

January 2023

Happy New Year



NEWS

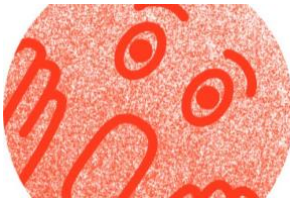
Congratulations to our researchers Carole Guedj, Rémi Tyrand, Emmanuel Badier, Russia Hà-Vinh Leuchter and Frédéric Grouiller who have been awarded with the HUG Innovation Price 2022.



The project aims to develop an alternative to medication for children suffering from attention deficit disorder with or without hyperactivity (ADHD). They developed an immersive virtual classroom in which children can practice to self-regulate their attention (by flying a helicopter) in a playful environment controlled by real-time feedback of their brain activity.

<https://www.hug.ch/centre-linnovation/journee-linnovation-2022>

OUTREACH



The exhibition « *La Nouvelle Menace* » organized by the Neurocenter and which aims to inform the wide audience of a wide range of cognitive biases is now traveling from school to school in the lemanic region, with a booked agenda until the spring 2024.

<https://www.neurocenter-unige.ch/educational-content/nouvelle-menace/>

POSITION



Karl Schaller's team is looking for a post-doctoral researcher to work on innovation of techniques for safe neurosurgery, more precisely on the evaluation of the use of functional Arterial Spin Labelling (fASL) as alternative to the most widespread fMRI-BOLD for mapping brain functions. Starting ideally in February 2023.

<https://neurocenter-unige.ch/post-doctoral-position-in-innovation-of-techniques-for-neurosurgery/>

POSITION



Iaria Sani is looking for a PhD student and a post-doctoral researcher to work on the brain mechanisms of spatial and object-based attention using multi-modal MRI and Virtual Reality. The position is available from April 2023.

To know more and apply:

<https://neurocenter-unige.ch/phd-and-post-doc-position-sanis-lab/>

LEMANIC NEUROAGENDA

January 8-12

Onsite
COSYN, UNIGE
📍 Champéry

[Alping Brain Imaging conference \(ABIM\) 2023](#)

[Program](#)

January 11

12 :15, onsite and online
DNF, UNIL
📍 Petit Auditoire, UNIL, Lausanne
[Join](#)

[Boris Barbour](#), Institut de Biologie de l'Ecole Normale Supérieure (IBENS), Paris, France

Title: Searching for the algorithms of iterative motor learning involving the cerebellum

January 13

11:00, onsite
Dept of Basic Neuroscience, UNIGE
📍 B04.2222, CMU, Geneva
[More](#)

[Michael Platt](#), Department of Psychology, University of Pennsylvania, US

Title: Decoding natural social interactions from neuronal population activity in primates

January 18

16:00, onsite and online
BMI Seminar, EPFL
📍 SV1717, EPFL, Lausanne
[Join](#)

[Fides Zenk](#), Quantitative developmental biology Lab, University of Zürich, Switzerland

Title: Single-cell epigenomic reconstruction of developmental trajectories in human neural organoid systems

January 24

12:00, onsite and online
B&C Seminar, LNCO, UNIGE
📍 H8-01D, Campus Biotech, Geneva
[Join](#)

[Javier Pagonabarraga](#), Unit of Movement disorders, Department of neurology, Hospital Sant Pau, University of Barcelona, Spain

Title: tba

January 26

12 :15, onsite
DNF, UNIL
📍 Petit Auditoire, UNIL, Lausanne

[Robert Froemke](#), NYU Langone, USA

Title: tba

January 26

17:00, onsite
NeuroCentre Clinique Talks, HUG
📍 7A-2-744/745, HUG, Build. Prévost

[Stefan Kaiser](#), Department of psychiatry, Hospital University Geneva, Switzerland

Title: Apathy in patients with schizophrenia and beyond – an update

January 31

16:30, onsite and online
B&C Seminar, CISA, UNIGE
📍 H8-01D, Campus Biotech, Geneva
[Join](#)

[Claus Lamm](#), Department of Cognition, Emotion, and Methods in Psychology, University of Vienna, Austria

Title: Why do we care? Linking the social neuroscience of empathy and prosocial behaviors to pro-environmental behavior

World Wide Neuro

Online platform gathering webinars

[All seminars hosted by WorldWideNeuro here](#)

NEUROCENTER PUBLICATIONS

December 2022

Task-based functional connectivity identifies two segregated networks underlying intentional action.

Doganci N, Iannotti GR, **Ptak R**

NeuroImage - Jan 2023

Morphometric features of drug-resistant essential tremor and recovery after stereotactic radiosurgical thalamotomy.

Bolton TAW, **Van De Ville D**, Régis J, Witjas T, Girard N, Levivier M, Tuleasca C

Network neuroscience (Cambridge, Mass.) - Jul 2022

In vivo adaptive focusing for clinical contrast-enhanced transcranial ultrasound imaging in human.

Robin J, Demene C, Heiles B, Blanvillain V, Puke L, **Perren F**, Tanter M

Physics in medicine and biology - Dec 2022

Thalamic volume and functional connectivity are associated with nicotine dependence severity and craving.

Lor CS, Haugg A, Zhang M, Schneider L, Herdener M, Quednow BB, **Golestani N**, Scharnowski F

Addiction biology - Jan 2023

Modulation of pulvinar connectivity with cortical areas in the control of selective visual attention.

Guedj C, **Vuilleumier P**

NeuroImage - Feb 2023

Influence of bodily resonances on emotional prosody perception.

Selosse G, **Grandjean D**, Ceravolo L

Frontiers in psychology - 2022

Elsberg Syndrome Secondary to Cytomegalovirus Infection in an Immunocompetent Patient: A Case Report.

Lefevre L, Schibler M, **Lalive PH**

Neurology(R) neuroimmunology & neuroinflammation - Mar 2023

The Relation of Having Experienced a Fall in the Past to Lower Cognitive Functioning in Old Age Is Mediated via Less Physical Activity Engagement as Cognitive Reserve Contributor.

Ihle A, Gouveia ÉR, Gouveia BR, Marques A, Marconcin P, Nascimento MM, Haas M, Jurema J, Tinôco MA, **Kliegel M**

Biology - Dec 2022

Disclosure of Genetic Risk Factors for Alzheimer's Disease to Cognitively Healthy Individuals-From Current Practice towards a Personalised Medicine Scenario.

Galluzzi S, Pievani M, Zanetti O, Benussi L, The Italian-DIAFN Working Group, **Frisoni GB**, Di Maria E

Biomedicines - Dec 2022

Low-dose brain irradiation normalizes TSPO and CLUSTERIN levels and promotes the non-amyloidogenic pathway in pre-symptomatic TgF344-AD rats.

Ceyzériat K, Zilli T, **Millet P**, Koutsouvelis N, Dipasquale G, Fossey C, Cailly T, Fabis F, **Frisoni GB**, **Garibotto V**, Tournier BB

Journal of neuroinflammation - Dec 2022

Contextual variation in cognitive performance of older adults: Demonstration of an age-of-examiner effect.

Desrichard O, Heiser N, Renaud O, Zuber S, Oris M, **Kliegel M**

The Clinical neuropsychologist - Dec 2022

Manual and semi-automated approaches to MIBG myocardial scintigraphy in patients with Parkinson's disease.

Boccalini C, Carli G, Vanoli EG, Cocco A, Albanese A, **Garibotto V**, Perani D
[Frontiers in medicine - 2022](#)

The Early Diagnosis of Alzheimer's Disease: A Patient-Centred Conversation with the Care Team.
Nasreddine Z, **Garibotto V**, Kyaga S, Padovani A
[Neurology and therapy - Dec 2022](#)

Predicting AT(N) pathologies in Alzheimer's disease from blood-based proteomic data using neural networks.
Zhang Y, Ghose U, Buckley NJ, Engelborghs S, Sleegers K, **Frisoni GB**, Wallin A, Lleó A, Popp J, Martinez-Lage P, Legido-Quigley C, Barkhof F, Zetterberg H, Visser PJ, Bertram L, Lovestone S, Nevado-Holgado AJ, Shi L
[Frontiers in aging neuroscience - 2022](#)

Cerebral Activity in Female Baboons () During the Perception of Conspecific and Heterospecific Agonistic Vocalizations: a Functional Near Infrared Spectroscopy Study.
Debracque C, Gruber T, Lacoste R, Meguerditchian A, **Grandjean D**
[Affective science - Dec 2022](#)

Exploring the heterogeneous morphometric data in essential tremor with probabilistic modelling.
Bolton TAW, **Van De Ville D**, Régis J, Witjas T, Girard N, Levivier M, Tuleasca C
[NeuroImage. Clinical - Dec 2022](#)

Are facet-specific task trainings efficient in improving children's executive functions and why (they might not be)? A multi-facet latent change score approach.
Zuber S, Joly-Burra E, Mahy CEV, Loaiza V, **Kliegel M**
[Journal of experimental child psychology - Mar 2023](#)

Decentralized collaborative multi-institutional PET attenuation and scatter correction using federated deep learning.
Shiri I, Vafaei Sadr A, Akhavan A, Salimi Y, Sanaat A, Amini M, Razeghi B, Saberi A, Arabi H, Ferdowsi S, Voloshynovskiy S, Gündüz D, Rahmim A, **Zaidi H**
[European journal of nuclear medicine and molecular imaging - Dec 2022](#)

Educational interventions to improve detection and management of cognitive decline in primary care-An Italian multicenter pragmatic study.
Lombardi G, Chipi E, Arenella D, Fiorani A, **Frisoni GB**, Linarello S, Montanucci C, Muscio C, Pacifico I, Pelizzari S, Perani D, Piras F, Rozzini L, Sorbi S, Spalletta G, Tagliavini F, Tiraboschi P, Parnetti L, Filippini G
[Frontiers in psychiatry - 2022](#)

The Role of Oxytocin in Abnormal Brain Development: Effect on Glial Cells and Neuroinflammation.
Knoop M, Possovre ML, Jacquens A, Charlet A, **Baud O**, Darbon P
[Cells - Dec 2022](#)

Submillimeter T atlas for subject-specific abnormality detection at 7T.
Piredda GF, Caneschi S, Hilbert T, Bonanno G, Joseph A, Egger K, Peter J, Klöppel S, Jehli E, Grieder M, Slotboom J, Seiffge D, Goeldlin M, Hoepner R, Willems T, **Vulliemoz S**, **Seeck M**, Venkatesgowda PB, Corredor Jerez RA, Maréchal B, Thiran JP, Wiest R, Kober T, Radojewski P
[Magnetic resonance in medicine - Dec 2022](#)

Adopting transfer learning for neuroimaging: a comparative analysis with a custom 3D convolution neural network model.
Soliman A, Chang JR, Etmnani K, Byttner S, Davidsson A, Martínez-Sanchis B, Camacho V, Bauckneht M, Stegeran R, Ressler M, Agudelo-Cifuentes M, Chincarini A, Brendel M, Rominger A, Bruffaerts R, Vandenberghe R, Kramberger MG, Trost M, Nicastro N, **Frisoni GB**, Lemstra AW, Berckel BNMV, Pilotto A, Padovani A, Morbelli S, Aarsland D, Nobili F, **Garibotto V**, Ochoa-Figueroa M
[BMC medical informatics and decision making - Dec 2022](#)

Concurrent measures of impulsive action and choice are partially related and differentially modulated by dopamine D- and D-like receptors in a rat model of impulsivity.

Bellés L, Arrondeau C, Urueña-Méndez G, **Ginovart N**

Pharmacology, biochemistry, and behavior - Dec 2022

Whole-exome rare-variant analysis of Alzheimer's disease and related biomarker traits.

Küçükali F, Neumann A, Van Dongen J, De Pooter T, Joris G, De Rijk P, Ohlei O, Dobricic V, Bos I, Vos SJB, Engelborghs S, De Roeck E, Vandenberghe R, Gabel S, Meersmans K, Tsolaki M, Verhey F, Martinez-Lage P, Tainta M, **Frisoni G**, Blin O, Richardson JC, Bordet R, Scheltens P, Popp J, Peyratout G, Johannsen P, Frölich L, Freund-Levi Y, Streffer J, Lovestone S, Legido-Quigley C, Kate MT, Barkhof F, Zetterberg H, Bertram L, Strazisar M, Visser PJ, Van Broeckhoven C, Sleegers K

Alzheimer's & dementia : the journal of the Alzheimer's Association - Dec 2022

Brain functional connectivity alterations associated with neuropsychological performance 6-9 months following SARS-CoV-2 infection.

Voruz P, Cionca A, Jacot de Alcântara I, Nuber-Champier A, Allali G, Benzakour L, **Lalive PH**, Lövblad KO, Braillard O, Nehme M, Coen M, Serratrice J, Reny JL, Pugin J, Guessous I, **Ptak R**, **Landis BN**, Adler D, Griffa A, **Van De Ville D**, Assal F, **Péron JA**

Human brain mapping - Dec 2022

Multi-Scale Temporal Imaging: From Micro- and Meso- to Macro-scale-time Nuclear Medicine.

Farhadi F, Rajagopal JR, Veziroglu EM, Abdollahi H, Shiri I, Nikpanah M, Morris MA, Zaidi H, Rahmim A, Saboury B
PET clinics - Jan 2023

Development and validation of an optimal GATE model for proton pencil-beam scanning delivery.

Asadi A, Akhavanallaf A, Hosseini SA, Vosoughi N, Zaidi H

Zeitschrift fur medizinische Physik - Nov 2022

EPELL: a novel virtual reality task for the assessment of goal-directed behavior in real-life contexts.
Seesjärvi E, Puhakka J, Aronen ET, Hering A, Zuber S, Merzon L, Kliegel M, Laine M, Salmi J
[Psychological research - Nov 2022](#)

Neurocognitive outcomes at age 5 years after prophylactic hydrocortisone in infants born extremely preterm.
Trousson C, Toumazi A, Bourmaud A, Biran V, Baud O
[Developmental medicine and child neurology - Nov 2022](#)

Prediction Algorithms: Is Peer Review Enough?
Glance LG, Vutskits L, Davidson A
[Anesthesiology - Dec 2022](#)

Deep Learning-based calculation of patient size and attenuation surrogates from localizer Image: Toward personalized chest CT protocol optimization.
Salimi Y, Shiri I, Akhavanallaf A, Mansouri Z, Sanaat A, Pakbin M, Ghasemian M, Arabi H, Zaidi H
[European journal of radiology - Nov 2022](#)

Association of Attention-Deficit/Hyperactivity Disorder and Depression Polygenic Scores with Lithium Response: A Consortium for Lithium Genetics Study.
Coombes BJ, Millischer V, Batzler A, Larrabee B, Hou L, Papiol S, Heilbronner U, Adli M, Akiyama K, Akula N, Amare AT, Ardau R, Arias B, Aubry JM, Backlund L, Bauer M, Baune BT, Bellivier F, Benabarre A, Bengesser S, Bhattacharjee AK, Cervantes P, Chen HC, Chillotti C, Cichon S, Clark SR, Colom F, Cruceanu C, Czerski PM, Dalkner N, Degenhardt F, Del Zompo M, DePaulo JR, Étain B, Falkai P, Ferensztajn-Rochowiak E, Forstner AJ, Frisen L, Gard S, Garnham JS, Goes FS, Grigoriu-Serbanescu M, Grof P, Hashimoto R, Hauser J, Herms S, Hoffmann P, Jamain S, Jiménez E, Kahn JP, Kassem L, Kato T, Kelsoe JR, Kittel-Schneider S, König B, Kuo PH, Kusumi I, Laje G, Landén M, Lavebratt C, Leboyer M, Leckband SG, Maj M, Manchia M, Martinsson L, McCarthy MJ, McElroy SL, Mitchell PB, Mitjans M, Mondimore FM, Monteleone P, Nievergelt CM, Nöthen MM, Novák T, O'Donovan C, Osby U, Ozaki N, Pfennig A, Pisanu C, Potash JB, Reif A, Reininghaus E, Rietschel M, Rouleau GA, Rybakowski JK, Schalling M, Schofield PR, Schubert KO, Schweizer BW, Severino G, Shekhtman T, Shilling PD, Shimoda K, Simhandl C, Slaney CM, Squassina A, Stamm T, Stopkova P, Tortorella A, Turecki G, Vieta E, Witt SH, Zandi PP, Fullerton JM, Alda M, Frye MA, Schulze TG, McMahon FJ, Biernacka JM
[Complex psychiatry - Dec 2021](#)

A balance of noncanonical Semaphorin signaling from the cerebrospinal fluid regulates apical cell dynamics during corticogenesis.
Gerstmann K, Kindbeiter K, Telley L, Bozon M, Reynaud F, Théouille E, Charoy C, Jabaudon D, Moret F, Castellani V
[Science advances - Nov 2022](#)

Title of "Ambassador of Clinical Psychology and Psychological Treatment" Awarded to Peter Fonagy.
Debbané M
[Clinical psychology in Europe - Mar 2022](#)

Effects of risperidone on psychotic symptoms and cognitive functions in 22q11.2 deletion syndrome: Results from a clinical trial.
Latrèche C, Maeder J, Mancini V, Schneider M, Eliez S
[Frontiers in psychiatry - 2022](#)

Clustering of vomeronasal receptor genes is required for transcriptional stability but not for choice.
Dietschi Q, Tuberosa J, Fodouliau L, Boillat M, Kan C, Codourey J, Pauli V, Feinstein P, Carleton A, Rodriguez I
[Science advances - Nov 2022](#)

Myocardial Perfusion SPECT Imaging Radiomic Features and Machine Learning Algorithms for Cardiac Contractile Pattern Recognition.
Sabouri M, Hajianfar G, Hosseini Z, Amini M, Mohebi M, Ghaedian T, Madadi S, Rastgou F, Oveisi M, Bitarafan Rajabi A, Shiri I, Zaidi H
[Journal of digital imaging - Nov 2022](#)

Differentiation of Motor Speech Disorders through the Seven Deviance Scores from MonPaGe-2.0.s.
Fougeron C, Kodrasi I, Laganaro M
[Brain sciences - Oct 2022](#)

Triple-source saddle-curve cone-beam photon counting CT image reconstruction: A simulation study.
Xin L, Zhuo W, Liu Q, Xie T, Zaidi H
[Zeitschrift fur medizinische Physik - Nov 2022](#)

The Geneva University Neurocenter wishes you a nice Christmas season !

