Sergio Castro-Gómez, MD-PhD



University Hospital Bonn German Center for Neurodegenerative Diseases (DZNE)

Neurology resident and Postdoctoral Researcher

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Research Expertise

Sergio Castro-Gomez studied medicine at the Universities of Antioquia (Medellín – Colombia) and Hamburg, and received his MD-PhD in 2016 at the University of Hamburg. He has worked in general medicine, neurology and basic neuroscience with particular emphasis on molecular mechanisms of learning and memory, and neurodegenerative diseases. He is currently MD/PhD researcher graduate lecture and neurology resident in the Department of Neurodegenerative Disease at the University Hospital Bonn in Germany. Currently, his research focuses on biomarkers of neurodegenerative diseases and neuroimmunological mechanisms after brain injury.

Education / Training

2016

University of Hamburg, University Medical Center Hamburg-Eppendorf, Germany, PhD.

2015

University of Hamburg, University Medical Center Hamburg-Eppendorf, Germany, MD.

2010

University of Antioquia, Medellín, Colombia, Medicine and Surgery

Appointments / Positions Held

2017-Present

Resident in Neurology, University Hospital Bonn 2017

Resident in Neurology, Sana Regio Klinikum Pinneberg - University Medical Center Hamburg-Eppendorf, Germany, MD, 2015 2012 - 2016

Associate researcher and MD-PhD Student, University of Hamburg 2010-2011

General practitioner – San Juan de Dios Hospital, Carmen de Viboral, Antioquia, Colombia 2009-2011

Research associate, Neuroscience research group of Antioquia, Medellín, Colombia

Honors / Awards

2020

One-year Research Grant, Clinician Scientist Program (Gerok-Stipendium), University of Bonn, University Hospital Bonn, Germany

2010

"Guillermo Velasquez Tangarife": Scholarship for international exchange in medical schools abroad, Faculty of Medicine, University of Antioquia, Medellín, Colombia 2009

Two-years Research Grant, Promotion Program of the University of Antioquia, Medellín, Colombia 2002

"Andrés Bello" Award in the National Category Chemistry, Institute for the Promotion of Higher Education, Colombia

Publications

- 1. Brosseron F, Kleemann K, Kolbe CC, Santarelli F, **Castro-Gomez S,** Tacik P, Latz E, Jessen F, Heneka MT. Interrelations of Alzheimer's disease candidate biomarkers neurogranin, fatty acid-binding protein 3 and ferritin to neurodegeneration and neuroinflammation. J Neurochem. 2020 Sep 7.
- 2. Brosseron F, Kolbe CC, Santarelli F, Carvalho S, Antonell A, Castro-Gomez S, Tacik P, Namasivayam AA, Mangone G, Schneider R, Latz E, Wüllner U, Svenningsson P, Sánchez-Valle R, Molinuevo JL, Corvol JC, Heneka MT; AETIONOMY study group. Multicenter Alzheimer's and Parkinson's disease immune biomarker verification study. Alzheimers Dement. 2020 Feb;16(2):292-304.
- 3. Gao X, Grendel J, Muhia M, Castro-Gomez S, Süsens U, Isbrandt D, Kneussel M, Kuhl D, Ohana O. Disturbed Prefrontal Cortex Activity in the Absence of Schizophrenia-Like Behavioral Dysfunction in Arc/Arg3.1 Deficient Mice. J Neurosci. 2019 Oct 9;39(41):8149-8163.
- 4. Castro-Gomez S, Binder J, Heneka MT. Neuroinflammation as motor of Alzheimer's disease. Nervenarzt. 2019 Sep;90(9):898-906.
- 5. Gao X*, **Castro-Gomez S***, Grendel J*, Graf S, Süsens U, Binkle L, Mensching D, Isbrandt D, Kuhl D, Ohana O. Arc/Arg3.1 mediates a critical period for spatial learning and hippocampal networks. Proc Natl Acad Sci U S A. 2018 Dec 4;115(49):12531-12536. *Co-first authorship
- 6. Ardura-Fabregat A, Boddeke EWGM, Boza-Serrano A, Brioschi S, **Castro-Gomez S**, Ceyzériat K, Dansokho C, Dierkes T, Gelders G, Heneka MT, Hoeijmakers L, Hoffmann A, Iaccarino L, Jahnert S, Kuhbandner K, Landreth G, Lonnemann N, Löschmann PA, McManus RM, Paulus A, Reemst K, Sanchez-Caro JM, Tiberi A, Van der Perren A, Vautheny A, Venegas C, Webers A, Weydt P, Wijasa TS, Xiang X, Yang Y. Targeting Neuroinflammation to Treat Alzheimer's Disease. CNS Drugs. 2017 Dec;31(12):1057-1082.
- 7. **Castro-Gomez S**, Barrera-Ocampo A, Machado-Rodriguez G, Castro-Alvarez JF, Glatzel M, Giraldo M, Sepulveda-Falla D. Specific de-SUMOylation triggered by acquisition of spatial learning is related to epigenetic changes in the rat hippocampus. Neuroreport. 2013 Dec 4;24(17):976-81.