# July 27, 2020 newsletter. Dear Grey House team and esteemed colleagues,

146 days into our kooky whackadoo team-building adventure.

### This week's newsletter theme:

### Good luck in your new life Leah!

You will see fun photos from the farewell pizza party. Tuesday 21 July at 6:30 pm, we all drove our cars to Grey House and parked them in the shade. It was 93 degrees farenheit, 30 celsius. We decorated with banners of colorful flags. Susan had a pizza delivered to each car. Everyone shouted goodbye limericks and haikus. Two city police cars came to investigate, but saw we were fewer than 25 people, outdoors, all 6 feet apart, and wearing fabulous masks. So they just waved and carried on. Leah and Curt leave Durham to start their new lives in Ann Arbor Michigan this week. **Pics at the end, as always!** 

Meanwhile, here is the all the news I have that's fit to print since 20 July:

#### FIRST THE HAPPY NEWS!

To Phil: Susan will have a long honey-do list for your retirement, so we thought you might need lotsa stuff from Tractor Supply. Temi, Av, and Grey Housers



Maria Sison starts medical school! We will all miss working with her, but are very excited for her as she goes on to start med school at Duke next week! Go Maria!

Annabel Harding, E-Risk placement student has been awarded first-class honours! BSc in Psychology from Loughborough University. Well done Annabel!!

Elizabeth Sack will soon be back on Duke campus for fall semester. Welcome back Elizabeth!

## **NEXT, THE UNHAPPY NEWS:**

Ideas for post-pandemic life: Bow instead of shake hands.



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### Which greeting is correct?



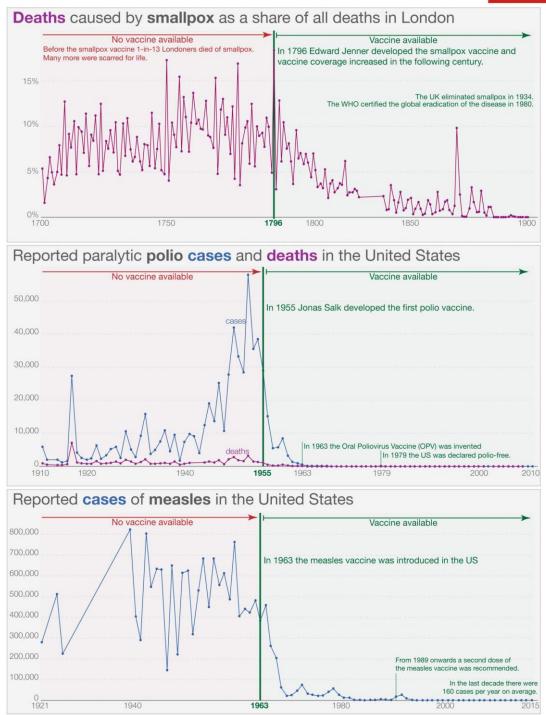
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That's it for unhappy news, so far as I know.

# Science-visualizations: This is so hopeful!!!!! (note, Temi was born on date of the polio vaccine in 1955, but she had a whopper case of measles in 1960)

Infectious diseases before and after a vaccine became available





Data sources: Smallpox: Our World in Data based on Guy (1882) and several publications of the Registrar General between 1886 and 1903 Polio: Our World in Data based on US Public Health Service (1910-1951) and US Center for Disease Control (1960-2010) Measles: Our World in Data based on several publications from the Public Health Reports, the US Public Health Service's Morbidity and Mortality Weekly Report Annual Supplements, and the US Census's Annual Statistical Abstracts

OurWorldinData.org – Research and data to make progress against the world's largest problems.

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## **RESEARCH-PROJECT PROGRESS SINCE 20 July:**

**YAY!!!!** Leah, Stephanie and Barry's new NZIDI paper is submitted: Richmond-Rakerd et al. Mental disorder forecasts physical disease and mortality: 30-year analysis of 2.3 million New Zealanders. *JAMA-Psychiatry*.

Jasmin's new paper on the same theme, but in Dunedin, is out for mock review. THANKS TO ALL DOING MOCKS. History of psychiatric illness as a risk factor for accelerated aging: Evidence from a population-representative longitudinal cohort study.

**Jenny Van Dongen's revised paper was re-submitted:** "DNA methylation signatures of aggression and closely related constructs: A meta-analysis of epigenome-wide studies across the lifespan" submitted to *Molecular Psychiatry*.

**Willy Pedersen's paper is accepted.** Delinquency Abstainers in Adolescence and Educational and Labour Market Outcomes in Midlife: A Population-Based 25-year Longitudinal Study from Norway. *Developmental Psychology* 

**Kyle's paper is provisionally accepted**, pending a couple of tweaks. Intimate Partner Violence and Lower Relationship Quality Are Associated with Faster Biological Aging. *Psychology and Aging.* Working on those last revisions.

Maria Gehred's first-year project paper was submitted to *Biological Psychiatry*. "Long-term neural embedding of adverse childhood experiences: a population-representative birth cohort followed for five decades." Good luck Maria!

**New Concept Paper from Tracy is circulating this week:** Microstructural integrity of whole-brain white matter tracts and midlife physical fitness.

Max and Avshalom's paper will be submitted to *Nature Aging* tomorrow: Disparities in the pace of biological aging among midlife adults of the same chronological age: Implications for early frailty risk and policy.

Christina Carlisi and Essi Viding's paper will be submitted soon: Associations between life-course-persistent antisocial behavior and subcortical brain volume in a population-representative longitudinal birth cohort.

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 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)

Renate is doing the reproducibility stat check on Jasmin's paper. Thank you!!!!

Honalee prepared a mega-dataset for Madeline Meier. It's so wonderful that Madeline has tenure and can now collaborate again! Welcome back!

Daniel Belsky is running validation analyses on 47 new polygenic scores from SSGAC. Derived from 23-and-me and UK Biobank, these are whoppers. Go Dan go!

**Barry and Stephanie in Auckland** are doing the initial runs in the NZIDI for the new paper with Leah on deaths of despair.

Ben finished analyzing polygenic scores for Jorim Tielbeek's antisocial meta-GWAS in E-risk and Dunedin. Delivering amazing findings to Jorim and JC Barnes this week.

Ben is also deriving the education3 polygenic score in the ALSPAC data that Jasmin has obtained, as soon as ALPAC Deliver their data Thanks Ben!

**Ben is further investigating** brain biomarker plasma assays, investigating UK data sets that have methylation data for validating the DunedinPoAm, and reviewing methodology for Dunedin and E-Risk telomere work.

Jon and Eilis are analyzing DunedinPoAm derived from postmortem brain tissue.

Karen is doing a server clean-up of HARDAC, to make room for incoming megadatasets for our team's polygenic and methylation studies.

**Hurrah! Antony Ambler** in London has delivered the data set for Dunedin study members' family history of dementia to Honalee. **Aaron** will have a first go. **Data are ready for analysis! Just ask for them.** 

**Sean Hogan in Dunedin** is searching admin register data for Dunedin Study members.

**Susan** is making big list of chores for Phil, who retires Thursday. She is also paying our enormous pizza bills at Mellow Mushroom, and shipping audiotapes **to Helen Fisher** in London, chasing up **Max's** fellowship, developing different budget scenarios to handle any potential cuts to the cannabis grant, handling legal processing for data-use agreements for **Jasmin**, working on **Stephanie's visa**, and maintaining our website. <a href="https://www.moffittcaspi.com">www.moffittcaspi.com</a>

Honalee's creating a spreadsheet table of reasons for missing data at Phase 45 in Dunedin. 94% of Study members took part at 45. However, variable by variable, there are a few data missing for many different reasons. Before phase 52, we want to inform PI's about opportunities to improve their data-collection and avoid missing data.

Antony Ambler in London is doing the reproducibility stat check for Stephanie's Lewis's paper on trauma.

**Annchen, Maria, Max** are working on characterizing gradients of brain organization.

**Jasmin's working with Sara Jaffee** on an application to study the Next Gen sample of Study member's children in Dunedin.

Aaron and Max are writing applications for clinical hospital internships while also starting new clinical rotations. We wish you stamina guys!

Jo Newbury is updating some of the neighbourhood data on E-Risk twins, because now she can reduce missing data.

Susan reminds you to visit your blurb on the website and see if it needs a refresh.

If you are working on something you want others to know about, but I missed it, please let me know.

#### A pandemic poem by Isabelle Kim-Sherman, Grade 9

Once there was a squirrel who studied at Cornell He lived off apple cores and bits of pizza crust From students living there and studying as well The students gave him food and he began to trust

However, thanks to COVID, the students all went home To distance learn and FaceTime when they want to meet The squirrel was left on campus living all alone Without kids to harass he soon ran out of things to eat

But just when he was starving, something came out from the trees: A family of squirrels that lived in little huts He said to them "I'm hungry, could you help me please?" "Of course," they said, and shared with him their horde of winter nuts

Once there was a squirrel who studied at Cornell And when he found some friends the school became a place to live as well

### An observation about health inequalities and aging:

Zadie Smith — the acclaimed author of "White Teeth" — is back with <u>a timely</u> collection of short essays, "Intimations,"

She writes in one essay a fine quote for our Dunedin Study work on aging. "Death comes to all — but in America it has long been considered reasonable to offer the best chance of delay to the highest bidder."

# This week's newsletter theme: Dear Leah & Curt, Good luck in your new life!

































Wishing you all a serene week, wherever you are, Temi

