



Dear Grey House team members and trusty quaran-teammates, we are now 332 rather tiresome days into our unasked-for team-building adventure!

Evidence of spring at Honalee's place.

Bernie visited the Macon Farm this week:



25 January 2021 Newsletter theme:

Well, here we all are now, in 2021. Let's go!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

From Professor Willy Pedersen in Oslo: Dear Avshalom and Temi - I just wanted to tell you that most of my time these last weeks has been used on the New York Times (got a subscription), CNN, Politico and Fox News as well (very interesting). Not much time for researching. January 6th was scaring, and when looking at the inauguration with my wife Rebecca, we both were moved when seeing these two decent and honest persons who are your new leaders. Amanda Gorman was just wonderful. So - you understand that it's something special with USA for us here in Norway, most of us have relatives who immigrated, we have seen dozens of movies from New York, read your American fiction. I really hope things will function for the new team, even if the challenges are formidable. **Good luck this year, Willy**

Hold on young ones, they're coming.

COVID-19 Vaccination Record Card

Please keep this record card, which includes medical information about the vaccines you have received.
Por favor, guarde esta tarjeta de registro, que incluye información médica sobre las vacunas que ha recibido.

MOFFITT **TERRIE** **E**
Last Name First Name MI

9 MARCH 1955 **C-06810**
Date of birth Patient number (medical record or IIS record number)

Vaccine	Product Name/Manufacturer Lot Number	Date	Healthcare Professional or Clinic Site
1st dose Pfizer COVID19 Vaccine EL3247		1/19/21 mm dd yy	DUH- Gillespie
COVID-19		mm dd yy	
Other		mm dd yy	
Other		mm dd yy	



There's opera again! There's opera again! *Soldier Songs*.



We just watched and listened to the Philadelphia Opera's "Soldier Songs" an opera by David Little, performed by baritone Jonathan McCullough. Unbelievable! 59 minutes of sheer intensity. It is not performed on stage, it is filmed in a soldier's campervan home in a meadow. There is a song for each generation, from a little boy with GI Joe doll, to an 18-year old who just registered for the draft on his birthday, to a soldier under active fire, to a veteran back home with PTSD, to an older father whose son has just died in battle. Really amazing. <https://www.operaphila.org/whats-on/2020-2021/soldier-songs/>

You have to subscribe to see and hear it, but many talented artists have been hurting, so we felt happy to contribute. And from the star baritone, "I'm so glad you liked the movie. Hopefully there will be a lot more filmed opera in the near future. Thanks for taking the time to reach out! All the best, John"

Inaugural Address Spills Over Into Second Day As Biden Continues To List Greatest Issues Facing Nation (from The Onion)

WASHINGTON—Carrying on breathlessly with no sign of soon stopping, President Joe Biden's inaugural address spilled over into the second day Thursday as he continued to list the greatest issues facing the nation. "Child poverty, crumbling infrastructure, cyber warfare, wildfires, opioids, domestic violence, hunger, and homelessness plague our nation—not to mention sex trafficking, automation, hurricanes, obesity, and misinformation," said Biden, who clutched the podium with both hands in exhaustion as his speech to the nation stretched into its 26th hour, continuing to list immigration, unemployment, offshoring, guns, the wage gap, and water contamination as just a few of thousands of challenges waiting on the road ahead. "Gerrymandering, the decline of manufacturing, sexual harassment, and food deserts. Chlamydia, the cost of insulin, water privatization, credit card debt, dog fighting, and teen drinking. High murder rates on indigenous reservations and rising sea levels and smog. Low teacher salaries, E. coli, data breaches, voter suppression, animal testing, and PTSD. Plus, you can't forget the student loan crisis, lobster overfishing, the structural inequalities of the Senate, home foreclosures, the loneliness epidemic, toddler drowning deaths, cyberbullying, and suicide." At press time, Biden had continued rattling off gang violence, robocalling, and asthma as **EMTs transported the dehydrated new president into an ambulance.**

THE HAPPY NEWS FIRST:

Grace Brennan, <https://psychology.yale.edu/people/grace-brennan>, will join us in the fall! Of interest, there are actually quite a few Grace Brennans on the internet. Which one do you think is ours?



Our Grace received her B.S. in Psychology and German Studies from the College of William and Mary in 2012. Before graduate school in clinical psychology at Yale, she conducted neuroimaging research on alcohol use disorders at the National Institute on Alcohol Abuse and

Alcoholism. She is interested in using multiple methodologies to identify the cognitive, affective, and neural mechanisms underlying substance misuse and aggression, and in translating research findings into mechanism-specific clinical interventions. She is particularly interested in using computational modeling techniques to specify the cognitive mechanisms that underlie chronic aggression. Grace is currently completing her clinical internship at the Penn State Health Milton S. Hershey Medical Center. Grace has been accepted as a postdoctoral fellow in the Duke Aging Center Postdoctoral Research Training Program. She is interested in problems of self-regulation, and proposes to join us to learn about aging. Thank heaps to all of you who spoke with Grace.

Happy birthday to Manuela Polanczyk. Born in Durham, NC in 2009, during her dad Guilherme's postdoc at Grey House, Manuela is now growing up with her younger sister in Sao Paulo.



Antony is recovering nicely! Hurrah!

Still not nicely enough to send him any data-management requests, so hold your horses. He needs to rest. But here you can see Antony smiling broadly on zoom today.



Many of you will know of Professor Myrna Weissman, world-leading depression researcher at Columbia University. On Saturday, Prof. Weissman cooked Avshalom's recipe for venison meatballs with surprise capers hidden inside. She said she did not have deer meat, and was unable to catch squirrels in Central Park, so she and her husband Jon substituted ground turkey. A sure cure for depression!



NEXT, THE LESS-HAPPY NEWS:

Worms for food?

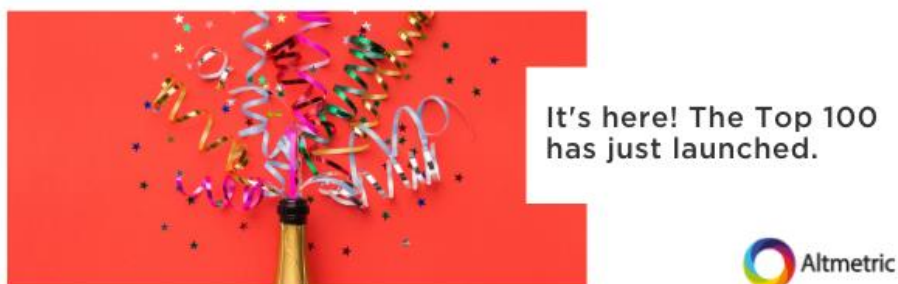
Yellow mealworm, a type of insect that looks a bit like a maggot, [has](#) been deemed safe for human consumption by the EU's food watchdog. This won't come as a surprise to the billions of people around the world who already eat insects as a regular part of their diet, but it does mark a notable milestone in Europe where for most countries (bar the UK) it has long been illegal to sell bugs as food. This is huge news for some, who [see](#) edible insects as a promising solution to the carbon footprint of food production – in particular that of protein – given its far lower carbon intensity compared with that of traditional meats. Anticipating an edible insect boom, one French company has already begun building giant mealworm farms near Dole and Amiens. It's called **Ynsect**.

Avshalom's and Ben's and Karen's chickens are gonna love it.

And after poking fun at Bernie and Biden.....



Republican Party leaders say they have become aware of a deadly new virus called 'COVID-19' which has been devastating America since Wednesday. Outraged GOP lawmakers said the virus was getting out of control, and blamed the Biden administration for doing nothing to stop the new pandemic, which sprang up suddenly this week. "This is a national emergency; why haven't the Democrats stopped it?" Republican Mitch McConnell said. Conservative news outlets joined Republicans in condemning the Biden presidency. "This is the worst start imaginable for a presidency," a Fox News commentator said. "Joe Biden takes office on Wednesday and next thing you know there's an emerging pandemic decimating our people and our economy".



Altmetric announced its top 100 scientific articles for 2020. And the top three for psychology are.....(drum roll please).....

#33 of 100

[Tracking historical changes in trustworthiness using machine learning analyses of facial cues in paintings](#)

Social psychologists came under fire after they used facial features in European portraits from 1500-2000 to analyze social "trustworthiness" across time. The study has been compared to the pseudosciences phrenology and physiognomy.

#34 of 100

[Freedom to think: the need for thorough assessment and treatment of gender dysphoric children](#)

A psychoanalyst calls for political discourse around gender dysphoria to be separated from medical care and decisions and shares an unsubstantiated claim that "rapid-onset gender dysphoria", which is not an official diagnosis, is widespread. The paper was widely criticized as being full of "misinformation".

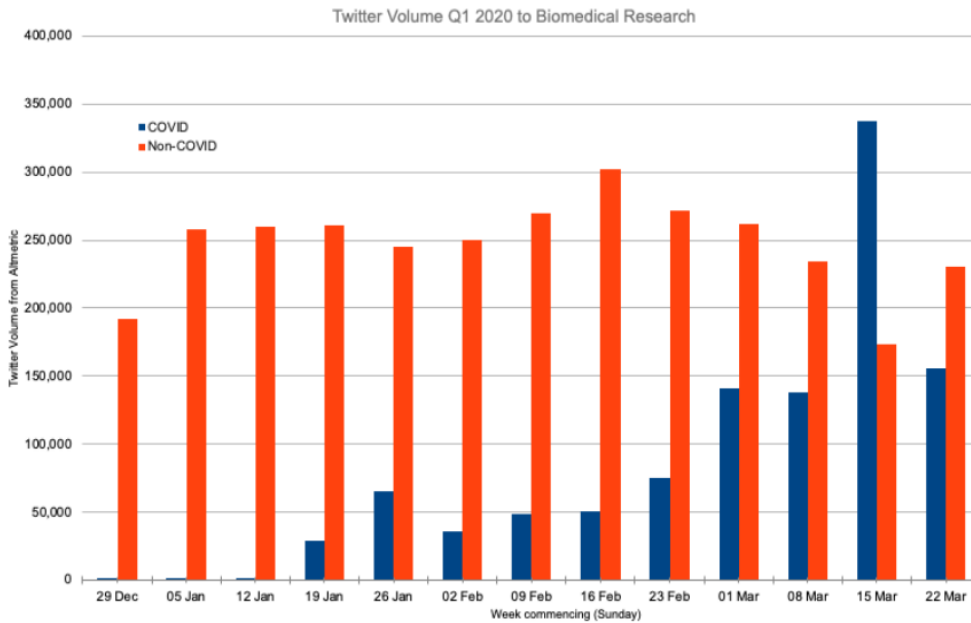
#35 of 100

[The role of cat eye narrowing movements in cat-human communication](#)

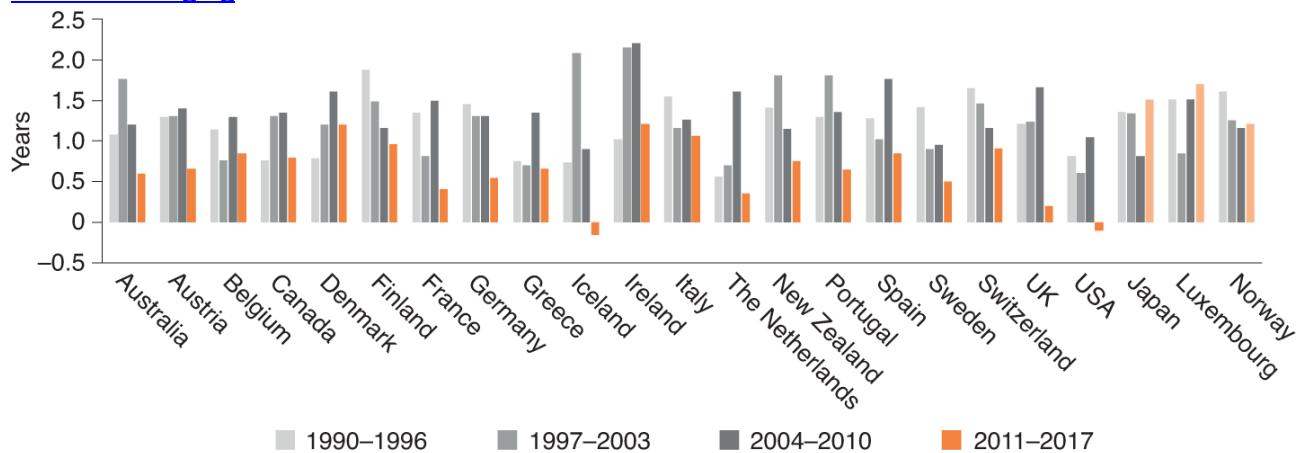
If you want your feline friend to love you back, do the "cat smile" – a slow blink that make humans more attractive to cats. According to the study of the role eye movements play in interactions between cats and their humans, eye narrowing plays a similar role in both species.

Well, there is no accounting for taste, eh?

THIS WEEK'S Science visualization: from Altmetric



Another important visualization for our work: [Fig. 1: Gains in life expectancy over four six-year periods, 1990–1996, 1997–2003, 2004–2010 and 2011–2017. From: Recent trends and increasing differences in life expectancy present opportunities for multidisciplinary research on aging](#)



Dark orange bars indicate lower increases in life expectancy in 2011–2017 than 2004–2010, and light orange bars indicate greater recent increases in life expectancy. Relatively low gains in years of life expectancy from 2011–2017 can be seen in 20 out of 23 OECD countries compared to 2004–2010. **The USA is going backward.** How come? Possibly bec there are no further lifespan gains to be made from smoking reduction or cholesterol or blood pressure meds. And no further gains to be made from

childhood vaccination to prevent infections and lifelong elevated inflammation. Those factors that extended lifespan have now topped out. And possibly bec there are behavioral factors worsening cardiovascular health such as obesity, addiction.

This comment in the essay by Eileen Crimmins is a great one for our future papers and grant proposals:

“I believe we have not fully grasped the importance of social and psychological factors as determinants of trends in life expectancy, nor have we understood how these factors operate over the span of lifecycles. There is significant current work beginning to explore how biology helps us understand the way social, psychological and environmental circumstances get ‘under the skin’ to explain differences in health outcomes¹³. This is leading to increased understanding of how experiences, circumstances and environment at specific life stages affect the development and progression of chronic diseases and mortality. However, much more understanding is needed before this leads to targeted interventions to delay the morbidity process overall, and increased healthy life expectancy for the socially, economically and psychologically disadvantaged.” (cite 13 is to my Aging Research Reviews essay published last week)

More nice science-y news:

The HRS (American Health and Retirement Study) announces it has made 13 DNA methylation measures of age available for analysis by the research community.

First-generation clocks fare poorly in this report, in terms of their correlations with demographic risk factors. Second-generation methylation clock Grimage fares better (but it should because it includes smoking history). DunedinPoAM up to Phase 38, a third-generation measure, fares well in this report.

<https://academic.oup.com/biomedgerontology/advance-article/doi/10.1093/gerona/6102583?login=true>

Notes on an R&R:

Today is a huge day in your career. You've just done one of the most difficult things there is to do: Persuade a critical and prejudiced group of reviewers that you are correct! You surmounted an incredibly challenging set of reviews. They were difficult because they required many new analyses (many of which we anticipated, so there's a lesson there), they required reworking text with an ultra-tight limit on words, and they required being critical of the reviewers, in a nice way. And you did it! The lessons learned:

Turn your data upside down, before you submit an article, so that when reviewers make requests you are not caught off guard with a nasty surprise by your own data!

Leave emotion out of your response. Get your head down and do the work methodically. Don't panic.

Step back and try to figure out where each reviewer is 'coming from.' What's their bias? What's their agenda? Know your 'enemy', so to speak. You may need to explain a reviewer's point of view to the editor.

Know the wider history of the problem that you are studying, so you can help the editor contextualize the issues.

To do a review efficiently, take each point from each reviewer, and write out the answer and/or your data analysis plan. With that template in hand, you've turned a huge task into smaller manageable chunks that you can work your way through. Address each point clearly and plainly.

Write, re-write, edit, and re-write your letter to the editor, responding to the reviews.

There will always be an error. Check your data again. Get co-authors to help.

Responding to reviews is an experience that you will have repeatedly in your scientific career. You've made a strong impression on an editor, and on a group of reviewers. That will serve you well in the future. Avshalom

Citizen reported old-age pensioners queueing for vaccine to Essex Police as an illegal rave, prompting a raid.

<https://mixmag.net/read/police-pensioners-covid-vaccine-illegal-rave-news>



RESEARCH-PROJECT PROGRESS SINCE 18 January:

Jessie Baldwin's and Andrea's paper is appearing today 25 January in *JAMA Pediatrics*. Baldwin, Jessie R., Avshalom Caspi, Antony Ambler, Louise Arseneault, Helen L. Fisher, HonaLee Harrington, Timothy Matthews, Alan Meehan, Candice L. Odgers, Richie Poulton, Sandhya Ramrakha, Terrie E. Moffitt, & Andrea Danese (2021). Population versus individual prediction of poor health from Adverse Childhood Experiences (ACEs) screening. *JAMA Pediatrics*. **Major message Jessie!**

Tim Matthews' and Louise's paper is out in the *International Journal of Behavioral Development*. Matthews, T., Fisher, H. L., Bryan, B. T., Danese, A., Moffitt, T. E., Qualter, P., Verity, L., & Arseneault, L. (2021). This is what loneliness looks like: A mixed-methods study of loneliness in adolescence and young adulthood. <https://doi.org/10.1177/0165025420979357> **Qualitative work in E-risk!**

Maria Gehred and Ahmad got an "accepted pending minor revisions" decision at *Biological Psychiatry*. "Long-term neural embedding of adverse childhood experiences in a population-representative birth cohort followed for five decades" MS Number: BPS-D-20-01352R1. **Maria endured brutal attacks by reviewers, and defeated them!**

Max Elliott and Avshalom got a preliminary acceptance pending minor edits at *Nature Aging*. "Disparities in the pace of biological aging among midlife adults of the same chronological age: Implications for future frailty risk and for policy" (NATAGING-A00141A). **This signature paper unites all the Phase 45 data-collection teams: dental, respiratory, brain, vision, hearing, cardio, gait, cognitive, biomarkers, physical function, facial age, and psychosocial!** A bit of historical narrative about this paper. It's the culmination of over 20 years of planning and hard teamwork. Richie started collecting biomarkers at Phase 26. At Phase 45 he recruited the new expert teams to join the study to measure vision and hearing. Way back during Phase 38 Temi had the idea that we could calculate slopes from multiple waves of each Study biomarker and combine them, as a way to define and quantify biological aging (envisaging this on the basis of a talk by Matt Kaberlein). Temi and Avshalom wrote proposals to raise the money. Renate modelled all the data to derive the Pace of Aging measures, and this sounds easy but it was not! Daniel produced the terrific Phase 38 paper up to 2015, which was so well-received we knew our team had a good idea. Ahmad and Annchen shepherded the brain-imaging data collection so we could add brain structure to the project. Antony, Sean, Sandhya, and Honalee made the data set first class and unique worldwide. Ben and Karen masterminded the biobanking and biomarkers. Puppeteer Avshalom kept us on track and made all this work happen, and Max and Avshalom took the lead on analyses and writing the paper after Phase 45.

Max Elliott and Annchen Knodt's response to a commentary on the fMRI reliability paper will appear soon in *Psychological Science*. 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." **Well argued you two!**

Helen Fisher and Rachel Latham submitted to the *Journal of Psychiatric Research*, Childhood exposure to ambient air pollution and predicting individual risk of depression onset in UK adolescents. Rachel Latham; Christian Kieling; Louise Arseneault; Thiago Botter-Maio Rocha; Andrew Beddows; Sean Beevers; Andrea Danese; Kathryn De Oliveira; Brandon Kohrt; Terrie Moffitt; Valeria Mondelli; Joanne Newbury; Aaron Reuben. **Fingers crossed!**

Tracy d'Arbeloff submitted to *Frontiers in Aging Neuroscience*: 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. **Good luck Tracy!**

Christina Carlisi submitted to *Development & Psychopathology*: Association of subcortical grey-matter volumes with life-course-persistent antisocial behavior in a population-representative longitudinal birth cohort. **Waiting to exhale!**

Kyle Bourassa and Line Rasmussen's new paper is out for mock review, due back 5 Feb. "Linking Stressful Life Events and Chronic Inflammation Using Soluble Urokinase Plasminogen Activator Receptor (suPAR)." **Thanks to all who are doing mocks!**

The Grey House Mighty Amaryllis race, in the winner's circle!

Ben's and Karen's, nose to nose.






It's Clara's birthday week. Born during mom Jasmin's Grey House postdoc, she's three, three, three!!!

It's Dolly Parton's birthday week too!!!!

Thanks to Helen for the heads-up.



Dolly Parton  @DollyParton · 14h

This year my birthday wish is a call for kindness. We can't just hope for a brighter day, we have to work for a brighter day. Love too often gets buried in a world of hurt and fear. So today, January 19th, let's get to unearthing love  dolly.lnk.to/75thBirthday



 3,733  19.5K  197K 

Have a serene week everyone.



Richmond Park, thanks to Helen and Brendon.