falls in geriatric outpatients. *Journal of hypertension, Volume 39, Issue 1, 1 January 2021, Pages 101-106.*

Mol A., Slangen L.R.N., van Wezel R.J.A., Maier A.B., Meskers C.G.M.

About the Study: Blood pressure (BP) recovery after orthostatic hypotension might be important to prevent cerebral hypoperfusion episodes in older adults, and be related to better clinical outcome. The objective was to study the relationship between BP recovery and clinical outcome, that is physical and cognitive performance, frailty and falls, in geriatric outpatients.

[Link to Publication](#)

9. Predicting outcome in older patients with cancer: Comprehensive geriatric assessment and clinical judgment. *Journal of Geriatric Oncology, Volume 12, Issue 1, January 2021, Pages 49-56.*

Versteeg K.S., Looijaard S.M.L.M., Slee-Valentijn M.S., Verheul H.M.W., Maier A.B., Konings I.R.H.M.

About the Research: Comprehensive Geriatric Assessment (CGA) has been incorporated into geriatric oncology to prevent unfavorable outcome from anticancer treatment. This study determined the value of CGA and medical oncologist's clinical judgment in predicting unfavorable outcome and explored whether treatment decisions can be based on CGA.

[Link to Publication](#)

10. Pathophysiological mechanisms explaining poor clinical outcome of older cancer patients with low skeletal muscle mass. *Acta Physiologica, Volume 231, Issue 1, January 2021, Article number e13516.*

About the Research: Low skeletal muscle mass is highly prevalent in older cancer patients and affects 5% to 89% depending on the type and stage of cancer. Low skeletal muscle mass is associated with poor clinical outcomes such as post-operative complications, chemotherapy toxicity and mortality in older cancer patients. Little is known about the mediating pathophysiological mechanisms. In this review, we summarize proposed pathophysiological mechanisms underlying the association between low skeletal muscle mass and poor clinical outcomes in older cancer patients including a) systemic inflammation; b) insulin-dependent glucose handling; c) mitochondrial function; d) protein status and; e) pharmacokinetics of anticancer drugs.

[Link to Publication](#)

11. The associations of childhood adiposity with menopausal symptoms in women aged 45-49 years: An Australian Cohort Study. *Maturitas, Volume 143, January 2021, Pages 81-88.*

He Y., Tian J., Oddy W.H., Blizzard L., Dwyer T., **Hickey M.**, Venn A.J.

About the Research: To examine the associations of childhood adiposity with menopausal symptoms in women aged 45–49 years.

[Link to Publication](#)

12. Loss of bone density and bone strength following premenopausal risk-reducing bilateral salpingo-oophorectomy: a prospective controlled study (WHAM Study). *Osteoporosis International, Volume 32, Issue 1, January 2021, Pages 101-112.*

Jiang H., Robinson D.L., Lee P.V.S., Krejany E.O., Yates C.J., **Hickey M.**, Wark J.D.

About the Research: Prophylactic oophorectomy is recommended for women at high risk for ovarian cancer, but the associated impact on bone health is of clinical concern. This prospective, controlled study demonstrated substantial loss of bone density and bone strength following surgical menopause. Postoperative hormone therapy alleviated, but not fully prevented, spinal bone loss.

[Link to Publication](#)

13. The Health and Well-Being of Transgender Australians: A National Community Survey. *LGBT Health, Volume 8, Issue 1, January 2021, Pages 42-49.*

Spanos C., Grace J.A., Leemaqz S.Y., Brownhill A., Cundill P., Locke P., Wong P., **Zajac J.D.**, Cheung A.S.

About the Research: Transgender, including gender diverse and nonbinary (trans), people experience significant health disparities. We aimed to better understand the health status and needs of Australian trans people to guide resources and health and well-being programs.

[Link to Publication](#)

14. Vitrectomy as an Aerosol-Generating Procedure in the Time of COVID-19: The VAPOR Study. *Ophthalmology Retina, Volume 5, Issue 1, January 2021, Pages 97-99*

Okada M., Sousa D.C., Fabinyi D.C.A., Hadoux X., Edwards T.L., Brown K.D., Chiu D., Dawkins R.C.H., Allen P.J., Yeoh J., **van Wijngaarden P.**

About the Research: Supplementary materials

[Link to Publication](#)

15. Longitudinal Changes in Muscle Mass, Muscle Strength, and Physical Performance in Acutely Hospitalized Older Adults. *Journal of the American Medical Directors Association. Published online January 2021.*

Aarden J.J., Reijnierse E.M., van der Schaaf M., van der Esch M., Reichardt L.A., van Seben R., Bosch J.A., Twisk J.W.R., **Maier A.B.**, Engelbert R.H.H., Buurman B.M., Kuper I., de Jonghe A., Kamper A., Posthuma N., Brendel N., Wold J., the Hospital-ADL study group

About the Research: Acute hospitalization may lead to a decrease in muscle measures, but limited studies are reporting on the changes after discharge. The aim of this study was to determine longitudinal changes in muscle mass, muscle strength, and physical performance in acutely hospitalized older adults from admission up to 3 months post-discharge.

[Link to Publication](#)

16. Retinal imaging in Alzheimer's and neurodegenerative diseases. *Alzheimer's and Dementia, Volume 17, Issue 1, January 2021, Pages 103-111.*

Snyder P.J., Alber J., Alt C., Bain L.J., Bouma B.E., Bouwman F.H., DeBuc D.C., Campbell M.C.W., Carrillo M.C., Chew E.Y., Cordeiro M.F., Dueñas M.R., Fernández B.M., Koronyo-Hamaoui M., La Morgia C., Carare R.O., Sadda S.R., **van Wijngaarden P.**, Snyder H.M.

About the Research: In the last 20 years, research focused on developing retinal imaging as a source of potential biomarkers for Alzheimer's disease and other neurodegenerative diseases, has increased significantly. The Alzheimer's Association and the Alzheimer's & Dementia: Diagnosis, Assessment, Disease Monitoring editorial team (companion journal to Alzheimer's & Dementia) convened an interdisciplinary discussion in 2019 to identify a path to expedite the development of retinal biomarkers capable of identifying biological changes associated with AD, and for tracking progression of disease severity over time. As different retinal imaging modalities provide different types of structural and/or functional information, the discussion reflected on these modalities and their respective strengths and weaknesses.

[Link to Publication](#)

17. Developing a core outcome set for future infertility research: an international consensus development study. *Fertility and Sterility, Volume 115, Issue 1, January 2021, Pages 191-200.*

Duffy J.M.N., AlAhwany H., Bhattacharya S., Collura B., Curtis C., Evers J.L.H., Farquharson R.G., Franik S., Giudice L.C., Khalaf Y., Knijnenburg J.M.L., Leeners B., Legro R.S., Lensen S., Vazquez-Niebla J.C., Mavrelou D., Mol B.W.J., Niederberger C., Ng E.H.Y., Otter A.S., Puscasiu L., Rautakallio-Hokkanen S., Repping S., Sarris I., Simpson J.L., Strandell A., Strawbridge C., Torrance H.L., Vail A., van Wely M., Vercoe M.A., Vuong N.L., Wang A.Y., Wang R., Wilkinson J., Youssef M.A., Farquhar C.M., Abou-Setta A.M., Aguilera J.J., Atanda O.O.A., Balkenende E.M.E., Barnhart K.T., Beebejaun Y., Bhattacharya S., Black M., Bofill M., Chambers G.M., Chughtai A.A., Crosby J.A., Cuevas-Sáiz I., D'Angelo A., Dubois D.D., Duckitt K., Encinas C., Fincham A., Gerval M.-O., Giang N.H., Gibreel A., Ginkel L.J., Glanville E.J., Glujovsky D., Granne I., Griesinger G., Gupta D., Hamzehgardeshi Z., **Hickey M.**, Hirsch M., Horton M., Hull M.L., Jain S., Jansa Perez M., Jones C.A., Jordan V., Kamath M.S., Kostova E., La Marca A., Khac Le T., Leader A., Li J., Loto O.M., Marks K.L., McTavish A.R., Mills D.J., Nair R.R., Thi Phuong Nguyen D., Pacey A.A., Sadler L.C., Sagle P., Schwarze J.-E., Shapiro H.M., Showell M., Siristatidis C.S., Sood A., Tu Tran C., Votteler E.L., Wang C.C., Watson A., Yossry M., Core Outcome Measure for Infertility Trials (COMMIT) initiative

About the Research: STUDY QUESTION: Can a core outcome set to standardize outcome selection, collection and reporting across future infertility research be developed? SUMMARY ANSWER: A minimum data set, known as a core outcome set, has been developed for randomized controlled trials (RCTs) and systematic reviews evaluating potential treatments for infertility.

[Link to Publication](#)

18. Fibrillar α -synuclein toxicity depends on functional lysosomes. *Journal of Biological Chemistry*, Volume 295, Issue 51, 18 December 2020, Pages 17497-17513.

Guiney S.J., Adlard P.A., Lei P., Mawal C.H., **Bush A.I.**, Finkelstein D.I., Ayton S.

About the Research: Neurodegeneration in Parkinson's disease (PD) can be recapitulated in animals by administration of α -synuclein preformed fibrils (PFFs) into the brain. However, the mechanism by which these PFFs induce toxicity is unknown. Iron is implicated in PD pathophysiology, so we investigated whether α -synuclein PFFs induce ferroptosis, an iron-dependent cell death pathway.

[Link to Publication](#)

19. Levonorgestrel intrauterine system for endometrial protection in women with breast cancer on adjuvant tamoxifen. *The Cochrane database of systematic reviews*. Volume 12, 21 December 2020, Page CD007245.

Romero S.A., Young K., **Hickey M.**, Su H.I.

About the Research: Adjuvant tamoxifen reduces the risk of breast cancer recurrence in women with oestrogen receptor-positive breast cancer. Tamoxifen also increases the risk of postmenopausal bleeding, endometrial polyps, hyperplasia, and endometrial cancer. The levonorgestrel-releasing intrauterine system (LNG-IUS) causes profound endometrial suppression. This systematic review considered the evidence that the LNG-IUS prevents the development of endometrial pathology in women taking tamoxifen as adjuvant endocrine therapy for breast cancer.

[Link to Publication](#)