



MAX PLANCK INSTITUTE FOR HUMAN DEVELOPMENT
RESEARCH REPORT 2020-2022/23

Max Planck UCL Centre for Computational Psychiatry and Ageing Research

Directors



Raymond J. Dolan (University College London, London, UK)

Ulman Lindenberger (MPI for Human Development, Berlin, Germany)

Deputy Directors

Arno Villringer (MPI for Cognitive and Brain Sciences, Leipzig, Germany)

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Research Scientists (Berlin Site)

Andreas M. Brandmaier

Douglas D. Garrett

Simone Kühn

Ulman Lindenberger

Nicolas W. Schuck

Overview

The behavioral neurosciences and related disciplines have seen spectacular scientific advances that make them rich in scientific opportunity. These advances have made it possible to work toward a mechanistic understanding of behavioral aging and psychopathology, two empirically overlapping fields of great importance to science and society. In both fields, it is key to take a personalized lifespan approach by identifying neural and behavioral parameters that predict more or less favorable

trajectories, with the intent to intervene in time when undesirable outcomes are expected.



Plenary Session at the Fifth Symposium and Advanced Course on Computational Psychiatry and Ageing Research, Schloss Marbach, September 2022. The event focused on childhood memory development, and was organized in collaboration with the Jacobs Foundation.

Image: MPI for Human Development

With these goals in mind, the Max Planck Society and University College London (UCL) established the Max Planck UCL Centre for Computational Psychiatry and Ageing Research in 2014, with both partners providing an initial 5 years of funding. In 2018, the Centre was positively evaluated by the Max Planck Society and extended for another 5 years (2019–2024). The Centre has two sites, one in London (Russell Square) and the other in Berlin-Dahlem at the MPI for Human Development (see Table 1). It has continued to grow both in scope and number of students. Combined across Berlin and London sites, the Centre currently comprises 77 members (faculty, fellows, and students).

The Centre's foundation was preceded by a 3-year preparatory phase, which also included the organization of the *First Symposium and Advanced Course on Computational Psychiatry and Ageing Research* in 2012 at Ringberg Castle, Bavaria. During the reporting period, the Centre organized the [⑦ fifth symposium](#) of this kind in 2022 at Schloss Marbach (see photos); the symposium in 2020 had to be cancelled because of the COVID-19 pandemic.

In 2016, the Centre launched the [International Max Planck Research School on Computational Methods in Psychiatry and Ageing Research \(COMP2PSYCH\)](#) to extend its reach into graduate education. After a successful evaluation in September 2020, the graduate program of the Centre was extended for a second 6-year term until September 30, 2028.

Research Groups

Three MPIB research groups form the Centre in Berlin:

- The [Formal Methods in Lifespan Psychology](#) project, led by Andreas Brandmaier at the Center for Lifespan Psychology (LIP);
- The Emmy Noether Group, [The Lifespan Neural Dynamics Group \(LNDG\)](#), led by Douglas D. Garrett (also affiliated with LIP);
- The Max Planck Research Group [Neural and Computational Basis of Learning, Decision Making](#)

[and Memory \(MPRG NeuroCode\)](#), led by Nicolas Schuck.

In London, six research groups form the basis of the Centre:

- The [Affective Brain Group](#), led by Tali Sharot;
- The [Applied Computational Psychiatry Group](#), led by Quentin Huys;
- The [Developmental Computational Psychiatry Group](#), led by Tobias Hauser;
- The [Learning Memory & Decision Lab](#), led by G. Elliott Wimmer;
- The [Metacognition and Computational Psychiatry Group](#), led by Steve Fleming; and
- The [Reward, Decision Making and Psychopathology Group](#), led by Ray Dolan.

A full overview of the Centre's activities can be found on the [Centre's website](#).

Collaborations



After-dinner impressions from the Fifth Symposium and Advanced Course on Computational Psychiatry and Ageing Research, Schloss Marbach, September 2022. From left to right: Chi (Zoe) Ngo, Ulman Lindenberger, Sarah Power, Ann-Kathrin Jöchner, Elisa Buchberger, Erika Stewart (Trinity College Dublin), Leonhard Waschke.

Image: personal

Leveraging the unique skill and interest set at each site, a number of collaborations between the Berlin and London Centre sites continue to develop. For example, the Lifespan Neural Dynamics Group (PI Douglas Garrett) collaborates with the Developmental Psychiatry Group (PI Tobias Hauser) on the behavioral and neural bases of explore–exploit decision making across the lifespan, and with the Metacognition and Computational Psychiatry Group (PI Steve Fleming) on the connections between behavioral and neural uncertainty. Further, the MPRG NeuroCode (PI Nicolas Schuck) is collaborating with the Applied Computational Psychiatry Group (PI Quentin Huys) on a project to investigate mind wandering in healthy subjects vs. depressed patients using fMRI decoding techniques, and has co-authored a review about decoding cognition from spontaneous neural activity with the Dolan group (Liu et al., 2022). Also, a cross-site, in-depth workshop on “Data management with DataLad” was organized by MPRG NeuroCode member Lennart Wittkuhn in November 2020. The workshop centered around [DataLad](#), an open-source software tool for data

management and data publication. Participants learned about core concepts of effective research data management, such as joint version control of code and data, provenance capture for reproducible analysis, organizational principles for data analysis, and workflows and services for data publication and collaboration.

Table 1. Max Planck UCL Centre Members at the MPIB (as of 03/2023)*

Name: Andreas Brandmaier

Center/Research Group: Lifespan Psychology **Position:** Group Leader

Name: Simon Ciranka

Center/Research Group: Adaptive Rationality **Position:** Postdoc

Name: Douglas D. Garrett

Center/Research Group: Lifespan Neural **Position:** Group Leader

Dynamics Group & Lifespan Psychology

Name: Shany Grossman

Center/Research Group: Max Planck Research **Position:** Postdoc

Group NeuroCode

Name: Sam Hall-Macmaster

Center/Research Group: Max Planck Research **Position:** Postdoc

Group NeuroCode

Name: Simone Kühn

Center/Research Group: Lise Meitner Group for **Position:** Group Leader

Environmental Neuroscience

Name: Ulman Lindenberger

Center/Research Group: Lifespan Psychology **Position:** Director

Name: Nicolas W. Schuck

Center/Research Group: Max Planck Research **Position:** Group Leader

Group NeuroCode

Name: Leonhard Waschke

Center/Research Group: Lifespan Neural **Position:** Postdoc

Dynamics Group & Lifespan Psychology

Name: Lennart Wittkuhn

Center/Research Group: Max Planck Research Group NeuroCode **Position:** Postdoc

Name: Ondrej Zika

Center/Research Group: Max Planck Research Group NeuroCode **Position:** Postdoc

* For doctoral students, see [IMPRS COMP2PSYCH](#).

Note that Simon Ciranka and Lennart Wittkuhn are COMP2PSYCH alumni, that is, they completed their graduate training within COMP2PSYCH.

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Website: www.mps-ucl-centre.mpg.de



Max Planck UCL Centre for Computational Psychiatry and Ageing Research Berlin Site Publications 2020–2022/23

Updated on a daily basis

Journal Article (165)

2023

Journal Article

Ascone, L., Wirtz, J., Mellentin, A. I., Kugler, D., Bremer, T., Schadow, F., Hoppe, S., Jebens, C., & Kühn, S. (2023). Transferring the approach avoidance task into virtual reality: A study in patients with alcohol use disorder versus healthy controls. *Virtual Reality*, 27(3), 2711–2722. <https://doi.org/10.1007/s10055-023-00835-7>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Baeuchl, C., Glöckner, F., Koch, C., Petzold, J., Schuck, N. W., Smolka, M. N., & Li, S.-C. (2023). Dopamine differentially modulates medial temporal lobe activity and behavior during spatial navigation in young and older adults. *NeuroImage*, 273, Article 120099. <https://doi.org/10.1016/j.neuroimage.2023.120099>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Beukelaer, S. D., Vehar, N., Rollwage, M., Fleming, S. M., & Tsakiris, M. (2023). Changing minds about climate change: A pervasive role for domain-general metacognition. *Humanities and Social Sciences Communications*, 10, Article 46. <https://doi.org/10.1057/s41599-023-01528-x>

[MPG.PuRe](#) [DOI](#)

Journal Article

Binnewies, J., Nawijn, L., Brandmaier, A. M., Baaré, W. F. C., Boraxbekk, C.-J., Demnitz, N., Drevon, C. A., Fjell, A. M., Lindenberger, U., Skak Madsen, K., Nyberg, L., Topiwala, A., Walhovd, K. B., Ebmeier, K. P., & Penninx, B. W. J. H. (2023). Lifestyle-related risk factors and their cumulative associations with hippocampal and total grey matter volume across the adult lifespan: A pooled analysis in the European Lifebrain consortium. *Brain Research Bulletin*, 200, Article 110692. <https://doi.org/10.1016/j.brainresbull.2023.110692>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Boker, S. M., von Oertzen, T., Pritikin, J. N., Hunter, M. D., Brick, T. R., Brandmaier, A. M., & Neale, M. C. (2023). Products of variables in structural equation models. *Structural Equation Modeling*, 30(5), 708–718. <https://doi.org/10.1080/10705511.2022.2141749>

[MPG.PuRe](#) [DOI](#)

Journal Article

Bouwer, F. L., Fahrenfort, J. J., Millard, S. K., Kloosterman, N. A., & Slagter, H. A. (2023). A silent disco: Differential effects of beat-based and pattern-based temporal expectations on persistent entrainment of low-frequency neural oscillations. *Journal of Cognitive Neuroscience*, 35(6), 990–1020. https://doi.org/10.1162/jocn_a_01985

[MPG.PuRe](#) [DOI](#)

Journal Article

Buchberger, E., Brandmaier, A. M., Lindenberger, U., Werkle-Bergner, M., & Ngo, C. T. (in press). The process structure of memory abilities in early and middle childhood [Registered Report]. *Developmental Science*. <https://doi.org/10.31234/osf.io/p84a6>

[MPG.PuRe](#) [DOI](#)

Journal Article

Chen, H., Belanger, M. J., Garbusow, M., Kuitunen-Paul, S., Huys, Q. J. M., Heinz, A., Rapp, M. A., & Smolka, M. N. (2023). Susceptibility to interference between Pavlovian and instrumental control predisposes risky alcohol use developmental trajectory from ages 18 to 24. *Addiction Biology*, 28(2), Article e13263. <https://doi.org/10.1111/adb.13263>

[MPG.PuRe](#) [DOI](#)

Journal Article

Ciranka, S., & Hertwig, R. (in press). Environmental statistics and experience shape risk-taking across adolescence. *Trends in Cognitive Sciences*.

[MPG.PuRe](#)

Journal Article

Dahl, M. J., Bachman, S. L., Dutt, S., Düzel, S., Bodammer, N. C., Lindenberger, U., Kühn, S., Werkle-Bergner, M., & Mather, M. (2023). The integrity of dopaminergic and noradrenergic brain regions is associated with different aspects of late-life memory performance. *Nature Aging*. Advance online publication. <https://doi.org/10.1038/s43587-023-00469-z>

[MPG.PuRe](#) [DOI](#)

Journal Article

Dahl, M. J., Kulesza, A., Werkle-Bergner, M., & Mather, M. (2023). Declining locus coeruleus-

dopaminergic and noradrenergic modulation of long-term memory in aging and Alzheimer's disease. *Neuroscience & Biobehavioral Reviews*, 153, Article 105358. <https://doi.org/10.1016/j.neubiorev.2023.105358>

[MPG.PuRe](#) [DOI](#)

Journal Article

Ernst, M. S., Peikert, A., Brandmaier, A. M., & Rosseel, Y. (2023). A note on the connection between trek rules and separable nonlinear least squares in linear structural equation models. *Psychometrika*, 88(1), 98–116. <https://doi.org/10.1007/s11336-022-09891-5>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Fjell, A. M., Sørensen, Ø., Wang, Y., Amlien, I. K., Baaré, W. F. C., Bartrés-Faz, D., Boraxbekk, C.-J., Brandmaier, A. M., Demuth, I., Drevon, C. A., Ebmeier, K. P., Ghisletta, P., Kievit, R., Kühn, S., Skak Madsen, K., Nyberg, L., Solé-Padullés, C., Vidal-Piñeiro, D., Wagner, G., Watne, L. O., & Walhovd, K. B. (2023). Is short sleep bad for the brain? Brain structure and cognitive function in short sleepers. *The Journal of Neuroscience*, 43(28), 5241–5250. <https://doi.org/10.1523/JNEUROSCI.2330-22.2023>

[MPG.PuRe](#) [DOI](#)

Journal Article

Friemelt, B., Bloszies, C., Ernst, M. S., Peikert, A., Brandmaier, A. M., & Koch, T. (2023). On the performance of different regularization methods in bifactor-(S-1) models with explanatory variables: Caveats, recommendations, and future directions. *Structural Equation Modeling*, 30(4), 560–573. <https://doi.org/10.1080/10705511.2022.2140664>

[MPG.PuRe](#) [DOI](#)

Journal Article

Garvert, M. M., Saanum, T., Schulz, E., Schuck, N. W., & Doeller, C. F. (2023). Hippocampal spatio-predictive cognitive maps adaptively guide reward generalization. *Nature Neuroscience*, 26, 615–626. <https://doi.org/10.1038/s41593-023-01283-x>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Gehlenborg, J., Görnitz, A. S., Moritz, S., & Kühn, S. (2023). Long-term effects of imaginal retraining in overweight and obesity: A controlled study. *Journal of Behavior Therapy and Experimental Psychiatry*, 78, Article 101794. <https://doi.org/10.1016/j.jbtep.2022.101794>

[MPG.PuRe](#) [DOI](#)

Journal Article

Gerstorff, D., Ram, N., Drewelies, J., Duzel, S., Eibich, P., Steinhagen-Thiessen, E., Liebig, S., Goebel, J., Demuth, I., Villringer, A., Wagner, G. G., Lindenberger, U., & Ghisletta, P. (2023). Today's older adults are cognitively fitter than older adults were 20 years ago, but when and how they decline is no different

than in the past. *Psychological Science*, 34(1), 22–34. <https://doi.org/10.1177/09567976221118541>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Giron, A. P., Ciranka, S., Schulz, E., van den Bos, W., Ruggeri, A., Meder, B., & Wu, C. M. (2023). Developmental changes in exploration resemble stochastic optimization. *Nature Human Behaviour*. Advance online publication. <https://doi.org/10.1038/s41562-023-01662-1>

[MPG.PuRe](#) [DOI](#)

Journal Article

Hensums, M., van den Bos, W., Overbeek, G., & Larsen, H. (2023). YouTube vloggers set the stage: How public (non)compliance with COVID-19 regulations affects adolescents. *Journal of Adolescence*. Advance online publication. <https://doi.org/10.1002/jad.12207>

[MPG.PuRe](#) [DOI](#)

Journal Article

Krohn, S., von Schwanenflug, N., Waschke, L., Romanello, A., Gell, M., Garrett, D. D., & Finke, C. (2023). A spatiotemporal complexity architecture of human brain activity. *Science Advances*, 9(5), Article eabq3851. <https://doi.org/10.1126/sciadv.abq3851>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Lövdén, M., Pagin, A., Bartrés-Faz, D., Boraxbekk, C.-J., Brandmaier, A. M., Demnitz, N., Drevon, C. A., Ebmeier, K. P., Fjell, A. M., Ghisletta, P., Gorbach, T., Lindenberger, U., Plachti, A., Walhovd, K. B., & Nyberg, L. (2023). No moderating influence of education on the association between changes in hippocampus volume and memory performance in aging. *Aging Brain*, 4, Article 100082. <https://doi.org/10.1016/j.nbas.2023.100082>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Moneta, N., Garvert, M. M., Heekeren, H. R., & Schuck, N. W. (2023). Task state representations in vmPFC mediate relevant and irrelevant value signals and their behavioral influence. *Nature Communications*, 14, Article 3156. <https://doi.org/10.1038/s41467-023-38709-w>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Morriss, J., Abend, R., Zika, O., Bradford, D. E., & Mertens, G. (2023). Neural and psychophysiological markers of intolerance of uncertainty. *International Journal of Psychophysiology*, 184, 94–99. <https://doi.org/10.1016/j.ijpsycho.2023.01.003>

[MPG.PuRe](#) [DOI](#)

Journal Article

Mostajeran, F., Steinicke, F., Reinhart, S., Stuerzlinger, W., Riecke, B. E., & Kühn, S. (2023). Adding virtual plants leads to higher cognitive performance and psychological well-being in virtual reality. *Scientific Reports*, 13, Article 8053. <https://doi.org/10.1038/s41598-023-34718-3>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Muhle-Karbe, P. S., Sheahan, H., Pezzulo, G., Spiers, H. J., Chien, S., Schuck, N. W., & Summerfield, C. (in press). Goal-seeking compresses neural codes for space in the human hippocampus and orbitofrontal cortex. *Neuron*.

[MPG.PuRe](#)

Journal Article

Müller, V., & Lindenberger, U. (2023). Intra- and interbrain synchrony and hyperbrain network dynamics of a guitarist quartet and its audience during a concert. *Annals of the New York Academy of Sciences*, 1523(1), 74–90. <https://doi.org/10.1111/nyas.14987>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Nyberg, L., Andersson, M., Lundquist, A., Baaré, W. F. C., Bartrés-Faz, D., Bertram, L., Boraxbekk, C.-J., Brandmaier, A. M., Demnitz, N., Drevon, C. A., Düzel, S., Ebmeier, K. P., Ghisletta, P., Henson, R., Jensen, D. E. A., Kievit, R. A., Knights, E., Kühn, S., Lindenberger, U., Plachti, A., Pudas, S., Roe, J. M., Madsen, K. S., Solé-Padullés, C., Sommerer, Y., Suri, S., Zsoldos, E., Fjell, A. M., & Walhovd, K. B. (2023). Individual differences in brain aging: Heterogeneity in cortico-hippocampal but not caudate atrophy rates. *Cerebral Cortex*, 33(9), 5075–5081. <https://doi.org/10.1093/cercor/bhac400>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Picó Cabiró, M., Sudimac, S., Stobbe, E., & Kühn, S. (2023). Urbanization is positively associated with global perceptual style. *Journal of Environmental Psychology*. Advance online publication. <https://doi.org/10.1016/j.jenvp.2023.102100>

[MPG.PuRe](#) [DOI](#)

Journal Article

Plini, E. R. G., Melnychuk, M. C., Harkin, A., Dahl, M. J., McAuslan, M., Kühn, S., Boyle, R. T., Whelan, R., Andrews, R., Düzel, S., Drewelies, J., Wagner, G. G., Lindenberger, U., Norman, K., Robertson, I. H., & Dockree, P. M. (in press). Dietary tyrosine intake is associated with locus coeruleus, attention and grey matter maintenance: An MRI structural study on 398 healthy individuals of the Berlin Aging Study-II. *The Journal of Nutrition, Health & Aging*.

[MPG.PuRe](#)

Journal Article

Polk, S. E., Kleemeyer, M. M., Bodammer, N. C., Misgeld, C., Porst, J., Wolfarth, B., Kühn, S.,

Lindenberger, U., Düzel, S., & Wenger, E. (2023). Aerobic exercise is associated with region-specific changes in volumetric, tensor-based, and fixel-based measures of white matter integrity in healthy older adults. *Neuroimage: Reports*, 3, Article 100155. <https://doi.org/10.1016/j.ynirp.2022.100155>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Schaefer, S., Riediger, M., Li, S.-C., & Lindenberger, U. (2023). Too easy, too hard, or just right: Lifespan age differences and gender effects on task difficulty choices. *International Journal of Behavioral Development*, 47(3), 253–264. <https://doi.org/10.1177/01650254231160126>

[MPG.PuRe](#) [DOI](#)

Journal Article

Schmiedek, F., Lövdén, M., Ratcliff, R., & Lindenberger, U. (2023). Practice-related changes in perceptual evidence accumulation correlate with changes in working memory. *Journal of Experimental Psychology: General*, 152(3), 763–779. <https://doi.org/10.1037/xge0001290>

[MPG.PuRe](#) [DOI](#)

Journal Article

Schwarze, S. A., Laube, C., Khosravani, N., Lindenberger, U., Bunge, S. A., & Fandakova, Y. (2023). Does prefrontal connectivity during task switching help or hinder children's performance? *Developmental Cognitive Neuroscience*, 60, Article 101217. <https://doi.org/10.1016/j.dcn.2023.101217>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Shine, J. M., Lewis, L. D., Garrett, D. D., & Hwang, K. (2023). The impact of the human thalamus on brain-wide information processing. *Nature Reviews Neuroscience*, 24, 416–430. <https://doi.org/10.1038/s41583-023-00701-0>

[MPG.PuRe](#) [DOI](#)

Journal Article

Thomas, A. W., Lindenberger, U., Samek, W., & Müller, K.-R. (2023). Evaluating deep transfer learning for whole-brain cognitive decoding. *Journal of the Franklin Institute*, 360(13), 9754–9787. <https://doi.org/10.1016/j.jfranklin.2023.07.015>

[MPG.PuRe](#) [DOI](#) [supplementary-material](#)

Journal Article

Wittekind, C. E., Schiebel, T., & Kühn, S. (2023). Reliability of and associations between cognitive bias measures and response inhibition in smoking. *Journal of Behavior Therapy and Experimental Psychiatry*, 81, Article 101853. <https://doi.org/10.1016/j.jbtep.2023.101853>

[MPG.PuRe](#) [DOI](#)

Journal Article

Zika, O. (2023). The relationship between latent state inference and (intolerance of) uncertainty. *Neuroscience & Biobehavioral Reviews*, 152, Article 105321. <https://doi.org/10.1016/j.neubiorev.2023.105321>

[MPG.PuRe](#) [DOI](#)

Journal Article

Zika, O., Wiech, K., Reinecke, A., Browning, M., & Schuck, N. W. (2023). Trait anxiety is associated with hidden state inference during aversive reversal learning. *Nature Communications*, 14, Article 4203. <https://doi.org/10.1038/s41467-023-39825-3>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

2022

Journal Article

Anand, C., Brandmaier, A. M., Lynn, J., Arshad, M., Stanley, J. A., & Raz, N. (2022). Test-retest and repositioning effects of white matter microstructure measurements in selected white matter tracts. *Neuroimage: Reports*, 2, Article 100096. <https://doi.org/10.1016/j.ynirp.2022.100096>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Binnewies, J., Nawijn, L., Brandmaier, A. M., Baaré, W. F. C., Bartrés-Faz, D., Drevon, C. A., Düzel, S., Fjell, A. M., Han, L. K. M., Knights, E., Lindenberger, U., Milaneschi, Y., Mowinckel, A. M., Nyberg, L., Plachti, A., Madsen, K. S., Solé-Padullés, C., Suri, S., Walhovd, K. B., Zsoldos, E., Ebmeier, K. P., & Penninx, B. W. J. H. (2022). Associations of depression and regional brain structure across the adult lifespan: Pooled analyses of six population-based and two clinical cohort studies in the European Lifebrain consortium. *NeuroImage: Clinical*, 36, Article 103180. <https://doi.org/10.1016/j.nicl.2022.103180>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Carver, R. B., Fredheim, N. A. G., Mowinckel, A. M., Ebmeier, K. P., Friedman, B. B., Rosness, T. A., Drevon, C. A., Suri, S., Baaré, W. F. C., Zsoldos, E., Solé-Padullés, C., Bartrés-Faz, D., Ghisletta, P., Nawijn, L., Düzel, S., Madsen, K. S., Fjell, A. M., Lindenberger, U., Walhovd, K. B., & Budin-Ljøsne, I. (2022). People's interest in brain health testing: Findings from an international, online cross-sectional survey. *Frontiers in Public Health*, 10, Article 998302. <https://doi.org/10.3389/fpubh.2022.998302>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Ciranka, S., Linde-Domingo, J., Padezhki, I., Wicharz, C., Wu, C. M., & Spitzer, B. (2022). Asymmetric reinforcement learning facilitates human inference of transitive relations. *Nature Human Behaviour*, 6, 555–564. <https://doi.org/10.1038/s41562-021-01263-w>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Cogliati Dezza, I., Maher, C., & Sharot, T. (2022). People adaptively use information to improve their internal states and external outcomes. *Cognition*, 228, Article 105224. <https://doi.org/10.1016/j.cognition.2022.105224>

[MPG.PuRe](#) [DOI](#)

Journal Article

Drewelies, J., Eibich, P., Düzel, S., Kühn, S., Krekel, C., Goebel, J., Kolbe, J., Demuth, I., Lindenberger, U., Wagner, G. G., & Gerstorf, D. (2022). Location, location, location: The role of objective neighborhood characteristics for perceptions of control. *Gerontology*, 68, 214–223. <https://doi.org/10.1159/000515634>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Drewelies, J., Hueluer, G., Düzel, S., Vetter, V. M., Pawelec, G., Steinhagen-Thiessen, E., Wagner, G. G., Lindenberger, U., Lill, C. M., Bertram, L., Gerstorf, D., & Demuth, I. (2022). Using blood test parameters to define biological age among older adults: Association with morbidity and mortality independent of chronological age validated in two separate birth cohorts. *GeroScience*, 44, 2685–2699. <https://doi.org/10.1007/s11357-022-00662-9>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Drewelies, J., Windsor, T. D., Düzel, S., Demuth, I., Wagner, G. G., Lindenberger, U., Gerstorf, D., & Ghisletta, P. (2022). Age trajectories of perceptual speed and loneliness: Separating between-person and within-person associations. *The Journals of Gerontology: B, Psychological Sciences and Social Sciences*, 77(1), 118–129. <https://doi.org/10.1093/geronb/gbab180>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Düzel, S., Drewelies, J., Polk, S. E., Misgeld, C., Porst, J., Wolfarth, B., Kühn, S., Brandmaier, A. M., & Wenger, E. (2022). No evidence for a boost in psychosocial functioning in older age after a 6-months physical exercise intervention. *Frontiers in Human Neuroscience*, 16, Article 825454. <https://doi.org/10.3389/fnhum.2022.825454>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Jawinski, P., Markett, S., Drewelies, J., Düzel, S., Demuth, I., Steinhagen-Thiessen, E., Wagner, G. G., Gerstorf, D., Lindenberger, U., Gaser, C., & Kühn, S. (2022). Linking brain age gap to mental and physical health in the Berlin Aging Study II. *Frontiers in Aging Neuroscience*, 14, Article 791222. <https://doi.org/10.3389/fnagi.2022.791222>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Johansson, J., Wåhlin, A., Lundquist, A., Brandmaier, A. M., Lindenberger, U., & Nyberg, L. (2022). Model of brain maintenance reveals specific change-change association between medial-temporal lobe integrity and episodic memory. *Aging Brain*, 2, Article 100027. <https://doi.org/10.1016/j.nbas.2021.100027>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Karalija, N., Johansson, J., Papenberg, G., Wåhlin, A., Salami, A., Köhncke, Y., Brandmaier, A. M., Andersson, M., Axelsson, J., Riklund, K., Lövdén, M., Lindenberger, U., Bäckman, L., & Nyberg, L. (2022). Longitudinal dopamine D2 receptor changes and cerebrovascular health in aging. *Neurology*, 99(12), e1278–e1289. <https://doi.org/10.1212/WNL.0000000000200891>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Karlsson, A. E., Lindenberger, U., & Sander, M. C. (2022). Out of rhythm: Compromised precision of theta-gamma coupling impairs associative memory in old age. *The Journal of Neuroscience*, 42(9), 1752–1764. <https://doi.org/10.1523/JNEUROSCI.1678-21.2021>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Kempermann, G., Lopes, J. B., Zocher, S., Schilling, S., Ehret, F., Garthe, A., Karasinsky, A., Brandmaier, A. M., Lindenberger, U., Winter, Y., & Overall, R. W. (2022). The individuality paradigm: Automated longitudinal activity tracking of large cohorts of genetically identical mice in an enriched environment. *Neurobiology of Disease*, 175, Article 105916. <https://doi.org/10.1016/j.nbd.2022.105916>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Klug, M., & Kloosterman, N. A. (2022). Zapline-plus: A Zapline extension for automatic and adaptive removal of frequency-specific noise artifacts in M/EEG. *Human Brain Mapping*, 43(9), 2743–2758. <https://doi.org/10.1002/hbm.25832>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Koch, C., Baeuchl, C., Glöckner, F., Riedel, P., Petzold, J., Smolka, M. N., Li, S.-C., & Schuck, N. W. (2022). L-DOPA enhances neural direction signals in younger and older adults. *NeuroImage*, 264, Article 119670. <https://doi.org/10.1016/j.neuroimage.2022.119670>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Kühn, S., Mascherek, A., Filevich, E., Lisofsky, N., Becker, M., Butler, O., Lochstet, M., Mårtensson, J., Wenger, E., Lindenberger, U., & Gallinat, J. (2022). Spend time outdoors for your brain: An in-depth longitudinal MRI study. *The World Journal of Biological Psychiatry*, 23(3), 201–207. <https://doi.org>

/10.1080/15622975.2021.1938670

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Kumar, M., Anderson, M. J., Antony, J. W., Baldassano, C., Brooks, P. P., Cai, M. B., Chen, P.-H. C., Ellis, C. T., Henselman-Petrusek, G., Huberdeau, D., Hutchinson, J. B., Li, P. Y., Lu, Q., Manning, J. R., Mennen, A. C., Nastase, S. A., Richard, H., Schapiro, A. C., Schuck, N. W., Shvartsman, M., Sundaram, N., Suo, D., Turek, J. S., Vo, V. A., Wallace, G., Wang, Y., Zhang, H., Zhu, X., Capota, M., Cohen, J. D., Hasson, U., Li, K., Ramadge, P. J., Turk-Browne, N. B., Willke, T. L., & Norman, K. A. (2022). BrainIAK: The Brain Imaging Analysis Kit. *Aperture Neuro*, Article 42. <https://doi.org/10.52294/31bb5b68-2184-411b-8c00-a1dacb61e1da>

[MPG.PuRe](#) [DOI](#)

Journal Article

Kumar, P., Stiernborg, M., Fogdell-Hahn, A., Månsson, K., Furmark, T., Berglind, D., Melas, P. A., Forsell, Y., & Lavebratt, C. (2022). Physical exercise is associated with a reduction in plasma levels of fractalkine, TGF- β 1, eotaxin-1 and IL-6 in younger adults with mobility disability. *PLoS ONE*, 17(2), Article e0263173. <https://doi.org/10.1371/journal.pone.0263173>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Liu, Y., Nour, M. M., Schuck, N. W., Behrens, T. E. J., & Dolan, R. J. (2022). Decoding cognition from spontaneous neural activity. *Nature Reviews Neuroscience*, 23, 204–214. <https://doi.org/10.1038/s41583-022-00570-z>

[MPG.PuRe](#) [DOI](#)

Journal Article

Löckenhoff, C. E., Drewelies, J., Düzel, S., Steinhagen-Thiessen, E., Demuth, I., Freund, A. M., Staudinger, U. M., Lindenberger, U., Wagner, G. G., Ram, N., & Gerstorf, D. (2022). Sociohistorical change in urban older adults' perceived speed of time and time pressure. *The Journals of Gerontology: B, Psychological Sciences and Social Sciences*, 77(3), 457–466. <https://doi.org/10.1093/geronb/gbab094>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Lorenz, R. C., Butler, O., Willmund, G., Wesemann, U., Zimmermann, P., Gallinat, J., & Kühn, S. (2022). Effects of stress on neural processing of combat-related stimuli in deployed soldiers: An fMRI study. *Translational Psychiatry*, 12, Article 483. <https://doi.org/10.1038/s41398-022-02241-0>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Månsson, K. N. T., Lasselin, J., Karshikoff, B., Axelsson, J., Engler, H., Schedlowski, M., Benson, S., Petrovic, P., & Lekander, M. (2022). Anterior insula morphology and vulnerability to psychopathology-

related symptoms in response to acute inflammation. *Brain, Behavior, and Immunity*, 99, 9–16.

<https://doi.org/10.1016/j.bbi.2021.09.007>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Månsson, K. N. T., Waschke, L., Manzouri, A., Furmark, T., Fischer, H., & Garrett, D. D. (2022). Moment-to-moment brain signal variability reliably predicts psychiatric treatment outcome. *Biological Psychiatry*, 91(7), 658–666. <https://doi.org/10.1016/j.biopsych.2021.09.026>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Müller, V., & Lindenberger, U. (2022). Probing associations between interbrain synchronization and interpersonal action coordination during guitar playing. *Annals of the New York Academy of Sciences*, 1507(1), 146–161. <https://doi.org/10.1111/nyas.14689>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Navajas, J., Armand, O., Moran, R., Bahrami, B., & Deroy, O. (2022). Diversity of opinions promotes herding in uncertain crowds. *Royal Society Open Science*, 9(6), Article 191497. <https://doi.org/10.1098/rsos.191497>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Nyberg, L., Karalija, N., Papenberg, G., Salami, A., Andersson, M., Pedersen, R., Vikner, T., Garrett, D. D., Riklund, K., Wåhlin, A., Lövdén, M., Lindenberger, U., & Bäckman, L. (2022). Longitudinal stability in working memory and frontal activity in relation to general brain maintenance. *Scientific Reports*, 12, Article 20957. <https://doi.org/10.1038/s41598-022-25503-9>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Ojala, K. E., Staib, M., Gerster, S., Ruff, C. C., & Bach, D. R. (2022). Inhibiting human aversive memory by transcranial theta-burst stimulation to the primary sensory cortex: Archival report. *Biological Psychiatry*, 92(2), 149–157. <https://doi.org/10.1016/j.biopsych.2022.01.021>

[MPG.PuRe](#) [DOI](#)

Journal Article

Olivo, G., Lövdén, M., Manzouri, A., Terlau, L., Jenner, B., Jafari, A., Petersson, S., Li, T.-Q., Fischer, H., & Månsson, K. N. T. (2022). Estimated gray matter volume rapidly changes after a short motor task. *Cerebral Cortex*, 32(19), 4356–4369. <https://doi.org/10.1093/cercor/bhab488>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Polk, S. E., Kleemeyer, M. M., Köhncke, Y., Brandmaier, A. M., Bodammer, N. C., Misgeld, C., Porst, J., Wolfarth, B., Kühn, S., Lindenberger, U., Wenger, E., & Düzel, S. (2022). Change in latent gray matter structural integrity is associated with change in cardiovascular fitness in older adults who engage in at-home aerobic exercise. *Frontiers in Human Neuroscience*, *16*, Article 852737. <https://doi.org/10.3389/fnhum.2022.852737>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Porat, S., Sibilia, F., Yoon, J., Shi, Y., Dahl, M. J., Werkle-Bergner, M., Düzel, S., Bodammer, N., Lindenberger, U., Kühn, S., & Mather, M. (2022). Age differences in diffusivity in the locus coeruleus and its ascending noradrenergic tract. *NeuroImage*, *251*, Article 119022. <https://doi.org/10.1016/j.neuroimage.2022.119022>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Schmiedek, F., Kroehne, U., Goldhammer, F., Prindle, J. J., Lindenberger, U., Klinger-König, J., Grabe, H. J., Riedel-Heller, S. G., Pabst, A., Streit, F., Zillich, L., Kleineidam, L., Wagner, M., Rietschel, M., Rujescu, D., Schmidt, B., Nako Investigators, & Berger, K. (2022). General cognitive ability assessment in the German National Cohort (NAKO): The block-adaptive number series task. *The World Journal of Biological Psychiatry*. Advance online publication. <https://doi.org/10.1080/15622975.2021.2011407>

[MPG.PuRe](#) [DOI](#)

Journal Article

Solé-Padullés, C., Macià, D., Andersson, M., Stiernstedt, M., Pudas, S., Düzel, S., Zsoldos, E., Ebmeier, K. P., Binnewies, J., Drevon, C. A., Brandmaier, A. M., Mowinckel, A. M., Fjell, A. M., Madsen, K. S., Baaré, W. F. C., Lindenberger, U., Nyberg, L., Walhovd, K. B., & Bartrés-Faz, D. (2022). No association between loneliness, episodic memory and hippocampal volume change in young and healthy older adults: A longitudinal European multicenter study. *Frontiers in Aging Neuroscience*, *14*, Article 795764. <https://doi.org/10.3389/fnagi.2022.795764>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [ZIP](#)

Journal Article

Sommerer, Y., Dobricic, V., Schilling, M., Ohlei, O., Bartrés-Faz, D., Cattaneo, G., Demuth, I., Düzel, S., Franzenburg, S., Fuß, J., Lindenberger, U., Pascual-Leone, Á., Sabet, S. S., Solé-Padullés, C., Tormos, J. M., Vetter, V. M., Wesse, T., Franke, A., Lill, C. M., & Bertram, L. (2022). Epigenome-wide association study in peripheral tissues highlights DNA methylation profiles associated with episodic memory performance in humans. *Biomedicines*, *10*(11), Article 2798. <https://doi.org/10.3390/biomedicines10112798>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [ZIP](#)

Journal Article

Sudimac, S., & Kühn, S. (2022). A one-hour walk in nature reduces amygdala activity in women, but not in men. *Frontiers in Psychology, 13*, Article 931905. <https://doi.org/10.3389/fpsyg.2022.931905>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Sudimac, S., Sale, V., & Kühn, S. (2022). How nature nurtures: Amygdala activity decreases as the result of a one-hour walk in nature. *Molecular Psychiatry, 27*, 4446–4452. <https://doi.org/10.1038/s41380-022-01720-6>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Tawil, N., Ascone, L., & Kühn, S. (2022). The contour effect: Differences in the aesthetic preference and stress response to photo-realistic living environments. *Frontiers in Psychology, 13*, Article 933344. <https://doi.org/10.3389/fpsyg.2022.933344>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [supplementary-material](#)

Journal Article

Tucker-Drob, E. M., De la Fuente, J., Köhncke, Y., Brandmaier, A. M., Nyberg, L., & Lindenberger, U. (2022). A strong dependency between changes in fluid and crystallized abilities in human cognitive aging. *Science Advances, 8*, Article eabj2422. <https://doi.org/10.1126/sciadv.abj2422>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Vikner, T., Karalija, N., Eklund, A., Malm, J., Lundquist, A., Gallewicz, N., Dahlin, M., Lindenberger, U., Riklund, K., Bäckman, L., Nyberg, L., & Wåhlin, A. (2022). 5-year associations among cerebral arterial pulsatility, perivascular space dilation, and white matter lesions. *Annals of Neurology, 92*(5), 871–881. <https://doi.org/10.1002/ana.26475>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Wahl, H.-W., Drewelies, J., Düzel, S., Lachman, M. E., Smith, J., Eibich, P., Steinhagen-Thiessen, E., Demuth, I., Lindenberger, U., Wagner, G. G., Ram, N., & Gerstorf, D. (2022). Subjective age and attitudes toward own aging across two decades of historical time. *Psychology and Aging, 37*(3), 413–429. <https://doi.org/10.1037/pag0000649>

[MPG.PuRe](#) [DOI](#)

Journal Article

Walhovd, K. B., Fjell, A. M., Wang, Y., Amlie, I. K., Mowinckel, A. M., Lindenberger, U., Düzel, S., Bartrés-Faz, D., Ebmeier, K. P., Drevon, C. A., Baaré, W. F. C., Ghisletta, P., Johansen, L. B., Kievit, R. A., Henson, R. N., Skak Madsen, K., Nyberg, L., Harris, J. R., Solé-Padullés, C., Pudas, S., Sørensen, Ø., Westerhausen, R., Zsoldos, E., Nawijn, L., Hovde Lyngstad, T., Suri, S., Penninx, B., Rogeberg, O. J., & Brandmaier, A. M. (2022). Education and income show heterogeneous relationships to lifespan brain and cognitive

differences across European and US cohorts. *Cerebral Cortex*, 32(4), 839–854. <https://doi.org/10.1093/cercor/bhab248>

[MPG.PuRe](#) [DOI](#) [publisher-version](#) [ZIP](#)

Journal Article

Walhovd, K. B., Nyberg, L., Lindenberger, U., Magnussen, F., Amlien, I. K., Sørensen, Ø., Wang, Y., Mowinckel, A. M., Kievit, R. A., Ebmeier, K. P., Bartrés-Faz, D., Kühn, S., Boraxbekk, C.-J., Ghisletta, P., Skak Madsen, K., Baaré, W. F. C., Zsoldos, E., Penninx, B., & Fjell, A. M. (2022). Brain aging differs with cognitive ability regardless of education. *Scientific Reports*, 12, Article 13886. <https://doi.org/10.1038/s41598-022-17727-6>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Wenger, E., Polk, S. E., Kleemeyer, M. M., Weiskopf, N., Bodammer, N. C., Lindenberger, U., & Brandmaier, A. M. (2022). Reliability of quantitative multiparameter maps is high for magnetization transfer and proton density but attenuated for R_1 and R_2^* in healthy young adults. *Human Brain Mapping*, 43(11), 3585–3603. <https://doi.org/10.1002/hbm.25870>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Youn, C., Grotzinger, A. D., Lill, C. M., Bertram, L., Schmiedek, F., Lövdén, M., Lindenberger, U., Nivard, M., Harden, K. P., & Tucker-Drob, E. M. (2022). Genetic associations with learning over 100 days of practice. *npj Science of Learning*, 7, Article 7. <https://doi.org/10.1038/s41539-022-00121-2>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

2021

Journal Article

Arnold, M., Brandmaier, A. M., & Voelkle, M. C. (2021). Predicting differences in model parameters with individual parameter contribution regression using the R package lpcr. *Psych*, 3(3), 360–385. <https://doi.org/10.3390/psych3030027>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Arnold, M., Voelkle, M. C., & Brandmaier, A. M. (2021). Score-guided structural equation model trees. *Frontiers in Psychology*, 11, Article 564403. <https://doi.org/10.3389/fpsyg.2020.564403>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Bachman, S. L., Dahl, M. J., Werkle-Bergner, M., Düzel, S., Garcia Forlim, C., Lindenberger, U., Kühn, S., & Mather, M. (2021). Locus coeruleus MRI contrast is associated with cortical thickness in older adults. *Neurobiology of Aging*, 100, 72–82. <https://doi.org/10.1016/j.neurobiolaging.2020.12.019>

[MPG.PuRe](#) [DOI](#) [post-print](#) [ZIP](#)

Journal Article

Cekic, S., Aichele, S., Brandmaier, A. M., Köhncke, Y., & Ghisletta, P. (2021). A tutorial for joint modeling of longitudinal and time-to-event data in R. *Quantitative and Computational Methods in Behavioral Sciences*, 1, Article e2979. <https://doi.org/10.5964/qcmb.2979>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Chan, S. C. Y., Schuck, N. W., Lopatina, N., Schoenbaum, G., & Niv, Y. (2021). Orbitofrontal cortex and learning predictions of state transitions. *Behavioral Neuroscience*, 135(4), 487–497. <https://doi.org/10.1037/bne0000461>

[MPG.PuRe](#) [DOI](#) [post-print](#)

Journal Article

Ciranka, S., & van den Bos, W. (2021). Social norms in adolescent risk engagement and recommendation. *British Journal of Developmental Psychology*, 39(3), 481–498. <https://doi.org/10.1111/bjdp.12369>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Ciranka, S., & van den Bos, W. (2021). Adolescent risk-taking in the context of exploration and social influence. *Developmental Review*, 61, Article 100979. <https://doi.org/10.1016/j.dr.2021.100979>

[MPG.PuRe](#) [DOI](#) [post-print](#)

Journal Article

Dahl, M. J., Bachman, S. L., Dutt, S., Düzel, S., Lindenberger, U., Kühn, S., Werkle-Bergner, M., & Mather, M. (2021). Multimodal assessment of locus coeruleus integrity is associated with late-life memory performance. *Alzheimer's & Dementia*, 17(S4), Article e056330. <https://doi.org/10.1002/alz.056330>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Demuth, I., Banszerus, V., Drewelies, J., Düzel, S., Seeland, U., Spira, D., Tse, E., Braun, J., Steinhagen-Thiessen, E., Bertram, L., Thiel, A., Lindenberger, U., Regitz-Zagrosek, V., & Gerstorf, D. (2021). Cohort profile: Follow-up of a Berlin Aging Study II (BASE-II) subsample as part of the GendAge study. *BMJ Open*, 11, Article e045576. <https://doi.org/10.1136/bmjopen-2020-045576>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Fjell, A. M., Grydeland, H., Wang, Y., Amlien, I., Bartrés-Faz, D., Brandmaier, A. M., Düzel, S., Elman, J., Franz, C., Håberg, A. K., Kietzmann, T. C., Kievit, R. A., Kremen, W. S., Krogsrud, S. K., Kühn, S., Lindenberger, U., Macià, D., Mowinckel, A. M., Nyberg, L., Panizzon, M. S., Solé-Padullés, C., Sørensen, Ø., Westerhausen, R., & Walhovd, K. B. (2021). The genetic organization of longitudinal subcortical volumetric change is stable throughout the lifespan. *eLife*, 10, Article e66466. <https://doi.org/10.7554>

/eLife.66466

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Fjell, A. M., Sørensen, Ø., Amlien, I. K., Bartrés-Faz, D., Brandmaier, A. M., Buchmann, N., Demuth, I., Drevon, C. A., Düzel, S., Ebmeier, K. P., Ghisletta, P., Idland, A.-V., Kietzmann, T. C., Kievit, R. A., Kühn, S., Lindenberger, U., Magnussen, F., Macià, D., Mowinckel, A. M., Nyberg, L., Sexton, C. E., Solé-Padullés, C., Pudas, S., Roe, J. M., Sederevicius, D., Suri, S., Vidal-Piñeiro, D., Wagner, G., Watne, L. O., Westerhausen, R., Zsoldos, E., & Walhovd, K. B. (2021). Poor self-reported sleep is related to regional cortical thinning in aging but not memory decline: Results from the Lifebrain consortium. *Cerebral Cortex*, 31(4), 1953–1969. <https://doi.org/10.1093/cercor/bhaa332>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Garrett, D. D., Skowron, A., Wiegert, S., Adolf, J., Dahle, C. L., Lindenberger, U., & Raz, N. (2021). Lost dynamics and the dynamics of loss: Longitudinal compression of brain signal variability is coupled with declines in functional integration and cognitive performance. *Cerebral Cortex*, 31(11), 5239–5252. <https://doi.org/10.1093/cercor/bhab154>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Glöckner, F., Schuck, N. W., & Li, S. C. (2021). Differential prioritization of intramaze cue and boundary information during spatial navigation across the human lifespan. *Scientific Reports*, 11, Article 15257. <https://doi.org/10.1038/s41598-021-94530-9>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Grydeland, H., Sederevičius, D., Wang, Y., Bartrés-Faz, D., Bertram, L., Dobricic, V., Düzel, S., Ebmeier, K. P., Lindenberger, U., Nyberg, L., Pudas, S., Sexton, C. E., Solé-Padullés, C., Sørensen, Ø., Walhovd, K. B., & Fjell, A. M. (2021). Self-reported sleep relates to microstructural hippocampal decline in β -amyloid positive adults beyond genetic risk. *Sleep*, 44(11), Article zsab110. <https://doi.org/10.1093/sleep/zsab110>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Hall-McMaster, S., Dayan, P., & Schuck, N. W. (2021). Control over patch encounters changes foraging behavior. *iScience*, 24(9), Article 103005. <https://doi.org/10.1016/j.isci.2021.103005>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)

Journal Article

Hjorth, O. R., Frick, A., Gingnell, M., Hoppe, J. M., Faria, V., Hultberg, S., Alaie, I., Månsson, K. N. T., Wahlstedt, K., Jonasson, M., Lubberink, M., Antoni, G., Fredrikson, M., & Furmark, T. (2021). Expression

and co-expression of serotonin and dopamine transporters in social anxiety disorder: A multitracer positron emission tomography study. *Molecular Psychiatry*, 26, 3970–3979. <https://doi.org/10.1038/s41380-019-0618-7>

[MPG.PuRe](#) [DOI](#) [post-print](#)

Journal Article

Karalija, N., Köhncke, Y., Düzel, S., Bertram, L., Papenberg, G., Demuth, I., Lill, C. M., Johansson, J., Riklund, K., Lövdén, M., Bäckman, L., Nyberg, L., Lindenberger, U., & Brandmaier, A. M. (2021). A common polymorphism in the dopamine transporter gene predicts working memory performance and in vivo dopamine integrity in aging. *NeuroImage*, 245, Article 118707. <https://doi.org/10.1016/j.neuroimage.2021.118707>

[MPG.PuRe](#) [DOI](#) [publisher-version](#)