



Hello ever-patient Grey House team members and stoic quaran-teammates!

We are now 484 days into our team-building exercise, and every time I think we are nearly finished with it, some government or other gets the nervous nellys and imposes Covid restrictions again. Our UK teammates got their hopes for June freedom dashed with a

new July 19 date for re-opening. Our New Zealand teammates are still awaiting vaccinations, slated to launch at the end of July. Who knows what's up in Norway and Canada? Here in sunny Israel, after 3 glorious weeks of freedom a new outbreak of delta-variant cases caused the government to reinstate the mask mandate yesterday, and cancel the arrival flights of incoming tourists. Blech. At least I got in, but now, **will I be able to get out?**

Its PRIDE week here, and it's BIG, BIG, BIG!!!!

We made the mistake of staying in a hotel in the middle of PRIDE last weekend, and it was heaving. We were the only people over 30 and the only straight couple, for blocks and blocks. Israel is the only place in the middle east where being gay is legal, so it's a serious party.

We got to Israel on Saturday afternoon 5 June, after many flight delays due weather. Being in the plane was delicious! Then COVID test and quarantine in the Haifa apartment. On Sunday we passed our antibody serology tests with A+ at the Rambam Hospital (which as you know is built underground, to cope with wounded from an attack on the country). We were allowed into the senior center to see his mom in her apartment Monday afternoon. It was 15 months for him, 2 years for me. She was just the same, remarkably sharp, even took up new hobbies in the pandemic, and hadn't aged a day, at 88!



Now we are working on line, and since we are 7 hours later than the USA, we go to the beach, walk 2-3 miles on the beach-front path, swim, sun, lunch, and then go on line at 3pm and work via zoom till near midnight. I like this schedule! **My Israeli breakfast:**



Tel Aviv street bench. Translation: **Allow your heart the opportunity to bungee jump into the turbulent river of life. Or... Let your heart bungee jump life's rapids!**

Little Avi on tour in Tel Aviv.



Calendar of upcoming Grey House events:

June:

25: Aaron's birthday

30: Neuroimaging renewal, Aaron's fellowship submission, and DunedinPoAm4x applications all due at NIA

July:

13: Aaron and Jessalee move to South Carolina

16: Temi and Avshalom back at work in North Carolina

If you have events coming up, and would like to share them, do let me know. Temi

TEAM MEETING SCHEDULE, FLEX-ZOOM TILL 16 JULY, THEN REINSTATED FOR SUMMER 2021

Tuesdays 9am-6pm, Farm Meetings with those who want to zoom

9:00-10:00

10:30-11:30 Renate zoom

12:00-1:00 Genomics group with David and Av zoom

1:00-2:00 Ben and Karen zoom

2:00-3:00 Maria and Ahmad zoom

3:00-4:00 Susan zoom

4:00-5:00 Leah, Barry, Steph D'S. zoom

Wednesdays 9am-6pm Meetings with those who want face-to-face

8:00-10:00

10:00-11:00 Ahmad and co

11:00-12:00

12:00-1:00

1:30-2:30 HonaLee and Av

3:00-4:00

4:00-5:00

5:00-6:00

Thursdays 9-5 Meetings with those who want face-to-face

9:30-10:30 Kyle

11:00-12:00 Aaron thru July

12:30-1:30 Jasmin

2:00-3:00 Stephanie L.

3:00-4:00

4:00-6:00 drive from Durham back to farm

FIRST THE HAPPY NEWS: Congratulations due:

Jasmin got a job offer! The job of her dreams.



THE UNIVERSITY *of* EDINBURGH
School of Philosophy, Psychology
and Language Sciences

Lectureship/Senior Lectureship

Department of Psychology

Grade: UE08/09

Kyle and Alli found a new house!



Temi and Avshalom have kittens in the barn!

Caught on the game camera. Free to a good home. Really. No, really. Free.



Dunedin research on aging got a shout out in this David Brooks Op Ed!

<https://www.nytimes.com/2021/06/03/opinion/age-life-expectancy.html?action=click&module=Opinion&pgtype=Homepage>



[Opinion | Life Expectancy
Could Rise a Lot. Here's What
it Means. - The New York
Times](https://www.nytimes.com/2021/06/03/opinion/age-life-expectancy.html?action=click&module=Opinion&pgtype=Homepage)

Phil Mickelson just won the P.G.A. Championship at age 50. Tom Brady won the Super Bowl at 43. Serena Williams is a top tennis star at 39. Joe Biden entered the presidency at 78. Last year Bob ...

www.nytimes.com

From Jane Wilcox at the Dunedin Unit:

The Dunedin Unit has posted its new, improved policies and procedures handbook:

<https://dunedinstudy.otago.ac.nz/for-investigators/policy-statement-code-of-practice>

Dave Ireland and co have added a lovely page to the DMHDRU website's MRI section including a couple of GIF's:

<https://dunedinstudy.otago.ac.nz/studies/new-brain-imaging-study-2/how-does-mri-work>

The Exhibit on the Dunedin Study is still going strong, making the rounds of museums.

<https://www.newshub.co.nz/home/new-zealand/2021/06/dunedin-study-exhibition-offers-look-into-lives-of-some-of-the-most-studied-people-in-the-world.html>

A huge juvenile hawk visited Grey house! A hawk the size of a toddler.



Researchers can register to get a passport to access and use the All of Us study data set.

https://jamanetwork.com/journals/jama/fullarticle/2781166?guestAccessKey=c37f1595-4e4b-49f8-8737-b19b1b231532&utm_source=silverchair&utm_medium=email&utm_campaign=article_alert-jama&utm_content=olf&utm_term=061121

Maria Gehred's paper was recommended!

Recommended

9.3

Good for Teaching New Finding

Long-term Neural Embedding of Childhood Adversity in a Population-Representative Birth Cohort Followed for 5 Decades.

This manuscript presents whole brain neuroimaging data from the Dunedin Longitudinal Study sample when they were 45 years old. The Dunedin study has richly documented the experiences of its participants from age three through 15 years. This information was abstracted to produce a prospective Adverse Childhood Experiences (ACE) score, while interview data from age 38 were used to compute a retrospective ACE score. The results showed widespread reductions in cortical thickness and surface area, along with reductions in subcortical gray matter volume. Retrospective reports were more weakly associated with brain structural measures and when both prospective and retrospective values were entered, retrospective reports were no longer associated with brain measures. Convincingly, when individuals who as adults reported no childhood ACEs were examined, prospective ACE scores still were associated with structural brain measures, while the same was not true when adults who reported childhood ACEs but who had zero ACE scores prospectively were examined. This work raises several important issues that cannot be ignored because it is a longitudinal design with a large sample size. First, what accounts for the widespread reduction in volume, surface area and cortical thickness noted with prospective and largely objective measures of childhood adversity? Second, how early in development can we detect these effects? Can we continue to justify using adult retrospective reports of childhood adversity when we are interested in issues of biological embedding of early experiences?

Most people in UK initially opposed to Covid vaccine have had jab, study finds
https://www.theguardian.com/society/2021/jun/12/most-people-in-uk-initially-opposed-to-covid-vaccine-have-had-jab-study-finds?CMP=Share_iOSApp_Other

Honalee has squash blossoms! Next, squash.



what beauties!

Congratulations!

**DUKE INCUBATION FUND
SPRING 2021 AWARDEES**

DunedinPoAm4x: Developing a saliva test for how fast a person is aging

*Terrie Moffit, Avshalom Caspi, David Corcoran, Karen Sugden, and Benjamin Williams
(Psychology & Neuroscience)*

Knowing how quickly a person's body is aging is useful not only for basic research on aging, but also for testing whether an intervention has slowed a person's pace of aging. This project will validate and export a novel tool to measure a person's pace of whole-body aging: DunedinPoAm4x. This team has already developed and licensed this measure in blood; validating a new version that uses saliva samples will allow for expanded market size with direct-to-consumer marketing for customers wishing to enhance and extend their health.

Next, the Bad News:

Avshalom's chickens have gone to brooding. Sigh. He's driving the chicken-sitters nuts with absurd communiques from Israel like this one:

Hi 🐔 farmers,

Temi reports that you may have a brooding hen. If she is staying in her box, she is trying to have chicks. They started trying to do this in the spring. It's normal, but.....the problem is they will stay in the nest for 20 days, and only come out to have an occasional feed or drink and a Poo. They will get very weak and they may get dirty. So, brooding is to be discouraged. Unless you want chicks. I don't think we do. Smile.

So far, two of the hens have tried to do this, and I've discouraged this brooding behavior as soon as I noticed it.

So....what to do? Get them out of the nest box.

If it's poppy (she's the black one without the copper neck and lays blue eggs), she may get aggressive. She is generally feisty, although the smallest, and will peck at you. Wear gloves, and poke her out with a stick.

If it's one of the other black ones, they're docile, and will cooperate more. Wear gloves and move them out. They don't want to be moved out of the box, but it's the right thing to do. So, be bold!

Once out, they will probably flop on the ground. Just observe them for a while, and make sure they don't go back into the nest right away. If they try to go back, don't let them. encourage them to go outside.

The brooding hen will probably stop laying for several days....whether from stress or for hormonal reasons, or maybe because she's just pissed off.

If it's poppy, she may even try to find a new place to lay eggs (like in the gator or in the hay bales). So, if you don't see blue eggs for a while, start to look around or watch her in the mornings especially.

You sure are earning your Macon farm fees!

♡ av

Or, you could just leave the dang coop door open at night and foxes will get them. Voila! Problem solved! Temi

More kinda bad news: the *ProPublica* Scoop:

Yall may have seen that someone leaked tax returns of high-visibility American billionaires to ProPublica, who published them. Big news. I am thinking about the effects on people's perception of data safety. If the government can't keep rich people's tax returns safe, then what other information that is held about us cannot be kept safe? This might worry both cohort study participants and general citizens who consider if register data like the NZIDI are shared with scientists. Heck, It worries me!

American myth. [ProPublica](#), a non-profit investigative newsroom in the US, began publishing a series of reports based on a large leak of Internal Revenue Service data. The leak covers more than 15 years of tax returns from thousands of the wealthiest Americans. "Taken together," the journalists wrote, "it demolishes the cornerstone myth of the American tax system: that everyone pays their fair share and the richest Americans pay the most." From Tortoise, slow news.

Even worse news.

Avshalom's application to NICHD for an E-Risk followup was not funded. Booooooooooooooooooooo!

But, as we know, one never gets funded the first time at the NIH institutes. Now we wait for 30 days to see the referee comments. Waiting to exhale.

Even more bad news.

Proof that Stephanie Langevin always finds the silver lining in even the worst situation:

“We drove for ages to get there, but there was only the one hot air balloon at the Memorial HotAir Balloon Festival 😞 It feels like false advertising because there was only one balloon and they had absolutely no intention of flying it, but we still had a great time! “



Stéphanie

This week's science visualisation:

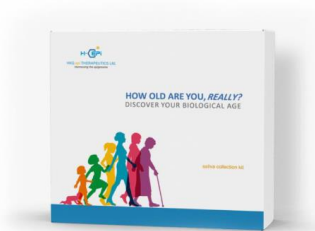
From Renate:

Frank and Ernest by Thaves



The competition! First, test your age, then when it comes back too old to suit you, order our wildly costly supplements!

BE HEALTHIER WITH OUR PRODUCTS



Biological Age Test "EpiAge"

★★★★★ Testing kit

USD \$169.00

ADD TO CART



epiSAmE

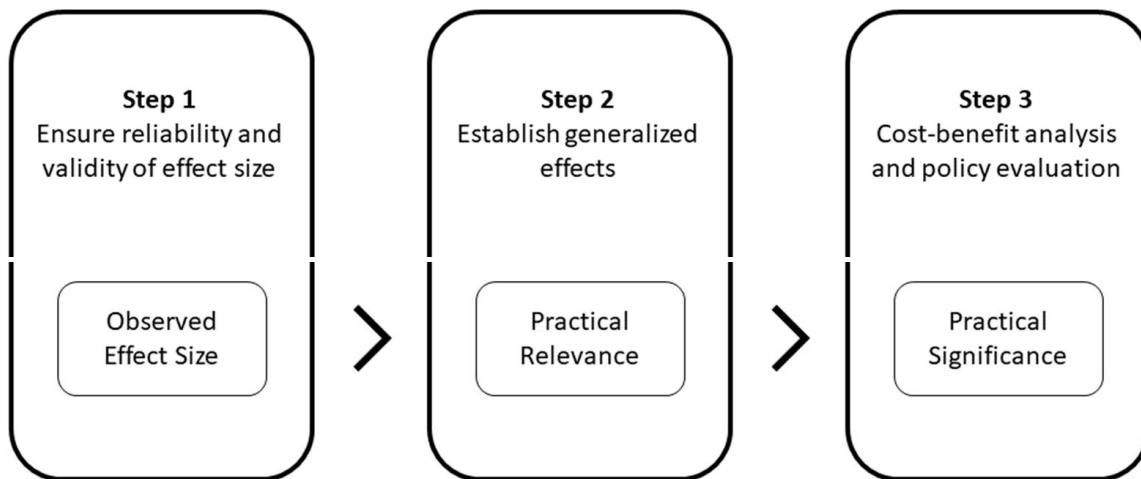
Supplements

USD \$39.00

ADD TO CART

https://epiagingusa.com/?gclid=Cj0KCQjw--GFBhDeARIsACH_kdZ6rfR4Ya6v4Evk7yAJ6MQARTQOy3Nmi5E0kQJPFPpfBivY-IRlrX4aAoFiEALw_wcB

More science, sent by Leah: Three-step process to proceed from calculating the observed effect size to establishing practical relevance and ultimately practical significance of a psychological finding.



Recommended paper in PsychRxiv:
Evaluating the practical relevance of observed
effect sizes in psychological research

Farid Anvari et al.

**A great aid for writing your discussion sections on
implications.**

NEWS ABOUT EVERYONE'S BIG QUESTION: WORK FROM HOME OR RETURN TO THE OFFICE?

A [2021 survey of approximately 30,000 Americans](#) concluded that, after the pandemic, 20 percent of all work days may continue to take place at home, versus just 5 percent before. Of course, this doesn't mean everyone gets 1 day at home each week, it means some people go to work every day, and others never go, and it averages out.

Nice thoughtful article about how to work from home properly:

<https://knowablemagazine.org/article/society/2021/remote-work-can-be-lot-better-this>

Announcement from the Duke Administration:

For Staff: We will welcome our staff back to campus on Monday, August 9. Please begin any planning necessary to return to the spaces and schedule you worked prior to the onset of the COVID-19 pandemic.

Our college is an incredibly complex academic unit and, as such, will require an intentional and robust assessment of our roles and practices before we can commit to new work arrangements. That assessment will begin in the fall semester and continue throughout the academic year. We look forward to engaging with you and getting your feedback throughout that process.

Erm, is that all they have to tell us? See y'all August 9.

King's College London is classifying all staff as an A, B or C. A's must come to work every day. C's must never come, unless there is some special event. B's work from home 2 or 3 days each week. The question is, on what basis do we get to be a B?

RESEARCH-PROJECT PROGRESS SINCE 3 June:

A new paper from the Framingham Study reports that DunedinPoAm is slower in people with a better diet.

<https://academic.oup.com/ajcn/advance-article-abstract/doi/10.1093/ajcn/nqab201/6301128>

Sophie Von Stumm, Jasmin Wertz, and Helen Fisher passed the first screening and were invited to submit a full proposal to the Nuffield Foundation, for their project to study social class manifested in voice and accents, using audiotapes from E-Risk mums. Now the work begins!

The SSGAC report of new polygenic scores that Dunedin and E-Risk contributed validation analyses to is published online:

<https://urldefense.com/v3/https://www.nature.com/articles/s41562-021-01119-3> ;!!OToaGQ!5sn4NhjaRuIGlg2oDEwFEbvr4Zt1SIO0KLXjOPFvltFv5uogFZ7nUHTE4wYSW4Br6xNL7A\$

Jenny Van Dongen got her paper accepted at Nature Communications. "Identical twins carry a persistent epigenetic signature of early genome programming" This project used E-risk data. **You can get a methylation test to see if you had a twin before birth who didn't make it.**

Signe and Leah got their paper accepted at PNAS: "Nationwide evidence that education disrupted multigenerational transmission of health & social disadvantage" **Hurrah! Hurrah!**

Hans Ip got his paper accepted at Translational Psychiatry. "Genetic Association Study of Childhood Aggression across raters, instruments and age" **Dunedin and E-risk data shared in this one.**

Kyle Bourassa and Line Rasmussen resubmitted their R&R at Brain, Behavior, and Immunity for the " Linking Stressful Life Events and Chronic Inflammation Using suPAR (Soluble Urokinase Plasminogen Activator Receptor)" **fingers crossed!**

Aaron Reuben took a lead on drafting and managing a report from the National Academy of Sciences on “Environmental Exposures and Mental Health Outcomes: Setting an Agenda.” It has now been submitted to the top environmental journal, Environmental Health Perspectives. They send something like 5% of submission on to review so will see what happens. **Good luck!!!**

Leah Richmond-Rakerd and Barry Milne and Stephanie D’Souza got a new grant! “Predicting Suicide and Self-Harm Risk in Linked Administrative Data,” from the American Foundation for Suicide Prevention.

Report on the vaccine hesitancy survey from Sean Hogan: more great progress in Dunedin! We have 709 forms in hand. We have a 77% return rate for the whole sample and a return rate of 81% for NZ residents. Government announced vaccines will be launched at the end of July, so we will keep going till then. **Go team go!**

26 June at 7AM EDT Temi’s interview with The People’s Pharmacy show on NPR with Joe & Terry Graedon, and it will also be a podcast on June 28. Anyone can listen on Saturday, June 26th at 7 a.m. EDT via www.wunc.org.
<https://www.peoplespharmacy.com/pages/find-a-radio-station>
A recorded interview with Dr. David Sinclair will be included in this broadcast.

Jasmin Wertz still has an R&R at Social Science and Medicine: The vital personality. They are taking their sweet time.

Kyle Bourassa was invited to submit to a special Issue of *Prevention Science* called “Toward a Lifespan Prevention Science: A Focus on Middle and Late Adulthood.” The paper was submitted this week, and is titled “Childhood Adversity and Midlife Health: Shining a Light on the Black Box of Potential Psychosocial Mechanisms”

Wendy Slutske and Leah Richmond-Rakerd’s manuscript sailed thru mock review June 11: “Disordered Gambling in a Longitudinal Birth Cohort: From Childhood Precursors to Adult Life Outcomes” To be submitted soon.

Madeline Meier's manuscript completed mock review June 16: "Long-term Cannabis Users Show Neuropsychological Deficits and Smaller Hippocampal Volume in Midlife" It will be submitted any day now. **Thanks to all for doing mocks!**

Kyle Bourassa has a manuscript out for mock review, due June 25.
"Accelerated Aging in Midlife is Antedated by Treatable Adolescent Health Conditions."
Thanks to all who are doing mocks!

Aaron Reuben has a paper going out soon for mock review. "Comprehensive evaluation of risk indices for Alzheimer's Disease and Related Dementias: Associations with midlife brain health"

Stephanie Langevin has a Dunedin concept paper approved and writing is underway: "Life-course persistent antisocial behaviours and accelerated aging in a longitudinal birth cohort."

Max Elliott has a new CP approved. "Can individual differences in the macroscale organization of cortex be reliably measured and mapped onto cognition and aging?"

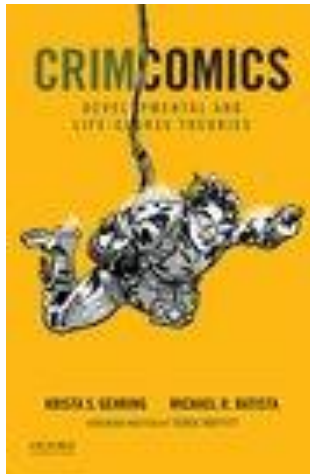
Rachel Latham and Helen Fisher have a new E-risk CP approved. "Violent experiences and violent neighbourhoods during adolescence: understanding and mitigating the impact on psychiatric disorders at the transition to adulthood".

Avshalom, Temi, and Susan submitted the revision of the 19-cohort proposal to NIA before Susan left on 2 weeks of vacation.

Ahmad finished the renewal application for Phase 52 brain imaging in Dunedin.
Susan Harward will submit when she returns from vacation 28 June. Annchen Knodt, Ben Williams, Renate Houts, Temi and Avshalom helped.

Aaron's writing a fellowship application, to submit in July. Good luck!

A new Crim-comicbook will be published in July 2021 from Oxford University Press. A comic textbook about developmental criminology.



Temí parachute jumping on the cover of the textbook.

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

Jasmin Wertz, parenting genomics in multiple cohorts

Annchen Knodt, cannabis and brain, exploratory

Karen Sugden, education and aging in multiple cohorts

Agnew-Blasé, Jess, mother-child polygenic ADHD scores and family chaos

Dan Belsky, Dunedin PoAm4x

Leah Richmond-Rakerd, mental health and ADRD in NZ IDI

Aaron Reuben, ADRD risk factors

Line Rasmussen, little p and suPAR

Karen Sugden, DunedinPoAm4x and dementia in ADNI

Max Elliot, the gradient in brain

From Aaron: Here's a terrific interview with the overlooked mRNA wizard.

The Unlikely Pioneer Behind mRNA Vaccines,

When she was at graduate school in the 1970s, Dr. Katalin Kariko learned about something that would become a career-defining obsession: mRNA. She believed in the potential of the molecule, but for decades ran up against institutional roadblocks. Then, the coronavirus hit and her obsession would help shield millions from a once-in-a-century pandemic. Today, a conversation with Dr. Kariko about her journey. Guest: Gina Kolata, a reporter covering science and medicine for The New York Times.

Listen on Apple Podcasts: <https://podcasts.apple.com/us/podcast/the-daily/id1200361736?i=1000524932973>

Have a serene week everyone.



Oscar enjoys the Scandinavian heatwave; Temi enjoys the Mediterranean heatwave.

