

NEWS

Alison Montagnin, Maître-Assistante in the Department of Basic Neuroscience, in collaboration with the Icahn School of Medicine in New York, has shown the major role of hippocampus in conducting

PLANNING



our daily priorities. Their study, published in *Nature Communications*, revealed that the brain prioritizes immediate needs over distant future ones, activating different hippocampal regions based on this timescale. This research has significant implications for understanding psychiatric disorders related to goal formation difficulties, such as depression.

<https://www.unige.ch/medias/en/2024/lhippocampe-chef-dorchestre-cerebral-de-nos-priorites-quotidiennes>

SCHIZOPHRENIA



One of the most common symptoms of schizophrenia is apathy and lack of motivation. Using a reward-based game protocol, Stefan Kaiser's team demonstrated that the brains of people suffering from schizophrenia are unable to discriminate between different levels of reward in a sufficiently subtle way, hampering their motivation to undertake everyday tasks. A study to be read in *Brain*.

<https://www.unige.ch/medias/en/2024/pourquoi-schizophrenie-et-apathe-vont-de-pair>

VISION



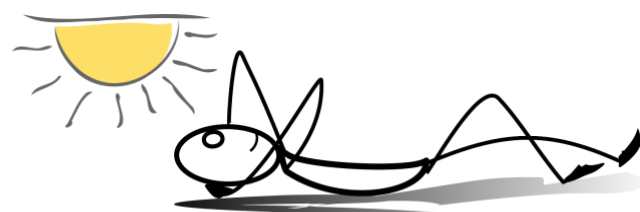
In a recent study on gaze decoding published in the journal *NeuroImage*, Nicolas Burra's team demonstrated a hierarchy in the processing of the global visual cues, i.e. the orientation of the head and the more local information, i.e. the eyes and gaze directions. These findings could significantly enhance our understanding of autism spectrum disorders and Alzheimer's disease.

<https://www.unige.ch/medias/en/2024/comment-notre-cerveau-decode-le-regard-de-lautre>

TIME OUT !



The Geneva University Neurocenter wishes you a nice summer!



LEMANIC NEUROAGENDA

See you in September!

World Wide Neuro

Online platform gathering webinars

[All seminars hosted by WorldWideNeuro here](#)

NEUROCENTER PUBLICATIONS

June 2024

Newborn's neural representation of instrumental and vocal music as revealed by fMRI: A dynamic effective brain connectivity study.

Loukas S, Filippa M, de Almeida JS, Boehringer AS, Tolsa CB, Barcos-Munoz F, Grandjean DM, van de Ville D, Hüppli PS

[Human brain mapping - Jul 2024](#)

Gustatory Function in Patients With Cerebellopontine Angle Masses.

Daskalou D, Hsieh JW, Hugentobler M, Macario S, Sipione R, Voruz F, Guinand N, Senn P, Landis BN

[Otology & neurotology : official publication of the American Otological Society, American Neurotology Society \[and\] European Academy of Otology and Neurotology - Aug 2024](#)

Cerebellum and social abilities: A structural and functional connectivity study in a transdiagnostic sample.

Kong Y, Roser M, Bègue I, Elandaloussi Y, Neu N, Grigis A, Duchesnay E, Leboyer M, Houenou J, Laidi C

[Human brain mapping - Jul 2024](#)

Editorial: Mentalization in the psychosis continuum: current knowledge and new directions for research and clinical practice.

Salaminios G, Barrantes-Vidal N, Luyten P, Debbané M

[Frontiers in psychiatry - 2024](#)

Single-cell atlas of the human brain vasculature across development, adulthood and disease.

Wälchli T, Ghobrial M, Schwab M, Takada S, Zhong H, Suntharalingham S, Vetiska S, Gonzalez DR, Wu R, Rehrauer H, Dinesh A, Yu K, Chen ELY, Bisschop J, Farnhammer F, Mansur A, Kalucka J, Tirosh I, Regli L, Schaller K, Frei K, Ketela T, Bernstein M, Kongkham P, Carmeliet P, Valiante T, Dirks PB, Suva ML, Zadeh G, Tabar V, Schlapbach R, Jackson HW, De Bock K, Fish JE, Monnier PP, Bader GD, Radovanovic I

[Nature - Jul 2024](#)

Visual perspective taking neural processing in forensic cases with high density EEG.

Rochas V, Montandon ML, Rodriguez C, Herrmann FR, Eytan A, Pegna AJ, Michel CM, Giannakopoulos P

[Scientific reports - Jul 2024](#)

Using an expert survey and user feedback to construct PRECHECK: A checklist to evaluate preprints on COVID-19 and beyond.

Turoman N, Heyard R, Schwab S, Furrer E, Vergauwe E, Held L

[F1000Research - 2023](#)

The role of biomarkers and dosimetry parameters in overall and progression free survival prediction for patients treated with personalized Y glass microspheres SIRT: a preliminary machine learning study.

Mansouri Z, Salimi Y, Hajianfar G, Wolf NB, Knappe L, Xhepa G, Gleyzolle A, Ricoeur A, Garibotto V, Mainta I, Zaidi H

[European journal of nuclear medicine and molecular imaging - Jul 2024](#)

Phenotyping variability in early socio-communicative skills in young children with autism and its influence on later development.

Journal F, Franchini M, Godel M, Kojovic N, Latrèche K, Solazzo S, Schneider M, Schaer M

[Autism research : official journal of the International Society for Autism Research - Jul 2024](#)

A behavioural exploration of language aptitude and experience, cognition and more using Graph Analysis.

Rampinini A, Balboni I, Golestani N, Berthele R

[Brain research - Jul 2024](#)

Stress testing the Centiloid: Precision and variability of PET quantification of amyloid pathology.
Shekari M, Vázquez García D, Collij LE, Altomare D, Heeman F, Pemberton H, Roé Vellvé N, Bullich S, Buckley C, Stephens A, Farrar G, Frisoni G, Klunk WE, Barkhof F, Gispert JD,
[Alzheimer's & dementia : the journal of the Alzheimer's Association - Jul 2024](#)

Altered correlation of concurrently recorded EEG-fMRI connectomes in temporal lobe epilepsy.
Wirsich J, Iannotti GR, Ridley B, Shamshiri EA, Sheybani L, Grouiller F, Bartolomei F, Seeck M, Lazeyras F, Ranjeva JP, Guye M, Vuilleumoz S
[Network neuroscience \(Cambridge, Mass.\) - 2024](#)

Enhancing precision: A predictive model for Lu-DOTATATE treatment response in neuroendocrine tumors using quantitative Ga-DOTATATE PET and clinicopathological biomarkers.
Akhavanallaf A, Joshi S, Mohan A, Worden FP, Krauss JC, Zaidi H, Frey K, Suresh K, Dewaraja YK, Wong KK
[Theranostics - 2024](#)

Theranostic digital twins: Concept, framework and roadmap towards personalized radiopharmaceutical therapies.
Abdollahi H, Yousefirizi F, Shiri I, Brosch-Lenz J, Mollaheydar E, Fele-Paranj A, Shi K, Zaidi H, Alberts I, Soltani M, Uribe C, Saboury B, Rahmim A
[Theranostics - 2024](#)

A fluorescent perilipin 2 knock-in mouse model reveals a high abundance of lipid droplets in the developing and adult brain.
Madsen S, Delgado AC, Cadilhac C, Maillard V, Battiston F, Igelbüscher CM, De Neck S, Magrinelli E, Jabaudon D, Telley L, Doetsch F, Knobloch M
[Nature communications - Jun 2024](#)

Functional network centrality indicates interactions between APOE4 and age across the clinical spectrum of AD.
Fall AB, Preti MG, Eshmaewy M, Kagerer SM, Van De Ville D, Unschuld PG,
[NeuroImage. Clinical - Jun 2024](#)

Association of glial fibrillary acid protein, Alzheimer's disease pathology and cognitive decline.
Peretti DE, Boccacini C, Ribaldi F, Scheffler M, Marizzoni M, Ashton NJ, Zetterberg H, Blennow K, Frisoni GB, Garibotto V
[Brain : a journal of neurology - Jun 2024](#)

Reliability and Validity of Temporal Parameters during the Side Hop Test in Patients after Anterior Cruciate Ligament Reconstruction.
Stitelmann A, Allet L, Armand S, Tscholl P
[Journal of clinical medicine - Jun 2024](#)

Effectiveness of a positive psychology and mindfulness-based app on mental health for parents of children with a neurodevelopmental disorder: study protocol of a pragmatic international randomized controlled trial.
Tönis KJM, Drossaert CHC, Ten Klooster PM, Schaer M, Bourgeron T, Buitelaar JK, Sadaka Y, Freitag CM, Lapidus KM, Chiochetti AG, Staal WG, Bohlmeijer ET
[Trials - Jun 2024](#)

Social context and drug cues modulate inhibitory control in cocaine addiction: involvement of the STN evidenced through functional MRI.
Terenzi D, Simon N, Gachomba MJM, de Peretti JL, Nazarian B, Sein J, Anton JL, Grandjean D, Baunez C, Chaminade T
[Molecular psychiatry - Jun 2024](#)

Dexmedetomidine in paediatric anaesthesia: a call for action?
Vutskits L
[British journal of anaesthesia - Jun 2024](#)
Sharing brain imaging data in the Open Science era: how and why?

Giehl K, Mutsaerts HJ, Aarts K, Barkhof F, Caspers S, Chetelat G, Colin ME, Düzel E, Frisoni GB, Ikram MA, Jovicich J, Morbelli S, Oertel W, Paret C, Perani D, Ritter P, Segura B, Wisse LEM, De Witte E, Cappa SF, van Eimeren T
[The Lancet. Digital health - Jul 2024](#)

Speech prosody enhances the neural processing of syntax.
Degano G, Donhauser PW, Gwilliams L, Merlo P, Golestani N
[Communications biology - Jun 2024](#)

Transdiagnostic markers across the psychosis continuum: a systematic review and meta-analysis of resting state fMRI studies.
Merola GP, Tarchi L, Saccaro LF, Delavari F, Piguet C, Van De Ville D, Castellini G, Ricca V
[Frontiers in psychiatry - 2024](#)

Amyloid-PET imaging predicts functional decline in clinically normal individuals.
Quenon L, Collij LE, Garcia DV, Lopes Alves I, Gérard T, Malotaux V, Huyghe L, Gispert JD, Jessen F, Visser PJ, den Braber A, Ritchie CW, Boada M, Marquié M, Vandenberghe R, Luckett ES, Schöll M, Frisoni GB, Buckley C, Stephens A, Altomare D, Ford L, Birck C, Mett A, Gismondi R, Wolz R, Grootoontk S, Manber R, Shekari M, Lhommel R, Dricot L, Ivanoiu A, Farrar G, Barkhof F, Hanseeuw BJ,
[Alzheimer's research & therapy - Jun 2024](#)

Concerns with the new biological research criteria for synucleinopathy.
Arnaldi D, Pardini M, Chincarini A, Garibotto V, Morbelli S
[The Lancet. Neurology - Jul 2024](#)

A focus group study for the design of a web-based tool for improving problem-solving in older adults.
Cipolletta S, Signorello D, Zuppiroli S, Hering A, Ballhausen N, Mioni G, Kliegel M, Gaspari M, Stablum F
[European journal of ageing - Jun 2024](#)

Author Correction: Full-body kinematics and head stabilisation strategies during walking in patients with chronic unilateral and bilateral vestibulopathy.
Grouvel G, Boutabla A, Corre J, Revol R, Franco Carvalho M, Cavuscens S, Ranieri M, Cugnot JF, McCrum C, van de Berg R, Guinand N, Pérez Fornos A, Armand S
[Scientific reports - Jun 2024](#)

A deep learning model for generating [F]FDG PET Images from early-phase [F]Florbetapir and [F]Flutemetamol PET images.
Sanaat A, Boccalini C, Mathoux G, Perani D, Frisoni GB, Haller S, Montandon ML, Rodriguez C, Giannakopoulos P, Garibotto V, Zaidi H
[European journal of nuclear medicine and molecular imaging - Jun 2024](#)

Transient brain activity dynamics discriminate levels of consciousness during anesthesia.
Ensel S, Uhrig L, Ozkirlı A, Hoffner G, Tasserie J, Dehaene S, Van De Ville D, Jarraya B, Pirondini E
[Communications biology - Jun 2024](#)

EANM perspectives for CZT SPECT in brain applications.
Verger A, Cecchin D, Guedj E, Albert NL, Brendel M, Fraioli F, Tolboom N, Traub-Weidinger T, Yakushev I, Van Weehaeghe D, Fernandez PA, Garibotto V, Imbert L
[European journal of nuclear medicine and molecular imaging - Jun 2024](#)

Contrastive Learning vs. Self-Learning vs. Deformable Data Augmentation in Semantic Segmentation of Medical Images.
Arabi H, Zaidi H
[Journal of imaging informatics in medicine - Jun 2024](#)

Tau Positron Emission Tomography for Predicting Dementia in Individuals With Mild Cognitive Impairment.

Groot C, Smith R, Collij LE, Mastenbroek SE, Stomrud E, Binette AP, Leuzy A, Palmqvist S, Mattsson-Carlgrén N, Strandberg O, Cho H, Lyoo CH, Frisoni GB, Peretti DE, Garibotto V, La Joie R, Soleimani-Meigooni DN, Rabinovici G, Ossenkoppele R, Hansson O
[JAMA neurology - Jun 2024](#)

The disengagement deficit after right-hemisphere damage: Distinct roles of lateral frontal and parietal damage.
Coll SY, Marti E, Doganci N, Ptak R
[Brain research bulletin - Aug 2024](#)

Recognition of facial expressions of emotions in tactile drawings by blind children, children with low vision and sighted children.
Chennaz L, Mascle C, Baltenneck N, Baudouin JY, Picard D, Gentaz E, Valente D
[Acta psychologica - Jul 2024](#)

Longitudinal Analysis of Brain Function-Structure Dependencies in 22q11.2DS and Psychotic Symptoms.
Ferrer S, Delavari F, Sandini C, Rafi H, Preti MG, Van De Ville D, Eliez S
[Biological psychiatry. Cognitive neuroscience and neuroimaging - Jun 2024](#)