June 15, 2020 newsletter.

Dear Grey House team and esteemed colleagues,

103 days into our ongoing team-building adventure. Our successive stages of adjustment have been tracked in this newsletter. **This week's newsletter theme is: Winds of Change.** Black lives matter protests, LGBT rights in the supreme court, quarantine opening up, COVID rates escalating, What's next?!?!?!?



Temi's mom Glenda Ann (center) and her sisters and friends, Coleridge High School Rebels cheerleading squad, North Carolina football season, 1952.

We've come a long way since September 2 1965, the day NC public schools were integrated. On that day, black lives mattered quite a bit. I realize that anyone younger than me went to a school that was already integrated, and anyone older than me attended a school that was all-white or all-black. The vivid memories of the first day of school 1965 belong to just a very few of us. Many of us who were there that day, especially the African American pupils, have already passed away. To learn something about that experience, next time you have a moment with someone in my age group, ask them about that special first day of school.

Next week's newsletter theme is: Books and

Streaming. What books have you read during quarantine that you would suggest to others (fiction or non-fiction). What gems have you found on streaming services? Send along enjoyable and less-well-known shows you have been watching on streaming services during stay-at-home. We will share them via the newsletter.

Meanwhile, here is the all the news I have that's fit to print since 8 June:

FIRST THE HAPPY NEWS!

Team zoom get together Tuesday 9 June was fun and heartwarming. Thank you Leah for organizing this! It was great to see everyone!

Clara tested COVID-negative. Hurrah! Pete and Jasmin say whew!

Kyle's paper is accepted, in a record 18 days from submission to acceptance!!!!

Bourassa Kyle J; David A. Sbarra; Avshalom Caspi; Terrie E. Moffitt (in press). Social Distancing as a Health Behavior: County-level Movement in the United States During the COVID-19 Pandemic is Associated with Conventional Health Behaviors". *Annals of Behavioral Medicine* https://psyarxiv.com/bt5ac submitted May 26

Temi's essay got accepted this week: Moffitt, TE. (in press). Innovations in life-course criminology: The Developmental and Life-Course Criminology Career Award David Farrington lecture, *Journal of Developmental and Life Course Criminology*.

Tracy got approval for access to the UK biobank neuroimaging data. YAY!

Our application to NIDA/NIA was scored at 8%. HURRAH! HURRAH! It's to report the outcomes of persistent heavy cannabis users. We won't know for sure if this is funded for a few months yet, but the percentile rank is within the recent funding line of the top 11%. Fingers crossed! The best bit? Collaborating with Madeline again!

Speaking of cannabis, legalisation is up for referendum in New Zealand, and Richie has been providing evidence to government:

RadioNZ interview: https://www.rnz.co.nz/national/programmes/saturday/audio/2018749540/how-does-cannabis-use-affect-new-zealanders-health

Newshub interview: https://www.newshub.co.nz/home/new-zealand/2020/06/cannabis-referendum-study-finds-most-kiwis-have-tried-it-without-negative-effects.html

Avshalom's mom, Gila, allowed outdoors for the first time in 3 months.



Methylation Pace of Aging picks up steam in the literature:

[PDF] Analysis of socioeconomic disadvantage and pace of aging measured in saliva DNA methylation of children and adolescents

LAS Raffington, DW Belsky, M Malanchini... - bioRxiv, 2020

Children who grow up in socioeconomically disadvantaged families face increased burden of disease and disability as they mature into adulthood. One hypothesized mechanism for this increased burden is that early-life disadvantage and its ...

[HTML] <u>Aging and Geroscience: Putting epigenetic biomarkers to the test for</u> clinical trials

JN Justice, SB Kritchevsky - Elife, 2020

Reliable biomarkers are needed to test the effectiveness of interventions intended to improve health and extend lifespan.

Jasmin and her collaborator Susanne (co-Pls on a small Jacobs grant, on youth and social media submitted the pre-registration for the online experiment part of the project: "The effect of social evaluative threat on learning and well-being in young people".

HAPPY BIRTHDAYS	JUNE	
Aaron		25-Jun

NEXT, THE UNHAPPY NEWS:

Jasmin's car towed, came to a stop in the middle of 9th street (Booo!).



Science visualizations:

Definitely watch this **animated data visualization** from the Global Burden of Disease folks. Both beautiful and amazing. And it moves.

https://public.flourish.studio/visualisation/2637725/

I didn't realize malaria was that deadly. Honalee

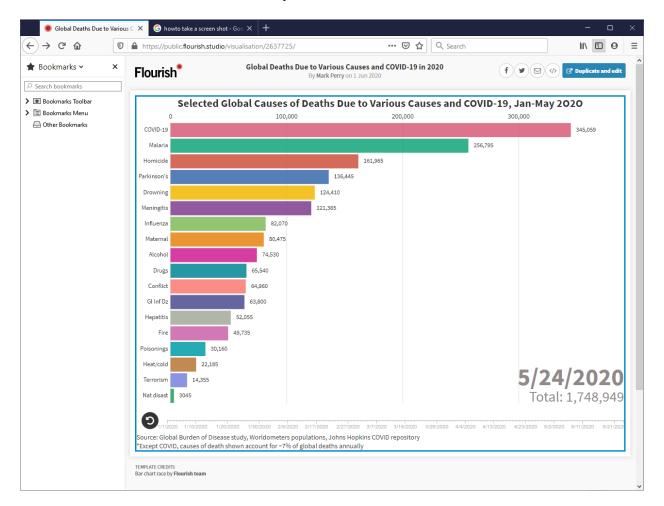
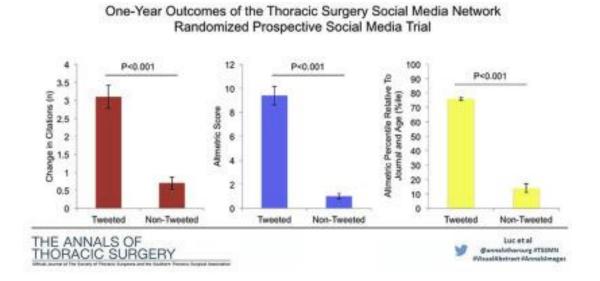
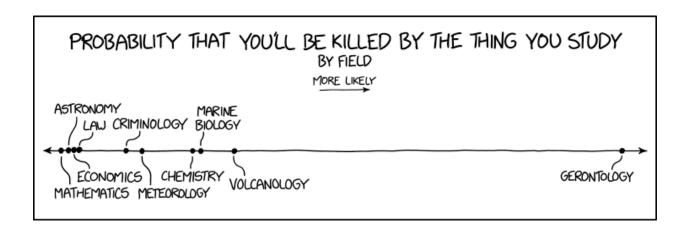


Figure below shows results from a randomised controlled trial of whether tweeted papers get more citations (they do!):

https://pubmed.ncbi.nlm.nih.gov/32504611/



Here is an amusing little graphic found by Jasmin, for those of you studying the Pace of Aging. Beware!



RESEARCH-PROJECT PROGRESS SINCE 8 June:

We have a large number of papers that have been sitting in review for weeks. The entire scientific publishing industry has slowed to a crawl. This can feel dispiriting, so I'm only going to report papers here that have evidence of progress. Chin up!

New Concept paper: Bob Hancox, Cannabis and lung function at 45.

Graham Wilson's vision paper entered mock review. Are macular drusen in midlife a marker of accelerated biological ageing?

Max and Avshalom's paper is in mock reviews this week: Disparities in the pace of biological aging among midlife adults of the same chronological age: Implications for early frailty risk and policy. THANKS TO ALL DOING MOCKS!

Christina Carlisi and Essi Viding's paper is in mock reviews this week:

Associations between life-course-persistent antisocial behavior and subcortical brain volume in a population-representative longitudinal birth cohort. THANKS TO ALL DOING MOCKS!

Maria Gehred's first-year project paper will be submitted this week. Long-term neural embedding of adverse childhood experiences: a population-representative birth cohort followed for five decades. **Good luck Maria!**

New submission from our Dutch collaborators: Boomsma, D., Van Dongen, J. et al. (submitted). Identical twins carry a lifelong epigenetic signature from gastrulation. *Nature.*

Kyle's paper was resubmitted this week: Intimate partner violence and lower relationship quality are associated with faster biological aging. *Psychology & Aging R&R*

Projects underway and making good progress on the march toward mock review:

Aaron Reuben and Helen Fisher, air pollution and mental health (E-Risk).

Leah Richmond-Rakerd, Barry Milne, Stephanie D'Souza, mental disorder predicts physical disease and mortality (NZ-IDI)

Jasmin Wertz, Little p psychiatric history and pace of aging (Dunedin)

Leah and Signe Andersen, education disrupts the intergenerational transmission of disadvantage (Danish registers)

Jasmin Wertz, parenting genomics in multiple cohorts (many cohorts)

Kyle Bourassa and Line Rasmussen, stressful life events and suPAR (Dunedin)

Max Elliott & Line Rasmussen brain and suPAR (Dunedin)

Karen Sugden, education and the methylation pace of aging (many cohorts)

Geli Ronald and Lizzie, Autism Q and p (Dunedin)

Franky Happe and David, Autism Q and midlife health (Dunedin)

Antony Ambler and Sean Hogan are making progress on finalizing the data set for family history of dementia, collected by the Dunedin Unit team in recent months through phone-call interviews with Study Member's mums. Variables ready soon!

Honalee's been on a roll with new ideas for measures. What about an equivalent of pack years, but for blood pressure?

Renate's been doing some massive data checking jobs. Like the Pace of Aging 45 paper. Thank you for that!

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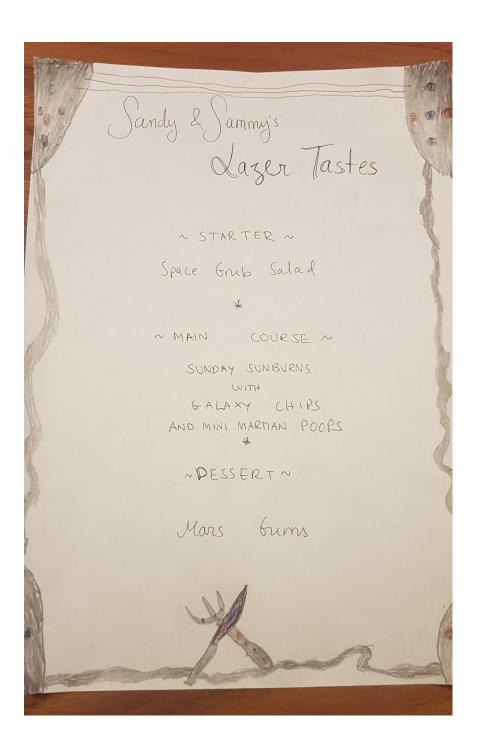
Everyone is seeking change now, more than ever. Change is in the air!

Winds of change at the BBC. Apparently bored with COVID and bored with Black Lives protests, BBC actually headlined a story about a lady who hatched two ducks from eggs bought at a Waitrose supermarket. **Woman hatches ducks from Waitrose eggs.**

Beep, Peep and Meep started life on a supermarket shelf.....
Read in BBC News: https://apple.news/AJIL9CXq4TXOzLzuaKsLbYw



Essi's son Milo is ready to change galaxies, Milo designed a whole new galaxy, plus a restaurant with strange inhabitants, much nicer than the Earth (not that hard to achieve). Milo set up an alien restaurant in their London kitchen (Essi was the two headed chef), complete with a menu to suit all sorts of Martian palates (see below). Fellow aliens sister Ava and dad John were invited to enjoy the fare. Essi's favourite dish was Mini Martian Poops (peas). :-)



Another rather alien menu, from Jasmin's kitchen, following on from the ongoing discussion of the merits of white asparagus in past newsletters.



Winds of change on the Macon farm? Avshalom and I switched the sides of the bed we sleep on, to get that vacation feeling. It gives you the same experience of waking up in the middle of the night in a strange hotel room and for a minute not knowing where you are!

Oscar meets Clara. Clara meets Oscar.



A spectacularly difficult jigsaw puzzle, from Leah:



Madeline's daughter Cecelia, a Grey House postdoc product, and her friend, change into mermaids! How tall she has grown, even without the tail!



Winds of change! New Zealand has sports events again, with enormous crowds of fans!



Parting shot: Don't forget your social distancing!



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