# Hello lovely Grey House team members and our ultra-

**favorite quaran-teammates!** We are now 431 days into our whacky team-building exercise, and it's still underway, believe it or not. But the newsletter theme this week is fun, fun, and more fun! We are all due some fun, I reckon.

**Speaking of parties**, this uplifting little issue of the newsletter has fun photos from Saturday's Graduation Party for the Grey House class of 2021. Team members braved red mud, fire ants, chiggers, ticks, chicken poo, poison ivy, black widow spiders, snakes, and falling into the creek. We even had an Easter Egg hunt.



From National Geographic, take this super fun fun Dinosaur Personality Quiz! Are you a cunning carnivore? Or a happy-go-lucky herbivore? Take this just-for-fun personality quiz to find out where you fall in the dinosaur food chain.

https://kids.nationalgeographic.com/games/personality-quizzes/article/what-dinosaur

You just click on the response options, and at the end, you get to find out what dinosaur's personality you share.

I turned out to be T Rex. Hmmm...... Does that seem right to you? Perhaps because I clicked that I prefer hamburgers over salad? Well, it's at least as valid as the Big 5 personality test.

## Calendar of upcoming Grey House events:

#### Мау

5: Avshalom's birthday Wednesday 5,6: Avshalom and Temi in the office 14: Avshalom, and maybe Temi, fly to Israel (I have applied, waiting to hear) 29: Susan Harward's birthday 31: Line and Jens move to Copenhagen June: 4: Honalee's birthday 12: Avshalom's K07 training grant submission due at NIA 14: Jasmin's birthday 25: Aaron's birthday 30: Neuroimaging renewal and DunedinPoAm4x applications due at NIA Max and Emily move to Massachusetts. July: Aaron and Jessalee move to South Carolina If you have events coming up, and would like to share them, do let me know. Temi **TEAM MEETING SCHEDULE, 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 drive to Durham 10:00-11:00 Ahmad and co 11:00-12:00 Max thru June 12:00-1:00 Line, thru May 1:30-2:30 HonaLee and Av 3:00-4:00 4:00-5:00 Dina Q odd weeks 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 June 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 After Line, Max, and Aaron depart (sad, sad, sad), times will open up for Tuesday zoomers to come into the office for meetings, moving gradually back toward some days in the office, per Duke's plan for fall.

FIRST THE HAPPY NEWS: thank you Jens for the photos!



just a perfect day



lots of beach balls









strawberries



Easter egg prep



bubbles



we got to meet Scott!



gator rides

forest hikes



splashing in the creek





catching a butterfly



choosing farm t-shirts

Mexican popsicles



Flowers everywhere



thanks Line and Aaron for flowers!



Altogether the party was a delightful send-off for our stars, Aaron, Line, and Max! And Erin and James are graduating too. Wishing you all 5 a bright future, full of

fun!

## NEXT, THE UN-HAPPY NEWS:



everyone got very, very tired

### THIS WEEK's fun science visualizations: from Honalee.

Where does North Carolina live??? Check out the results of the new census!



#### Side-Stepping Safeguards, Journalists Are Doing Data Science Now https://undark.org/2021/04/22/data-journalists-are-doing-science/

Terrific short article about how newspapers are now including data analysis in their stories...but can we trust their data handling? Without Avshalom's eagle eye on the numbers, or Renate's reproducibility check, or peer review?

The author says:

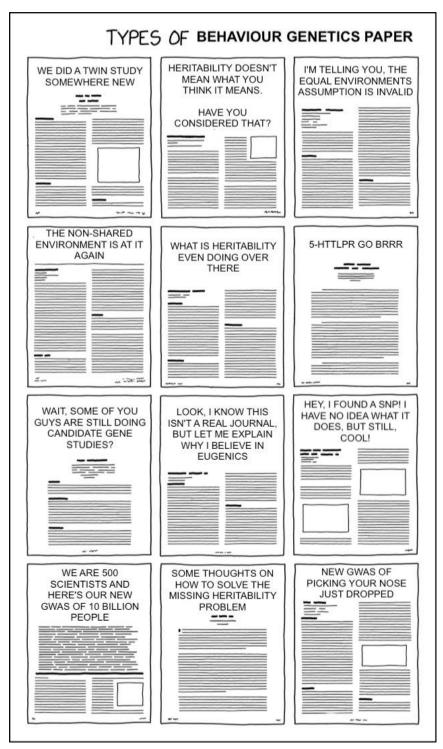
"For one thing, the pace of production in a newsroom is blistering. During the summer of 2018, I had the opportunity to write on the science desk at Slate Magazine while pursuing my Ph.D. in applied mathematics. Four years into my graduate studies at the time, I had published one scientific article, and another was grinding its way through the peer-review process. At Slate, I published <u>nine articles in 10 weeks</u>, and even that was a snail's pace relative to the professional journalists around me." **EEEK!** 

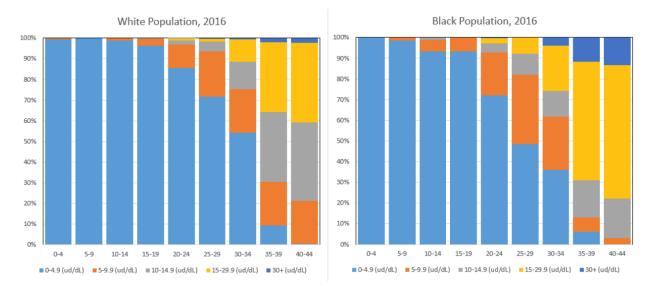
## Should journalists slow down to make sure they get it right? Or, should we scientists speed up to make our work more timely and impactful?

#### More science fun, from Jasmin:



### More fun science, especially on BG, from Essi:





## And from Aaron....estimating lead exposure by age

Inspired by our recent Dunedin Study JAMA papers, Michael McFarland has begun calculating the number of living Americans exposed to high lead levels as children. His team is now quantifying this estimate based on nationwide NHANES surveillance from 1976 onward.

He estimates that approximately <u>50.5 million</u> Americans currently under the age of forty-five were exposed to elevated BLLs in early life, based on the contemporary threshold for elevated BLLs (>5  $\mu$ g/dL).

The screen shot above shows his visualization of the percent of current Americans in age categories 44 and below who had high lead levels in childhood. What is notable is that for individuals currently aged 40-44, the majority had BLLs >10  $\mu$ g/dL and, for black Americans, a large number had BLLs >30  $\mu$ g/dL.

## **RESEARCH-PROJECT PROGRESS SINCE 26 April:**

Dona Matthews put out a terrific blog about our 4-decades of mental health paper. <u>https://www.nationalelfservice.net/treatment/mental-illness-prevention/mental-disorders-early-onset/</u>

#### Avshalom got this lovely letter from Duke!

Dear Avshalom Caspi,

Congratulations! A senior used their donation to honor you for your impact on their Duke experience. The <u>Senior Giving Challenge</u> allows senior donors to honor their mentors through the <u>Celebrating Mentors</u> campaign. We are so delighted to be mailing you a certificate with the senior's sentiments. Thank you so much for making such a big and positive impact on our student's Duke experience. Especially in such a trying year.



# Aaron and Helen got lots of news coverage for their paper on air pollution and p in JAMA-NO.

Here is the UK Science Media Center story: <u>https://www.sciencemediacentre.org/expert-reaction-to-</u>study-looking-at-childhood-air-pollution-exposure-and-mental-health-at-age-18/

Here is the paper: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2779249

And here is the Duke news story on the paper: <u>https://today.duke.edu/2021/04/childhood-air-pollution-exposure-linked-poor-mental-health-age-18</u>

Here's a first, coverage at *Daily News Egypt*, *Scientific American Arabic Edition*, *SciDev*.net and *AI Araby AI Jadeed*.

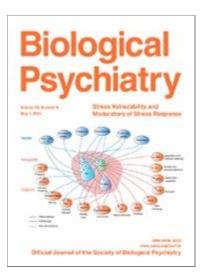
**The UK's All-Party Parliamentary Group on a Fit and Healthy Childhood** published their report titled "The COVID generation: A mental health pandemic in the making" that Andrea Danese and Helen Fisher contributed to. There's a brief overview on the MQ website: <u>https://www.mqmentalhealth.org/covid-generation/</u>

**Kyle's paper in** *Clinical Psychological Science*. "Lower Cardiovascular Reactivity Is Associated With More Childhood Adversity and Poorer Midlife Health: Replicated Findings From the Dunedin and MIDUS Cohorts" is now published and your complimentary e-copy is available at

https://journals.sagepub.com/eprint/I7HVNM4EDJZCWZZPMCZA/full

#### Maria Gehred's paper is now out, open access online.

Long-term neural embedding of childhood adversity in a population-representative birth cohort followed for five decades, https://doi.org/10.1016/j.biopsych.2021.02.971



**David Mason and Franky Happe's manuscript is accepted, entitled**, "Autistic traits are associated with faster pace of aging: Evidence from the Dunedin Study at age 45" (Manuscript ID: AUR-20-0501.R1), has been accepted for publication and will appear online in the next available issue of Autism Research.

#### Announcing a new journal: Nature Psychology!

https://www.nature.com/nrpsychol/?utm\_source=facebook&utm\_medium=social&utm\_conte nt=ads&utm\_campaign=NRRJ\_1\_MM01\_OT\_nrpsychol\_announcing&fbclid=IwAR3hdlP0ibepQ mFrnYLUEcBo41r9lpzCLEDwoD-Ol5kg-C-BhZlwlgWuN74

**New paper accepted**: Conway, C. C., \*Forbes, M. K, \*South, S. C., & the HiTOP Consortium. (in press). A Hierarchical Taxonomy of Psychopathology (HiTOP) primer for mental health researchers. <u>Clinical Psychological Science</u>.

Last Wednesday morning at 8am Jasmin was in Paris, giving a talk about the parenting/genes paper at CREST, which is the Center for Research in Economics and Statistics, part of the French National Institute for Statistics and Economic Studies: <u>https://crest.science/research/</u> who has the best research group logo (an Eiffel Tower! Made from DNA!)



**Aaron noticed this:** Interesting study buried at the end of last week's APS newsletter: a comparison of null and positive finding rates reported in standard publications vs registered reports. In studies registered for publication prior to data analysis, only 46% reported positive findings. In standard publications, 96% reported positive results! Stark illustration of how unnecessarily difficult it is to publish null findings...

Temi and Dan had 230 attendees Monday, who asked 24 questions we now must answer!



**100 Days of Biden's support for science.** This week we marked the 100th day of the Biden presidency, which presents the opportunity to assess the impact the new administration has on the research enterprise. As with any transition of leadership in the US government, the scientific community uniquely experiences changes in federal research priorities and policies. From Sigma Xi....

**The Biden administration has expressed strong support for science**. Prior to the election, candidate Biden stated that his administration would "listen to the scientists" and his initial actions have shown that to be the case. President Biden quickly moved to appoint Anthony Fauci as chief medical advisor to lead a team of experts in overseeing the administration's response to the COVID-19 pandemic, which has largely proven to be successful based on recent reports that more than 200 million vaccinations have been administered to Americans in the past three months; cases, hospitalizations, and deaths from the virus have dramatically fallen; and the Centers for Disease Control and Prevention is cautiously advising businesses and schools to open. Science was also the basis for the United States to return to the <u>Paris climate</u> agreement and for the president's decision to rejoin the World Health Organization. This commitment to the use of science in decision-making promises to improve the outcomes for the U.S. and the world.

The new administration has taken several steps to strengthen the federal research

enterprise. On his first day in office, Biden announced a diverse and talented group to assume top scientific leadership positions within the federal government and that he would elevate the science advisor and director of the Office of Science and Technology Policy to a Cabinet level position. On January 27, the administration made a commitment to end political manipulation of scientific evidence by releasing a <u>memorandum on scientific integrity</u>. President Biden's first proposed budget, unveiled on April 9, calls for major funding increases to research and development programs across non-defense agencies, including an increase of \$9 billion to the National Institutes of Health, \$1.7 billion added to the National Science Foundation, an additional \$400 million to the Department of Energy Office of Science, and increases for other research departments and agencies. The administration puts additional focus on the nation's aging highways, railways, and bridges in its \$2 trillion infrastructure package, which heavily invests in building scientific and engineering capacity.

While these developments represent only a fraction of the actions taken, the administration has clearly demonstrated significant support for science and engineering. However, questions remain about how the new investments in research and development will be managed. There have been discussions about establishing multiple research units based on the Department of Defense Advanced Research Projects Agency (ARPA). Joining the Department of Energy's ARPA-E, NIH would use \$6.5 billion of its budget increase to establish an Advanced Research Projects Agency-Health to focus on cancer, diabetes, and Alzheimer's. There is also a proposal for an Advanced Research Projects Agency-Climate to develop a more aggressive global warming mitigation and adaptation strategy. The National Science Foundation is exploring a new technology directorate to achieve the nation's innovation goals. Details about these proposals will be provided through forthcoming legislation and executive actions.



## Have a serene week everyone.