

## PERSONAL INFORMATION

### Current position

Position	Associate Professor		
Initial date	01/08/2009		
Institution	Universidad de Barcelona		
Department/Center	Biomedicina	Facultad de Medicina (Campus Clínic)	
Country	España	Teleph. number	93-4035286
Key words	Huntington's disease, memory and motor deficits, mitochondria, neurodegeneration, neuron-astrocyte crosstalk.		

### Education

PhD, Licensed, Graduate	University/Country	Year
Biochemistry	Universidad de Barcelona/ España	1995
Biochemistry and Molecular Biology (PhD)	Universidad de Barcelona/España	2000

## RELEVANT MERITS

### B.1. Publications

1- Cherubini M, Lopez-Molina L, **Gines S.** (2020). *Mitochondrial fission in Huntington's disease mouse striatum disrupts ER-mitochondria contacts leading to disturbances in Ca<sup>2+</sup> efflux and Reactive Oxygen Species (ROS) homeostasis.* **Neurobiol Dis.**136:104741. **(3/3). Corresponding author**

2- Moreno-Delgado D, Puigdel·l·ivol M, Moreno E, Rodríguez-Ruiz M, Botta J, Gasperini P, Chiarlone A, Howell LA, Scarselli M, Casadó V, Cortés A, Ferré S, Guzmán M, Lluís C, Alberch J, Canela EI, **\*Ginés S, \*McCormick PJ.** (2020). *Modulation of dopamine D<sub>1</sub> receptors via histamine H<sub>3</sub> receptors is a novel therapeutic target for Huntington's disease.* **Elife.** 9;9:e51093. **(16/16). Co-corresponding author.**

3- Brito V, Giralt A, Masana M, Royes A, Espina M, Sieiro E, Alberch J, Castañé A, Girault JA, **Ginés S** (2019). *Cyclin-Dependent Kinase 5 Dysfunction Contributes to Depressive-like Behaviors in Huntington's Disease by Altering the DARPP-32 Phosphorylation Status in the Nucleus Accumbens.* **Biol Psychiatry.** 86(3):196-207. **(10/10). Corresponding author.**

4- Suelves N, Miguez A, López-Benito S, Barriga GG, Giralt A, Alvarez-Periel E, Arévalo JC, Alberch J, **Ginés S,** Brito V. (2019). *Early Downregulation of p75<sup>NTR</sup> by Genetic and Pharmacological Approaches Delays the Onset of Motor Deficits and Striatal Dysfunction in Huntington's Disease Mice.* **Mol Neurobiol.** 56(2):935-953. **(9/10).**

5- Alvarez-Periel E, Puigdel·l·ivol M, Brito V, Plattner F, Bibb JA, Alberch J, **Ginés S.** (2018). *Cdk5 Contributes to Huntington's Disease Learning and Memory Deficits via Modulation of Brain Region-Specific Substrates.* **Mol Neurobiol.** 55(8):6250-6268. **(7/7). Corresponding author.**

6- Suelves N, Kirkham-McCarthy L, Lahue RS, **Ginés S.** (2017). *A selective inhibitor of histone deacetylase 3 prevents cognitive deficits and suppresses striatal CAG repeat expansions in Huntington's disease mice.* **Sci Rep.** 7(1):6082. **(4/4). Corresponding author.**

7- Giralt A, Brito V, Chevy Q, Simonnet C, Otsu Y, Cifuentes-Díaz C, de Pins B, Coura R, Alberch J, **Ginés S,** Poncer JC, Girault JA. (2017). *Pyk2 modulates hippocampal excitatory synapses and contributes to cognitive deficits in a Huntington's disease model.* **Nat Commun.** 8:15592. **(10/12).**

8- Puigdel·l·ivol M, Cherubini M, Brito V, Giralt A, Suelves N, Ballesteros J, Zamora-Moratalla A, Martín ED, Eipper BA, Alberch J, **Ginés S.** (2015) *A role for Kalirin-7 in corticostriatal synaptic dysfunction in Huntington's disease.* **Hum Mol Genet.** 24(25):7265-85. **(11/11). Corresponding author.**



9- Cherubini M, Puigdemívol M, Alberch J, **Ginés S.** (2015). *Cdk5-mediated mitochondrial fission: A key player in dopaminergic toxicity in Huntington's disease.* **Biochim Biophys Acta.** 1852(10 Pt A):2145-60. **(4/4). Corresponding autor.**

10- Brito V, Giralt A, Enriquez-Barreto L, Puigdemívol M, Suelves N, Zamora-Moratalla A, Ballesteros JJ, Martín ED, Dominguez-Iturza N, Morales M, Alberch J, **Ginés S.** (2014). *Neurotrophin receptor p75(NTR) mediates Huntington's disease-associated synaptic and memory dysfunction.* *J Clin Invest.* 124(10):4411-28. **(12/12). Corresponding author.**

## Research projects

1- Astrocytes at the hub of neuronal dysfunction in Huntington's disease: Dissecting the role of ARMS/kidins 220 on astrocyte secretome. **European Huntington's Disease Network (EHDN-1130\_201217).** 2021-2022. 50.000 EUROS. **Principal Investigator.** Universidad de Barcelona

2- Gliotransmitters and cannabinoid receptors at the hub of cognitive and synaptic plasticity impairments in Huntington's disease. **La Marató de TV3 (30\_C\_20200310\_1149).** 2021-2023. 319.708,75 EUROS. **Project Coordinator.** Universidad de Barcelona.

3- Transmitophagy between astrocytes and neurons: A new step of neuro-glia crosstalk in Huntington's disease. **MINISTERIO DE CIENCIA, INNOVACION Y UNIVERSIDADES (RTI2018-094374-B-I00).** 2018-2021. 181.500 EUROS. **Principal Investigator.** Universidad de Barcelona.

4- Interacción CB1R-GRP78: ¿Un nuevo mecanismo regulador de la actividad neurprotectora de los cannabinoides?. **CIBERNED (CNV-198PRF-739).** 2019-2021. 190.400 EUROS. Project Coordinator (Dr Manuel Guzman). **Subproject Principal Investigator.** 50.000 EUROS. Universidad de Barcelona.

5- Non-invasive dynamic neural control by laser-based technology. **EJUN-European Union (NEUROPA-863214).** 2020-2022. 451.070 EUROS. **Investigator.** Universidad de Barcelona.

6- Study of mitochondrial outcomes as biomarkers of Huntington's Disease progression and/or readouts of pharmacological interventions. **Huntington's Disease Society of America.** 2017-2018. 75.000 DOLARS. **Investigator.** Universidad de Barcelona.

7- Cdk5 como nueva diana terapéutica y biomarcador del trastorno depresivo en la enfermedad de Huntington. **MINECO (SAF2015-67474-R).** 2016-2018. 217.800 EUROS. **Principal Investigator.** Universidad de Barcelona.

8- Dual therapeutic benefits of isotype-selective HDAC inhibition in Huntington's disease. **European Huntington's Disease Network. (EHDN-1619-14).** 2015-2016. 50.000 EUROS. **Co-principal Investigator.** Universidad de Barcelona and NUI Galway University.

9- Cdk5 a therapeutic target for synaptic and cognitive deficits in Huntington disease. **Fundación Ramón Areces (CIVP16A1842).** 2012-2015. 84.435 EUROS. **Principal Investigator.** Universidad de Barcelona.

10- Cdk5 a potential therapeutic target for synaptic and cognitive deficits in Huntington's Disease. **MINECO (SAF2012-39142).** 2012-2015 152.100 EUROS. **Principal Investigator.** Universidad de Barcelona.

## Contracts, technological or transfer merits

**Patents:** Methods and pharmaceutical composition for the treatment of neurodegenerative disease. Number/ID: WO 2018/172527 A1. Country: France and Spain. Date: 2017-03-24. Entity/es: INSERM, Sorbone Université, Universitat de Barcelona. Inventors: Jean-Antoine Girault (45%), Albert Giralt (40%), Veronica Brito (10%), Silvia Gines (5%). Exploitation: n.a