

CV Date	17/11/2021
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PART A. PERSONAL INFORMATION

First Name *	Christian		
Family Name *	Stephan-Otto Attolini		
Sex *	Male	Date of Birth *	23/04/1976
ID number Social Security, Passport *	49819349S	Phone Number	
URL Web			
Email Address *	cstephanotto@pssjd.org		
Researcher's identification number	Open Researcher and Contributor ID (ORCID)*	0000-0002-6326-7648	
	Researcher ID		
	Scopus Author ID	56087321300	

* Mandatory

A.1. CURRENT POSITION

Job Title	Postdoctoral Researcher		
Starting date	2020		
Institution	Fundació Sant Joan de Déu		
Department / Centre			
Country		Phone Number	
Keywords	Biomedicine; Memory; Neuropsychology; Neuroimage; Hemispheric dominance; Cognitive neuroscience; Schizophrenia and psychosis; Insanity senile (alzheimer, parkinson)		

A.2. PREVIOUS POSITIONS

Period	Job Title / Name of Employer / Country
2015 - 2020	Postdoctoral Researcher / Consorcio Centro de Investigación Biomédica en Red M.P. (CIBER)
2008 -	Postdoctoral Researcher / Fundació Privada per a la Recerca i la Docència Sant Joan de Déu

A.3. EDUCATION

Degree/Master/PhD	University / Country	Year
PhD in Physics	Tufts University, USA	2006
MSc in Physics	Tufts University, USA	2003
BSc in Physics	Universidad Nacional Autónoma de México (UNAM)	2001

A.4. GENERAL QUALITY INDICATORS OF SCIENTIFIC PRODUCTION

Author information (Scopus):

39 publications

367 cites

H-index: 10

First author publications: 9

Last author publications: 3

Corresponding author publications: 5

A.5. SUMMARY OF CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium - and long - term. It also includes other important aspects or peculiarities.

I was originally trained as a Theoretical Physicist in the field of Cosmology, but I have devoted my entire post-doctoral career to Neuroscience. I specialize in the design, implementation and interpretation of neuroimaging experiments, but my continuous interaction with diverse clinical professionals has led to results in a variety of biomedical fields, such as psychiatry, psychology, neurology and neonatology. My main line of research is based on the application of advanced neuroimaging techniques to the study of the brain: from its healthy development to the pathology-induced alterations it may present. Since 2017 I lead the SGR Emerging Group 'Cerebral Imprints of Gender, Development and Pathology' (AGAUR, 2017-SGR-1297), which continues with previous research in psychiatric disorders and has also developed new lines of research in gender-differences, neurodevelopment and neurological diseases. I currently collaborate with 19 researchers within Spain, and have 5 ongoing international collaborations.

My research has mainly focused on three topics: 1) Structural and functional brain alterations caused by abnormal cognitive processes within schizophrenia (with Dr Gildas Brébion); 2) Characterization of the arterial ischemic stroke in neonates (with Dr Alfredo García-Alix); and 3) Structural signatures of inflammation in psychiatric and neurological disease (with Dr Christian Núñez). My collaborations have produced 28 scientific articles in which I am first (in 9 of them), last (in 3 of them) or corresponding author (in 5 of them). In general, my contributions to research projects include joining the scientific proposal stage; gathering, analyzing and discussing data; and participating in the scientific discussion and writing of manuscripts.

My recent research has generated some important results: we found that an increase in neutrophil count, a peripheral blood marker of inflammation, is associated with brain tissue loss in first psychotic episodes. This supports the idea that schizophrenia may have an inflammatory component. We also recently reported that the brain of schizophrenia patients shows a more asymmetric structure than that of healthy subjects. We also reported that a higher degree of global brain asymmetry is observed in healthy men compared to healthy women. We have shown that the spatial distribution of brain infarcts in neonates is different from the one observed in adults, and that it affects brain regions not related to motor function, such as the posterior temporal. This suggests that on top of alleviating the motor impairments associated with this pathology, children should follow speech therapy early in life to mitigate the impact of neonatal infarction on verbal function.

In the future, I would like to continue exploring how the structural and functional characteristics of the brain enlighten us about diverse topics, such as its healthy development, possible gender differences, or the impact of neurological and psychiatric diseases.

PART C. RELEVANT ACCOMPLISHMENTS

C.1. PUBLICATIONS.

AC = corresponding author

(n° x / n° y) = position / total authors.

- 1 **Scientific paper.** Nuñez C; Stephan-Otto C (AC); Arca-Diaz G; et al; García-Alix A. (2/12). 2021. Neonatal arterial stroke location is associated with outcome at 2 years: a voxel-based lesion-symptom mapping study. ARCHIVES OF DISEASE IN CHILDHOOD-FETAL AND NEONATAL EDITION. BMJ PUBLISHING GROUP. ISSN 1359-2998.
- 2 **Scientific paper.** Nuñez C; Callen A; Lombardini F; Compta Y; Alzheimer's Disease Neuroimaging Initiative; Stephan-Otto C (AC). (6/6). 2020. Different Cortical Gyration Patterns in Alzheimer's Disease and Impact on Memory Performance Annals of Neurology. WILEY-LISS. 88-1, pp.67-80. ISSN 0364-5134. WOS (0)
- 3 **Scientific paper.** Nuñez C; Arca-Diaz G; Agut-Quijano T; Stephan-Otto C (AC); Garcia-Alix A. (4/5). 2020. Precise neonatal arterial ischemic stroke classification with a three-dimensional map of the arterial territories of the neonatal brain. Pediatric Research. INT PEDIATRIC RESEARCH FOUNDATION, INC. 87-7, pp.1231-1236. ISSN 0031-3998. WOS (2)
- 4 **Scientific paper.** Nuñez C; Stephan-Otto C (AC); Usall J; et al; PEPs group. (2/16). 2019. Neutrophil Count Is Associated With Reduced Gray Matter and Enlarged Ventricles in First-Episode Psychosis. Schizophrenia Bulletin. Oxford University Press. 45-4, pp.846-858. ISSN 0586-7614. WOS (2)
- 5 **Scientific paper.** Nuñez C; Theofanopoulou C; Carl Senior; Cambra-Martí MR; Usall J; Stephan-Otto C (AC); Brebion G. (6/7). 2018. A large-scale study on the effects of sex on gray matter asymmetry. Brain, Structure & Function. Springer Heidelberg. 223-1, pp.183-193. ISSN 18632653.
- 6 **Scientific paper.** Stephan-Otto C; Siddi S; Carl Senior; Cuevas-Esteban J; Cambra-Martí MR; Ochoa S; Brebion G. (1/7). 2017. Remembering verbally-presented items as pictures: Brain activity underlying visual mental images in schizophrenia patients with visual hallucinations. Cortex. ELSEVIER MASSON. 94, pp.113-122. ISSN 00109452.
- 7 **Scientific paper.** Nuñez C; Paipa N; Senior C; Coromina M; Siddi S; Ochoa S; Brebion G; Stephan-Otto C. (8/8). 2017. Global brain asymmetry is increased in schizophrenia and related to avolition. Acta Psychiatrica Scandinavica. Wiley-Blackwell. 135-5, pp.448-459. ISSN 0001690X. WOS (0)
- 8 **Scientific paper.** Stephan-Otto C; Nuñez C; Arca-Diaz G; Agut T; Garcia-Alix A. (1/5). 2017. Three-Dimensional Map of Neonatal Arterial Ischemic Stroke Distribution From Early Multimodal Brain Imaging Stroke. LIPPINCOTT WILLIAMS & WILKINS. 48-2, pp.482-485. ISSN 00392499. WOS (1)
- 9 **Scientific paper.** Stephan-Otto C; Siddi S; Senior C; Muñoz Samons D; Ochoa S; Sánchez-Laforga AM; Brebion G. (1/7). 2017. Visual Imagery and False Memory for Pictures: A Functional Magnetic Resonance Imaging Study in Healthy Participants. PLoS One. PUBLIC LIBRARY SCIENCE. 12-1. ISSN 19326203. WOS (0)
- 10 **Scientific paper.** Stephan-Otto C; Sara Siddi; Jorge Cuevas Esteban; Carl Senior; R García-Alvarez; Maria Rosa Cambra Martí; Usall J; Brébion G. (1/8). 2016. Neural activity during object perception in schizophrenia patients is associated with illness duration and affective symptoms. Schizophrenia Research. ELSEVIER SCIENCE BV. 175-1-3, pp.27-34. ISSN 09209964.
- 11 **Scientific paper.** Brebion G; Nuñez C; Lombardini F; Carl Senior; Sánchez Laforga AM; Sara Siddi; Usall J; Stephan-Otto C. (8/8). 2021. Subclinical depression and anxiety impact verbal memory functioning differently in men and women -an fMRI study. JOURNAL OF PSYCHIATRIC RESEARCH. PERGAMON-ELSEVIER SCIENCE LTD. 140, pp.308-315. ISSN 0022-3956. WOS (0)
- 12 **Scientific paper.** Martín Bejarano-García M; Ruiz-Sáez B; Zamora B; et al; Stephan-Otto C; González-Tomé Ml. (12/14). 2021. Actividad cerebral en jóvenes infectados

por el virus de la inmunodeficiencia humana por transmisión vertical: estudio piloto de resonancia magnética funcional. REVISTA DE NEUROLOGIA. REVISTA DE NEUROLOGIA. 72-10, pp.343-351. ISSN 0210-0010.

- 13 **Scientific paper**. Brébion G; Stephan-Otto C; Cuevas-Estaban J; Usall J; Ochoa S. (2/5). 2020. Impaired memory for temporal context in schizophrenia patients with hallucinations and thought disorganisation Schizophrenia Research. ELSEVIER SCIENCE BV. 220, pp.225-231. ISSN 0920-9964.
- 14 **Scientific paper**. Stephan-Otto C; Lombardini, Federica; Nuñez C; Carl Senior; Ochoa S; Usall J; Brebion G. (1/7). 2020. Fluctuating asymmetry in patients with schizophrenia is related to hallucinations and thought disorganisation Psychiatry Research. 285, pp.112816.
- 15 **Scientific paper**. Arca-Diaz G; Arnaez-Solis J; Agut-Quijano T; Nuñez C; Stephan-Otto C; Valls-Lafon A; Garcia-Alix A. (5/7). 2020. Neuron-specific enolase is correlated with lesion topology, relative infarct volume and outcome of symptomatic NAIS. Archives of Disease in Childhood-Fetal and Neonatal Edition. BMJ PUBLISHING GROUP. 105-2, pp.132-137. ISSN 1359-2998. WOS (1)
- 16 **Scientific paper**. Feliu-Soler A; Martínez-Zalacaín I; Adrián Pérez Aranda; et al; Stephan-Otto C; Luciano JV. (8/11). 2020. The Bed Nucleus of the Stria Terminalis as a Brain Correlate of Psychological Inflexibility in Fibromyalgia. Journal of Clinical Medicine. MDPI AG. 9-2. ISSN 2077-0383. WOS (0)
- 17 **Scientific paper**. Topyurek M; Tibbo P; Nuñez C; Stephan-Otto C; Good K. (4/5). 2019. Caffeine effects and schizophrenia: Is there a need for more research? Schizophrenia Research. ELSEVIER SCIENCE BV. 211, pp.34-35. ISSN 0920-9964.
- 18 **Scientific paper**. Adrián Pérez Aranda; Andrés Rodríguez L; Feliu-Soler A; et al; Stephan-Otto C; Luciano JV. (5/13). 2019. Clustering a large Spanish sample of patients with fibromyalgia using the Fibromyalgia Impact Questionnaire-Revised: differences in clinical outcomes, economic costs, inflammatory markers, and gray matter volumes. Pain. ELSEVIER SCIENCE BV. 160-4, pp.908-921. ISSN 0304-3959. WOS (3)
- 19 **Scientific paper**. Sara Siddi; Nuñez C; Carl Senior; Preti A; Cuevas-Estaban J; Ochoa S; Brebion G; Stephan-Otto C. (8/8). 2019. Depression, auditory-verbal hallucinations, and delusions in patients with schizophrenia: Different patterns of association with prefrontal gray and white matter volume. Psychiatric Research-Neuroimaging. ELSEVIER SCI IRELAND LTD. 283, pp.55-63. ISSN 0925-4927. WOS (1)
- 20 **Scientific paper**. Paipa N; Stephan-Otto C; Cuevas-Estaban J; Araceli Núñez Navarro; Usall J; Brebion G. (2/6). 2018. Second-to-fourth digit length ratio is associated with negative and affective symptoms in schizophrenia patients. Schizophrenia Research. ELSEVIER SCIENCE BV. 199, pp.297-303. ISSN 09209964.
- 21 **Scientific paper**. Feliu-Soler A; Adrián Pérez Aranda; Andrés Rodríguez L; et al; Stephan-Otto C; Luciano JV. (8/12). 2018. Digging into the construct of fibrofog: Psychometric properties of the Spanish version of the Multidimensional Inventory of Subjective Cognitive Impairment in patients with fibromyalgia Journal of Applied Biobehavioral Research. pp.1-22. ISSN 17519861.
- 22 **Scientific paper**. Brebion G; Stephan-Otto C; Ochoa S; María de Lourdes Nieto García; Contel M; Usall J. (2/6). 2018. Verbal fluency in male and female schizophrenia patients: Different patterns of association with processing speed, working memory span, and clinical symptoms. Neuropsychology. AMER PSYCHOLOGICAL ASSOC. 32-1, pp.65-76. ISSN 08944105.
- 23 **Scientific paper**. Brebion G; Stephan-Otto C; Ochoa S; Roca M; María de Lourdes Nieto García; Usall J. (2/6). 2016. Impaired Self-Monitoring of Inner Speech in Schizophrenia Patients with Verbal Hallucinations and in Non-clinical Individuals Prone to Hallucinations. Frontiers in Psychology. FRONTIERS MEDIA SA. 7, pp.1381-1381. ISSN 16641078. WOS (0)

C.3. R&D and innovation projects and contracts

- 1 **Project.** Identificación de los principales rasgos cerebrales asociados a las etapas iniciales de diversos trastornos psiquiátricos y neurológicos. Cambra Martí. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu - FSJD). 01/01/2021-31/12/2022. 5.000 €.
- 2 **Project.** 201714.10, Rare Coding Genetic Variants Associated with neonatal arterial ischemic stroke. Fundació La Marató de TV3. Alfredo Garcia-Alix Pérez. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu - FSJD). 12/03/2018-11/03/2021. 199.826,25 €.
- 3 **Project.** 2016-1-FR01-KA203-023932, eHealth Eurocampus. European Commission. Arian Tarbal Roquer. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu). 01/09/2016-31/08/2019. 23.746 €.
- 4 **Project.** PI15/00846, Aplicación diagnóstica y pronóstica de la caracterización del infarto arterial cerebral neonatal con neuroimagen multimodal y mapeo lesión-conducta con voxel-based lesion-symptom maps. Instituto de Salud Carlos III (ISCIII). Alfredo Garcia-Alix Pérez. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu - FSJD). 01/01/2016-30/06/2019. 52.635 €.
- 5 **Project.** PI14/00047, Bases neurofuncionales de la anomalía del discurso interior en las alucinaciones verbales. Instituto de Salud Carlos III (ISCIII). Gildas Yanin Guillaume Brebion. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu - FSJD). 01/01/2015-30/06/2019. 98.615 €.
- 6 **Project.** Diferencias de asimetría cerebral global entre personas con síntomas de depresión y de ansiedad. Instituto de Especialidades Neurológicas. Christian Núñez Leáñez. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu). 14/11/2016-14/05/2018. 15.000 €.
- 7 **Project.** SGR2014-1603, SGR 2014_Etiopatogenia i tractament dels trastorns mentals. Agaur - Agència de Gestió d'Ajuts Universitaris i de Recerca. Judith Usall Rodie. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu). 01/01/2014-30/04/2017. 0 €.
- 8 **Project.** AR201404, Experiencias psíquicas inusuales y jumping to conclusions en población clínica y general. Parc Sanitari Sant Joan de Déu y Fundación Sant Joan de Déu. 1. (Parc Sanitari Sant Joan de Déu). 01/02/2014-31/01/2016. 5.000 €.
- 9 **Project.** PI10/02479, Estudio de las alucinaciones desde un enfoque neurofuncional y cognitivo. Gildas Yanin Guillaume Brebion. (Instituto de Salud Carlos III (ISCIII)). 01/01/2011-31/12/2014. 78.771 €.
- 10 **Project.** 090810, The Pathologies of the Social Brain: a neurofunctional approach to social disability in autism, paranoia and social anxiety.. Fundació La Marató de TV3. Victoria Villalta Gil. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu). 01/01/2010-30/06/2013. 195.203,75 €.
- 11 **Project.** PSI2011-28446, Estudio de las bases neurofuncionales de las decisiones sociales en personas con rasgos psicopáticos.. Ministerio de Economía Y Competitividad (MINECO) (MICINN). Victoria Villalta Gil. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu - FSJD). 01/01/2012-30/10/2012. 58.000 €.
- 12 **Project.** PI07/0401, Diferencias de género en las bases neuroanatómicas y funcionales de la cognición social en la psicosis no afectiva. Instituto de Salud Carlos III (ISCIII). Josep Maria Haro Abad. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu). 01/01/2008-30/06/2011. 145.502,5 €.
- 13 **Project.** 2017-SGR-1297, SGR 2017_Cerebral Imprints of Gender, Development and Pathology. Agaur - Agència de Gestió d'Ajuts Universitaris i de Recerca. Christian Stephan-Otto Attolini. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu - FSJD). From 01/03/2018.
- 14 **Project.** PI081129, Evaluación de las estructuras cerebrales implicadas en el fenómeno de saltar a conclusiones en primeros episodios psicóticos y depresivos.. Instituto de Salud Carlos III (ISCIII). Susana Ochoa Güerre. (Fundació Privada per a la Recerca i la Docència Sant Joan de Déu).