

Dear Grey House team members and esteemed quaranteammates, we are now 318 days into our team-building exercise together.

11 January 2021 theme: "Well, we had 5 good days into 2021....roll on 2022!"

Dear readers, I've tried to stay scrupulously away from politics in this newsletter, but this guy is too good to pass up. The very photogenic Mr. Jake Angeli, occupation voice-over artist, from Arizona, visited our nation's capitol on January 5th. Jake styles himself a "shaman" for Q-anon, which is about as close to a mental health professional as it's possible to be.



I WANT JAKE'S HAT (My birthday is 9th March)

But he can keep his 6-foot spear. OK, no more politics, promise!

THE HAPPY NEWS FIRST:

COVID-19 vaccines are now available at Duke for anyone over 75. You do not have to be a Duke patient to get one. **I booked my Dad**, its an easy orderly process.

Phase 1a Winter

Health care workers in high-risk COVID-19 areas and long-term care facilities' staff and residents.

- This includes health care workers caring for and working directly with patients with COVID-19, including staff responsible for cleaning and maintenance in those areas.
- Health care workers administering the vaccine
- Long-term care staff and residents -- people in skilled nursing facilities and in adult, family, and group homes

Phase 1b Winter

Adults 75 and older and front-line essential workers.

- Group 1: Anyone age 75 and older, regardless of health status or living situation
- Group 2: Health care workers and front-line essential workers, age 60 and older*
- Group 3: Health care workers and front-line essential workers of any age

Phase 2 Spring

Adults at high risk for exposure and at increased risk of severe illness.

- Group 1: Anyone age 65-74, regardless of health status or living situation
- Group 2: Anyone age 16-64 with high-risk medical conditions that increase the risk of severe disease from COVID-19
- Group 3: Anyone who is incarcerated or living in other close group living settings who is not already vaccinated due to age, medical condition, or job function
- Group 4: Essential workers not yet vaccinated**

Phase 3 Summer

- College students
- Students age 16 and over. Younger children will be vaccinated when the vaccine is approved for this age group.

Phase 4 Summer

- Everyone who wants a safe and effective COVID-19 vaccination

* The CDC defines front-line essential workers as first responders (e.g. firefighters and police officers), corrections officers, food and agricultural workers, U.S. Postal Service workers, manufacturing workers, grocery store workers, public transit workers, and those who work in the education sector (teachers and support staff) as well as child care workers.

<https://www.dukehealth.org/covid-19-update/covid-19-vaccine-update?fbclid=IwAR2giVyPqiEMlpXlclGzwh7kacP9tlcoVXYvbR6GI5zZqC8Ugx2L2DOS tQ8>

A London team member sent this entry from Samuel Pepys diary -

"The Year of Our Lorde 1665 hathe been such a terrible one for ye plague. I cannot wait for 1666, for which I have especial excitement to trye the newe bakery that hath opened on Pudding Lane."

More good virus news:

Mutation in SARS-CoV-2 Variant Does Not Affect Vaccine: Study

An engineered coronavirus with the N501Y mutation—one of many mutations present in the emerging B.1.1.7 and 501.V2 variants of the coronavirus—is neutralized by the sera of COVID-19 vaccine recipients. Jan 8, 2021. Serum samples from 20 individuals who received the Pfizer-BioNTech vaccine against SARS-CoV-2 thwarted a version of the coronavirus with the so-called N501Y mutation, according to a preprint posted to [bioRxiv](#) yesterday (January 7). This mutation is one of many sequence changes present in the [B.1.1.7](#) and [501.V2](#) variants of SARS-CoV-2 that were first detected in the UK and South Africa, respectively, and are now rapidly spreading around the world. “There’s no reason to think the vaccines won’t work just as well on these strains,” Frederic Bushman of the University of Pennsylvania who tracks how the virus mutates and was not involved in the work, tells the [Associated Press](#).

Stephanie Langevin gets closer to joining us!!! She has been given an offer by Duke (thank you Susan!), and she has accepted it, and is now awaiting her visa so she can cross the border. The plan is to arrive in Durham the last week of January. Keep fingers crossed for Stephanie. **And if you have good ideas for where she can live, or even stay for a while, please come forward!!!!**

5 January 2021: Professor Francesca Happé awarded a CBE!!! Congratulations to Professor Francesca Happé who has been recognised in the Queen’s New Year Honours 2021 as Commander of the British Empire. Franky is writing up the autism data collected in Dunedin at Phase 45.



NEXT, THE UNHAPPY NEWS:

Our Antony Ambler returned to London from Leeds last Monday and ended up in hospital with pancreatitis the following day. He is doing well but as you can all imagine, this is not a great time to be in hospital. Hopefully he will be discharged at some point this coming week. We have sent him a meal service, so he doesn't have to worry about meals when he gets home to the flat. An e-card will be sent by Louise Arseneault on Wednesday January 13th. You can sign it here:

<https://www.groupgreeting.com/sign/33d7781c2386c1e>.

Sad news: Michael Apted, filmmaker behind innovative 'Seven Up!' documentary series, dies at 79. Every seven years, he followed the lives of 14 British youths; he also made "Coal Miner's Daughter," "Nell" and other feature films.

https://www.washingtonpost.com/local/obituaries/michael-aped-dead/2021/01/09/54a3d07e-51f7-11eb-83e3-322644d82356_story.html



The original film, 7-up, included 14 children, but only 4 girls, shown above at about the same age as the last Dunedin Study phase (one girl died, so you see 3 above). Michael Apted explained in the NY Times interview, "In Britain we didn't have the Vietnam war,

or civil rights movement, or anything like that, but I think the major social change during my lifetime has been a change in women's roles." In the last follow-up, the women above criticized Apted roundly for only ever asking them about boyfriends and babies, whereas he interviewed the male participants about school and work.

People often ask me about the Dunedin Study, and say "oh right its just like that 7-up film." One thing I am proud of is that in the Dunedin Study we ask every Study Member the same questions, always.

Another way the Dunedin Study differs from 7-up: confidentiality and professional conduct toward our Study members are of paramount importance to all staff.



R.I.P Michael.

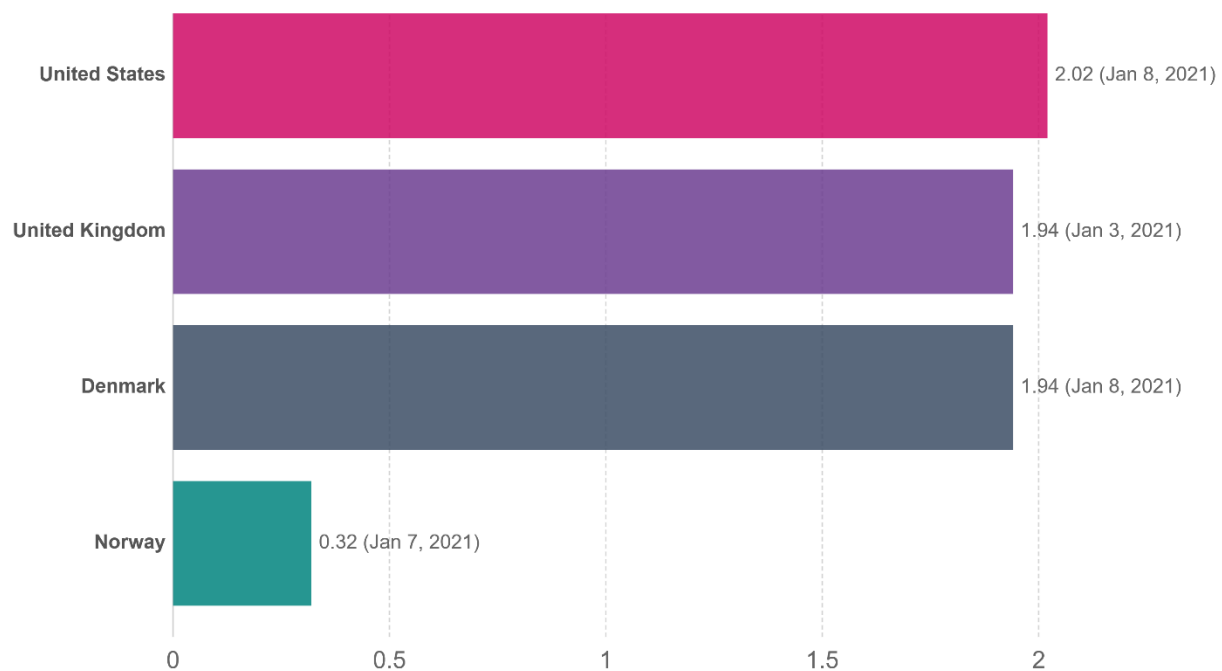
THIS WEEK's Science visualizations: from <https://ourworldindata.org/covid-vaccinations>

For this graph, I selected countries where team members live. Sorry, no data for New Zealand yet.

Cumulative COVID-19 vaccination doses administered per 100 people, Jan 8, 2021



This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).



Source: Official data collated by Our World in Data

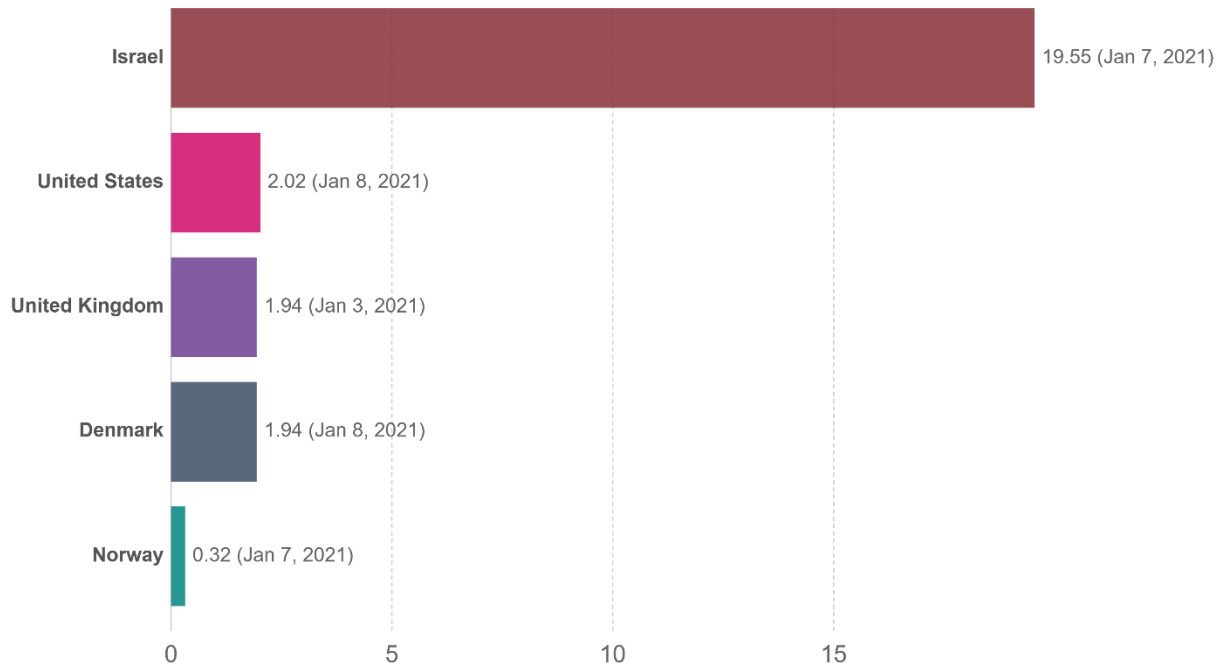
CC BY

But now, check the next page.

Cumulative COVID-19 vaccination doses administered per 100 people, Jan 8, 2021

Our World
in Data

This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).



Source: Official data collated by Our World in Data

CC BY

Organisation and logistics always pay off. Always.

RESEARCH-PROJECT PROGRESS SINCE 4 January:



First team publication of 2021! Leah's paper on childhood self-control and midlife aging is now available online open-access at PNAS, "Childhood self-control forecasts the pace of midlife aging and preparedness for old age,": <https://www.pnas.org/content/118/3/e2010211118>

Altmetric = 365!!!

Nice coverage: <https://www.inverse.com/mind-body/self-control-can-slow-aging>

Signe's new paper in *JAMA-Network Open* is out too, three days later! Signe worked on this paper when visiting Grey House. "Association of Youth Age at Exposure to Household Dysfunction With Outcomes in Early Adulthood"
https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2774706?utm_source=ForTheMedia&utm_medium=referral&utm_campaign=ftm_links&utm_term=010721

Jessica Agnew-Blais's paper is out today in JAACAP!

<https://www.jaacap.org/action/showPdf?pii=S0890-8567%2821%2900001-0>
Agnew-Blais, J., Belsky, D., Caspi, A., Danese, A., Moffitt, T.E., Polanczyk, G., Sugden, K., Williams, B., Wertz, J., Lewis, C., Arseneault, L. (2021). Polygenic risk and the course of attention-deficit/hyperactivity disorder from childhood to young adulthood: Findings from a nationally-representative cohort. *Journal of the American Academy of Child and Adolescent Psychiatry*. (doi.org/10.1016/j.jaac.2020.12.033).

Jenny van Dongen and Karen's paper is out too today in *Molecular Psychiatry* !

"DNA methylation signatures of aggression and closely related constructs: A meta-analysis of epigenome-wide studies across the lifespan" is now online at <https://rdcu.be/cdhsC>

Helen and Jamie's paper is also out! Murphy J, Shevlin M, Arseneault L, Bentall R, Caspi A, Danese A, Hyland P, Moffitt TE, Fisher HL (2021). Externalizing the threat from within: A new direction for researching associations between suicide and psychotic experiences. *Development and Psychopathology*, doi: 10.1017/S0954579420001728

Leah's paper will launch on Wednesday in JAMA-Network Open: "Longitudinal associations of mental disorders with physical diseases and mortality in 2.3 million New Zealand citizens" Leah S. Richmond-Rakerd, Stephanie D'Souza, Barry J. Milne, Avshalom Caspi, Terrie E. Moffitt.

Here is the link to the study, which will go live after the embargo lifts on Wednesday:

[http://jamanetwork.com/journals/jamanetworkopen/fullarticle/10.1001/jamanetworkopen.2020.33448?utm_source=For The Media&utm_medium=referral&utm_campaign=ftm_links&utm_term=011321](http://jamanetwork.com/journals/jamanetworkopen/fullarticle/10.1001/jamanetworkopen.2020.33448?utm_source=For%20The%20Media&utm_medium=referral&utm_campaign=ftm_links&utm_term=011321)



Papers of the Month

◀ Previous Article

Next Article ▶

Aaron's and Max's paper has been selected for paper of the month: Childhood lead exposure affects midlife brain.

Children exposed to lead have altered brain structure and poorer cognitive function in midlife, according to NIEHS-funded research. These lead-related brain changes may increase the risk of neurodegenerative disease, like dementia, in later life.

The study included 564 children who were enrolled in a New Zealand birth cohort in the early 1970s and followed to midlife. The researchers measured child blood lead levels at age 11 years. Using magnetic resonance imaging, they examined participants' structural brain integrity at age 45 years. They also assessed adult cognitive function and intelligence using a standardized IQ test.

Higher lead exposure in childhood was associated with structural deficits in the middle-aged brain. High child blood lead levels were linked to reduced volumes of gray and white matter in the brain, which are important for learning, memory, and communication between brain regions. Participants with higher blood lead as children also scored lower in IQ tests in midlife. Specifically, for each 5 micrograms per deciliter more lead they carried as children, study participants lost an average of 2 IQ points by age 45.

According to the authors, results suggest that adults exposed to lead as children may be at increased risk of neurodegenerative diseases in later life and reinforce the need for long-term follow-up of lead exposed child cohorts. Citation: [Reuben A, Elliott ML, Abraham WC, Broadbent J, Houts RM, Ireland D, Knodt AR, Poulton R, Ramrakha S, Hariri AR, Caspi A, Moffitt TE](#). 2020. Association of childhood lead exposure with MRI measurements of structural brain integrity in midlife. JAMA 324(19):1970–1979.

Max and Annchen's response to a commentary on the fMRI reliability paper will appear soon as Elliott, Maxwell L., Annchen R. Knodt, Avshalom Caspi, Terrie E. Moffitt, Ahmad R. Hariri (2021) "Need for psychometric theory in neuroscience research and training" *Psychological Science*.

Tracy's paper will be submitted soon: d'Arbeloff, Tracy, Maxwell L. Elliott, Annchen R. Knodt, Maria Sison, Tracy R. Melzer, David Ireland, Sandhya Ramrakha, Richie Poulton, Avshalom Caspi, Terrie E. Moffitt, Ahmad R. Hariri. Midlife cardiovascular fitness is reflected in the brain's white matter: Potential implications for biomarker development in cognitive decline and dementia intervention research.

Kyle's and Line's new paper will be ready for mock review soon. "Linking Stressful Life Events and Chronic Inflammation Using Soluble Urokinase Plasminogen Activator Receptor (suPAR)"

Kyle has been selected to attend the upcoming National Institute on Aging (NIA) Division of Behavioral and Social Research (BSR) virtual workshop on *Deeply Phenotyped Longitudinal Studies on Aging: Opportunities for Coordination and Collaborations*.

Jasmin's 2 symposia were accepted by SRCD's biennial meeting. *Childhood Self-Control Forecasts the Pace of Midlife Aging and Preparedness for Old Age*



Breaking postdoc news today! Grace Brennan, <https://psychology.yale.edu/people/grace-brennan>, has been accepted as a postdoctoral fellow in the Duke Aging Center Postdoctoral Research Training Program. Grace is a clinical psychologist from Yale, now on her internship in Pennsylvania. She is interested in problems of self-regulation, and proposes to join us to learn about aging. I know Grace has multiple postdoc offers, so now we keep fingers crossed she will choose our team.

Fab new story in Johns Hopkins Magazine by our Aaron Reuben!!!!

It's necessarily focused on the COVID work Johns Hopkins is doing but has some interesting points about the state of our preparedness for the worsening mental health in the US in the coming years.

<https://hub.jhu.edu/magazine/2020/winter/anxiety-public-health-crisis/>

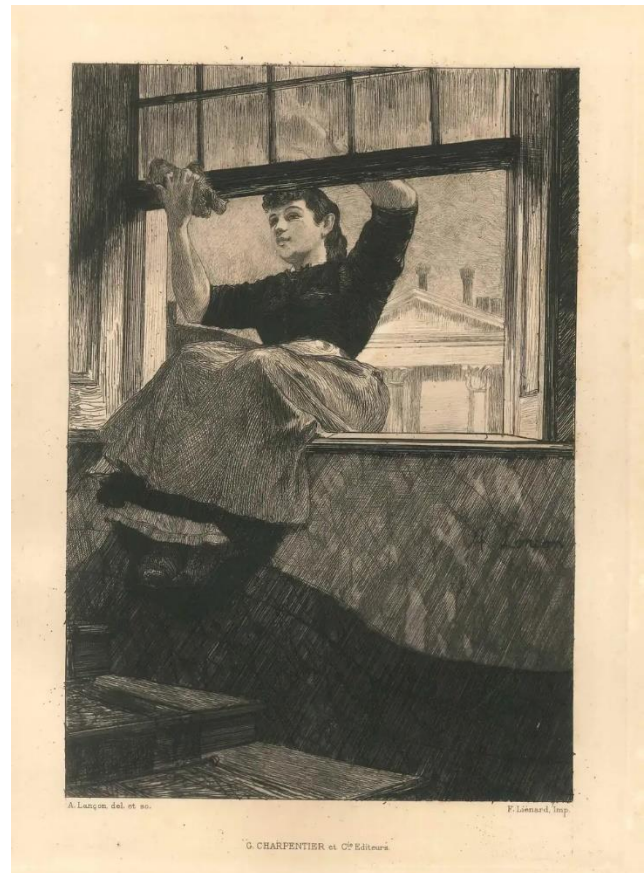


HOUSEKEEPING PLEASE!

Congratulations on your successful work using data from the Dunedin and or E-Risk Studies during 2020!!!! We are super proud of your work. This is a friendly reminder about housekeeping. We need these things from you.

1. On our Z drive filing system at Duke, we keep a folder under your name with 3 sets of documents for every paper:
 - a. Set 1 is all final Authors Accepted Manuscript documents in their original format (WORD, tif figures, tables, supplements, etc.).
 - b. Set 2 is the pdf of the final published paper, from the journal.
 - c. Set 3 is any subsequent publications directly related to your paper (editorials, letters, critiques, direct replications, blogs, etc.)
2. For those who have access to the Z drive, please go there, and look at your folders. Is the folder for each paper there? Is it named properly with your name, the journal name, brief topic of the paper, year? What's in it? All three sets mentioned above? Is there stuff in there that does not belong, like old versions and old drafts that are not the final accepted version of your paper? Clear them out please.
3. For those collaborators who do not have access to our Z drive, please e-mail susan.harward@duke.edu. Susan will check your folder(s) for completeness, and will post for you any missing items. Please send them to her, with clear labelling so she can find which folder. (Don't make Susan come after you!)
4. Separately from the Z drive, Honalee keeps a folder for every project with the original data set that was sent to you. To close out Honalee's files, she needs your code. She also needs any new variables you created/derived in the course of the project that appeared in the final paper. If you are not up to date on this, you will know. Honalee will be handling getting you up to date. honalee.harrington@duke.edu

With best wishes, and thank you for your terrific work on everything except housekeeping! Temi and Avshalom, Susan, and Honalee



The Mighty Amaryllis race thunders down the home-stretch!

Kyle and Alli's, what a beauty!



Ben's. Brilliant!



Leah and Curt's, looking stunning.



Temi's and Avshalom's.



Renate's. More to come!



FYI, Susan arranged for the shipments of bulb kits to your homes, so she deserves a big thank you for being the secret behind Santa!

Oscar's, Line's, Jens's



Whenever yours blooms, send a photo!

Have a serene week everyone.



Taken from Rakino Island, Auckland Harbour, Jan 3 by Mark McNeill