

Last updated: July 19, 2024

## Curriculum Vitae – Javier González-Maeso

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### Education and Training

#### *Postdoctoral training*

2001-2005 Postdoctoral fellow  
Mount Sinai School of Medicine, New York  
Advisor: Stuart C. Sealfon, MD

#### *Graduate*

1997-2001 PhD student  
University of the Basque Country (Bilbao, Spain)  
Advisor: J. Javier Meana, MD, PhD

1998 Visiting PhD student  
Esteve Laboratories (Barcelona, Spain)

1999 Visiting PhD student  
University of Cambridge (Cambridge, England)  
Advisor: Jennifer A. Koenig, PhD

#### *Undergraduate*

1992-1997 Master's thesis student  
University of the Basque Country (Bilbao, Spain)  
Advisor: Isabel Barcina, PhD

1995-1997 BS in Biochemistry and Molecular Biology  
University of the Basque Country (Bilbao, Spain)

1990-1995 BS in Biology  
University of the Basque Country (Bilbao, Spain)

### Positions

2020 – present Professor  
Department of Physiology and Biophysics  
Virginia Commonwealth University

2020-present Affiliate Professor, Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, Virginia

2020-present Affiliate Professor, Center for Biomarker Research and Precision Medicine, Virginia Commonwealth University School of Pharmacy, Richmond, Virginia

2015 – 2020 Associate Professor (tenured, 2016)  
Department of Physiology and Biophysics  
Virginia Commonwealth University

2008 – 2015      Assistant Professor  
 Department of Psychiatry  
 Mount Sinai School of Medicine

2006 – 2008      Instructor  
 Department of Neurology  
 Mount Sinai School of Medicine

### Honors and Awards

2023              TEDx speaker in RVA – From Hallucinations to Healing: Neurobiology of  
 Psychedelics

2023              VCU Inaugural National/International Recognition Award (NIRA)

2022              VCU Breakthroughs Fund Award

2021              American College of Neuropsychopharmacology (ACNP) Travel Award

2020-2021      President, Central Virginia Society for Neuroscience

2019              Value and Efficiency Teaching and Research (VETAR) Award

2018              VCU School of Medicine Outstanding Departmental Teacher Award

2017              Life Science Poster at Tocris (Schizophrenia)  
<https://www.tocris.com/literature/life-science-posters>

2016              VCU Presidential Research Award

2012              The Mortimer D. Sackler Foundation Award

2011              XII Premio de Investigación Dr. Antonio Esteve (Honorary mention)

2010              NARSAD Young Investigator Award

2009              Maltz Family Foundation Award

2009              Selected to present at the 2009 Annual New York Mental Health  
 Symposium

2008              NARSAD Young Investigator Award

2001-2003      Postdoctoral fellowship (Basque Government, Spain) at Mount Sinai in  
 New York

2001              PhD *summa cum laude*. University of the Basque Country, Spain

1999              International PhD rotation fellowship (Ministry of Science and  
 Technology, Spain) at the University of Cambridge in England.

1997-2000      PhD student fellowship. Ministry of Science and Technology, Spain.

1996              Master's Thesis Honor. University of the Basque Country, Spain.

1994-1996      Master's Thesis fellowship. Basque Government, Spain.

1990-1995      BS fellowship. Basque Government, Spain.

### Membership in Scientific or Professional Societies

2018 – present      International Society for Research on Psychedelics

2018 – present      American Physiological Society

2012 – present      International Society for Serotonin Research  
 (formerly known as the Serotonin Club)

1997 – present Society for Neuroscience  
 1997 – present Spanish Society of Pharmacology

### Study Section/Grant Reviewer

2023 – 2025 Society for Neuroscience (SfN) Trainee Professional Development Award Review Committee  
 2019 – 2025 Pathophysiological Basis of Mental Disorders and Addictions (PMDA) Study Section at NIH – NIMH  
 2018 – 2021 Fellowships: Behavioral Neuroscience (F02A) at NIH – NIMH  
 since 2019 (*ad hoc*) India Alliance DBT welcome  
 since 2018 (*ad hoc*) Research Council of Canada  
 since 2017 (*ad hoc*) Medical Research Council (UK)  
 since 2015 (*ad hoc*) Ireland Health Research Board  
 since 2015 (*ad hoc*) Agencia Nacional de Evaluación y Prospectiva (ANEP), Spain  
 since 2015 (*ad hoc*) Agence Nationale de la Recherche (France)  
 since 2012 (*ad hoc*) Poland National Science Center  
 2024 The Lundbeck Foundation  
 2024 American Institute of Biological Sciences (AIBS)  
 2022 W.M. Keck Foundation  
 2022 Danish National Research Foundation  
 2020 American Heart Association  
 2019 Veterans Affairs Office  
 2018 NIH special emphasis panel ZRG1 BDCN-J (02)  
 2017 Comisión Evaluación Juan de la Cierva (Spain)  
 2017 NIH special emphasis panel (ZRG1 IFCN-C 56)  
 2017 NIH special emphasis panel (ZRG1 BDCN-J)  
 2016 NIH special emphasis panel (ZRG1 IFCN-L)  
 2016 Swiss National Science Foundation  
 2016 Promoción Científica y Tecnológica (Argentina)  
 2016 Deutsche Forschungsgemeinschaft  
 2015 Comisión Evaluación Ramón y Cajal (Spain)  
 2014 Defense Threat Reduction Agency  
 2009 NIH-NCDDDG Special Emphasis Panel Review Group  
 2009 Austrian Science Fund (FWF) Peer Review Committee

### Intramural presentations

2003 Mount Sinai School of Medicine  
 2007 Department of Psychiatry. Mount Sinai School of Medicine  
 2007 Department of Psychiatry Grand Rounds. Mount Sinai School of Medicine  
 2008 Sinai Molecular Interactions Discussion Group. Mount Sinai School of Medicine.  
 2017 Department of Pharmacology and Toxicology, VCU, Richmond, VA  
 2017 Department of Dance and Choreography, VCU School of Arts, Richmond, VA  
 2018 Department of Biochemistry and Molecular Biology, VCU, Richmond, VA  
 2019 Retreat on Opioids at VCU, Richmond, VA.

- 2019 Virginia Institute for Psychiatric and Behavioral Genetics, Richmond, VA.
- 2021 Student Psychiatry Society of VCU
- 2021 Department of Pharmacology and Toxicology, VCU, Richmond, VA
- 2021 Department of Anatomy and Neurobiology, VCU, Richmond, VA
- 2021 Center for Microbiome Engineering and Data Analysis (cMEDA), VCU, Richmond, VA
- 2022 Retreat on Opioids at VCU, Richmond, VA.
- 2023 One VCU Research Optimizing Health: Impacts from VCU Researchers Panel.

### **Extramural presentations**

- 2002 Department of Psychiatry. Columbia University
- 2006 Department of Pharmacology. University of the Basque Country
- 2006 Keystone Symposia, Colorado.
- 2007 Society for Neuroscience. San Diego, CA.
- 2008 Department of Physiology and Pharmacology. University of Cantabria, Spain.
- 2008 Lieber Center Seminars. Columbia University and New York Psychiatric Institute.
- 2008 Keystone Symposia. Killarney, Co. Kerry, Ireland.
- 2008 Spanish Society of Pharmacology, Bilbao, Spain.
- 2009 NARSAD 21<sup>st</sup> Annual New York Mental Health Symposium.
- 2009 Sanofi-Aventis. Bridgewater, New Jersey.
- 2010 11<sup>th</sup> Annual Joint Meeting of the Great Lakes GPCR retreat, Toronto, Canada.
- 2010 BioForo UPV/EHU, Bilbao, Spain.
- 2011 City College of CUNY, New York.
- 2011 7<sup>th</sup> International Meeting of Metabotropic Glutamate Receptors, Taormina, Sicily, Italy.
- 2012 45<sup>th</sup> Winter Conference on Brain Research, Snowbird, Utah.
- 2012 6<sup>th</sup> European Congress on Pharmacology (EPHAR), Granada, Spain.
- 2012 XXVIII International College of Neuro-Psychopharmacology Congress, Stockholm, Sweden.
- 2012 16<sup>th</sup> Serotonin club meeting, Montpellier, France.
- 2012 Neurobiology Research Unit, Copenhagen University Hospital, Denmark
- 2012 Nagoya University Global COE Program, Japan
- 2012 Dainippon Sumitomo Pharma, Osaka, Japan
- 2013 Department of Psychiatry Grand Rounds. Richmond University Medical Center, Staten Island, NY
- 2013 4<sup>th</sup> GPCR Colloquium (ASPET Annual Meeting), Boston, MA
- 2013 11<sup>th</sup> World Congress of Biological Psychiatry, Kyoto, Japan
- 2013 Integrative Neurobiology Section, National Institute on Drug Abuse (NIH-NIDA), Baltimore, MD.
- 2014 22<sup>nd</sup> European Congress of Psychiatry, Munich, Germany
- 2014 17<sup>th</sup> International Society for Serotonin Research Meeting (formerly Serotonin Club), Arabella, South Africa
- 2014 8<sup>th</sup> International Meeting of Metabotropic Glutamate Receptors, Taormina, Sicily, Italy.
- 2015 Spanish Society of Pharmacology, Valencia, Spain.

- 2015 Schizophrenia research forum at Bispebjerg Hospital, University of Copenhagen
- 2016 18<sup>th</sup> International Society for Serotonin Research Meeting (formerly Serotonin Club), Seattle, WA
- 2017 Instituto de Investigación Sanitaria Valdecilla (IDIVAL), Santander, Spain
- 2017 Departamento de Farmacología, Universidad de Santiago de Compostela, Spain
- 2017 Departamento de Farmacología, Universidad del País Vasco, Bilbao, Spain
- 2017 ASPET Annual Meeting at Experimental Biology, Chicago, IL.
- 2017 Global Health and Emerging Pathogens Institute, New York, NY.
- 2017 9<sup>th</sup> International Meeting of Metabotropic Glutamate Receptors, Taormina, Sicily, Italy.
- 2017 Institute of Neuroscience, University of Oregon, Eugene, OR
- 2017 Global Health and Emerging Pathogens Institute, New York, NY
- 2018 Winter Conference on Brain Research, Whistler, Canada
- 2018 Boehringer Ingelheim Pharma, Germany
- 2018 19<sup>th</sup> International Society for Serotonin Research Meeting (formerly Serotonin Club), Cork, Ireland
- 2018 Department of Pharmacology, Carver College of Medicine, University of Iowa, Iowa City, IA.
- 2019 International Society for Research on Psychedelics (Inaugural Conference), New Orleans, LA
- 2020 10<sup>th</sup> Esteve Foundation Discussion Group, Barcelona, Spain
- 2020 20<sup>th</sup> International Society for Serotonin Research Meeting (formerly Serotonin Club), Cancún, Mexico (postponed to 2022)
- 2020 10<sup>th</sup> International Meeting of Metabotropic Glutamate Receptors, Taormina, Sicily, Italy (postponed to 2021)
- 2021 XXIX Curso Nacional de Actualización en Psiquiatría, Vitoria-Gasteiz, Spain (virtual meeting)
- 2021 Division of Molecular Psychiatry, Yale School of Medicine, New Haven, CT
- 2021 The Psychedelic Therapeutics & Drug Development Conference (virtual meeting)
- 2021 60<sup>th</sup> American College of Neuropsychopharmacology, San Juan, Puerto Rico
- 2021 Psychedelic Neuroscience & Therapy, University of Michigan, Ann Harbor MI.
- 2022 14<sup>th</sup> Behavior, Biology, and Chemistry: Translational Research in Addiction meeting, San Antonio, TX.
- 2022 The Psychedelic Therapeutics & Drug Development Conference, Washington, DC
- 2022 Johns Hopkins University Psychiatry Research Conference, Baltimore, MD.
- 2022 The National Hispanic Science Network (NHSN), Grand Rapids, MI.
- 2022 Biofisika Institute (CSIC – Science Park of UPV/EHU), Bilbao, Spain.
- 2023 Brain Awareness Week at University of Mississippi, Oxford, MS.
- 2023 STEAM-H Seminar, Virginia State University, Petersburg, VA.
- 2023 Graduate Student Distinguished Lecturer, Louisiana State University, Shreveport, LA.
- 2023 The Einstein Center for Neurosciences, Humboldt University of Berlin, Germany
- 2024 International Society for Research on Psychedelics, New Orleans, LA.
- 2024 The International Narcotics Research Conference (INRC), Ann Harbor, MI.

**Publications** (h-index = 44; citations = 8,961)*Preprints:*

1. Olivet J, Choi SG, Sierra S, O'Grady TM, de la Fuente Revenga M, Laval F, Botchkarev VV, Gorgulla C, Coote PW, Blavier J, Geffken EA, Lakhani J, Song K, Yeoh ZC, Hu B, Varca AC, Nyquist SK, Richardson A, Yue H, Wang Y, Calongui N, Stefan A, Spirohn K, Vertommen D, Baietti MF, Lemmens I, Seo HS, Dozmorov MG, Willems L, Tavernier J, Das K, Leucci E, Hochkoepler A, Jim Sum ZY, Calderwood MA, Hao T, Shalek AK\*, Hill DE\*, Boeszoermyeni A\*, Arthanari H\*, Buhrlage SJ\*, Dhe-Paganon S\*, González-Maeso J\*, Dequiedt F\*, Twizere JC\*, Vidal M\*. Expanding the HDAC druggable landscape beyond enzymatic activity. *bioRxiv* (2021) – \*co-corresponding authors.
2. Martin-Guerrero SM, Martin-Estebane M, Lara-Ordoñez A, Canovas M, Martin-Oliva D, González-Maeso J, Cutillas PR, Lopez-Gimenez JF. Maternal immune activation imprints translational dysregulation and differential MAP2 phosphorylation in descendant neural stem cells. *bioRxiv* (2024)
3. Saha S, González-Maeso J. Translation-independent association of mRNAs encoding promoters of the 5-HT<sub>2A</sub>-mGlu2 receptor complex in living cells. *bioRxiv* (2024)

*Research papers:*

1. Gaitonde SA, Avet C, de la Fuente Revenga M, Blondel-Tepaz E, Shahraki A, Morales Pastor A, Talagayev V, Robledo P, Kolb P, Selent J, González-Maeso J, Bouvier M. Pharmacological fingerprint of antipsychotic drugs at the serotonin 5-HT<sub>2A</sub> receptor. *Molecular Psychiatry* (Online ahead of print)
2. Takaba R, Ibi D, Yoshida K, Hosomi E, Kawase R, Kitagawa H, Achiwa M, Mizutani K, Maede K, González-Maeso J, Kitagaki S, Hiramatsu M. Ethopharmacological evaluation of antidepressant-like effect of serotonergic psychedelics in C57BL/6J mice. *Naunyn-Schmiedeberg's Archives of Pharmacology* 397:3523 (2024).
- \*3. Zhu B, Ainsworth RI, Wang Z, Liu Z, Sierra S, Deng C, Callado LF, Meana JJ, Wang W\*, Lu C\*, González-Maeso J\*. Antipsychotic-induced epigenomic reorganization in frontal cortex samples of individuals with schizophrenia. *eLife* 12:RP92393 (2024) – \*co-corresponding authors.

This is the first article showing cell-specific genome-wide histone modifications in the frontal cortex of individuals with schizophrenia, as well as shedding light on the role of age and antipsychotic treatment in these associations.

4. Zhang Q, Ma S, Liu Z, Zhu B, Zhou Z, Li G, Meana JJ, González-Maeso J, Lu C. Droplet-based bisulfite sequencing for high-throughput profiling of single-cell DNA methylomes. *Nature Communications* 14:4672 (2023).
5. Wolstenholme JT, Saunders JM, Smith M, Kang JD, Hylemon PB, González-Maeso J, Fagan A, Zhao D, Sikaroodi M, Herzog J, Shamsadini A, Peña-Rodriguez M, Su L, Tai Y-L, Zhen J, Cheng B-C, Sartor R.B., Guillevet PM, Zhou H, Bajaj JS. Improvement in drinking behavior after fecal transplant from patients with alcohol use disorder is transmissible to germ-free mice. *Nature Communications* 13:6198

(2022).

6. Saunders JM, Muguruza C, Sierra S, Moreno JL, Callado LF, Meana JJ, Beardsley PM, González-Maeso J. Glucocorticoid receptor dysregulation underlies 5-HT<sub>2A</sub> receptor-dependent synaptic and behavioral deficits in a mouse neurodevelopmental disorder model. **Journal of Biological Chemistry** 298:102481 (2022).
7. Jaster A, Younkin J, Cuddy T, de la Fuente Revenga M, Poklis JL, Dozmorov MG, González-Maeso J. Differences across sexes on head-twitch behavior and 5-HT<sub>2A</sub> receptor signaling in C57BL/6J mice. **Neuroscience Letters** 788:136836 (2022).
8. de la Fuente Revenga M, Jaster AM, McGinn J, Silva G, González-Maeso J. Tolerance and cross-tolerance among psychedelics and nonpsychedelic 5-HT<sub>2A</sub> receptor agonists in mice. **ACS Chemical Neuroscience** 13:2436-2448 (2022).

Special Issue: DARK classics in chemical neuroscience.

9. Meng J, Xu C, Lafon P-A, Roux S, Mathieu M, Zhou R, Scholler P, Blanc E, Becker JAJ, Le Merrer J, González-Maeso J, Chames P, Liu J, Pin JP, Rondard P. Optical biosensors of native membrane protein complexes reveal a high proportion of mGlu heterodimers in brain. **Nature Chemical Biology** 18:894-903 (2022).
10. Jaster AM, Elder H, Marsh SA, de la Fuente Revenga M, Negus SS\*, González-Maeso J\*. Effects of the 5-HT<sub>2A</sub> receptor antagonist volinanserin on head-twitch response and intracranial self-stimulation depression induced by different classes of psychedelics in rodents. **Psychopharmacology** 239:1665-1677 (2022) – \*co-corresponding authors.

Special Issue: Psychopharmacology on psychedelic drugs.

11. Sierra A, Muchhala KH, Jessup DK, Contreras KM, Shah UH, Stevens DL, Jimenez J, Cuno Lavilla XK, de la Fuente Revenga M, Lippold KM, Shen S, Poklis JL, Qiao LY, Dewey WL, Akbarali HI, Damaj MI, González-Maeso J. Sex-specific role for serotonin 5-HT<sub>2A</sub> receptor in modulation of opioid-induced antinociception in mice. **Neuropharmacology** 209:108988 (2022).
12. Vohra HZ, Saunders JM, Jaster AM, de la Fuente Revenga M, Jimenez J, Fernandez-Teruel A, Wolstenholme JT, Beardsley PM, González-Maeso J. Sex-specific effects of psychedelics on prepulse inhibition of startle in 129S6/SvEv mice. **Psychopharmacology** 239:1649-1664 (2022).

Special Issue: Psychopharmacology on psychedelic drugs.

- \*13. de la Fuente Revenga M, Zhu B, Guevara CA, Naler LB, Saunders JM, Zhou Z, Toneatti R, Sierra S, Wolstenholme JT, Beardsley PM, Huntley GW, Lu C\*, González-Maeso J\*. Prolonged epigenomic and synaptic plasticity alterations following single exposure to a psychedelic in mice. **Cell Reports** 37:109836 (2021) – \*co-corresponding authors

Cover article

Treatments not trips. **Nature** 609:S80 (2022)

Epigenetic roots of long-lasting therapy. **Nature** 609:S99 (2022)

This is the first article showing long-lasting epigenomic alterations by a psychedelic

14. Egusquiza I, Munarriz-Cueva E, Segarra R, González-Maeso J, Callado LF, Meana JJ, Diez-Alarcia R. Characterization of dopamine D<sub>2</sub> receptor coupling to G proteins in postmortem brain of subjects with schizophrenia ***Pharmacological Reports*** 73:1136-1146 (2021).
  15. Zhang Y, Kang JD, Zhao D, Ghosh SS, Wang Y, Tai Y, González-Maeso J, Sikaroodi M, Gillevet PM, Lippman HR, Hylemon PB, Zhou H, Bajaj JS. Hepatic branch vagotomy modulates the gut-liver-brain axis in murine cirrhosis. ***Frontiers in Physiology*** 12:702646 (2021)
  16. Martin-Guerrero SM, Alonso P, Iglesias A, Cimadevilla M, Brea J, Loza MI, Casado P, Martin-Oliva D, Cutillas PR, González-Maeso J\*, Lopez-Gimenez JF\*. His452Tyr polymorphism in the human 5-HT<sub>2A</sub> receptor affects clozapine-induced signaling networks revealed by quantitative phosphoproteomics. ***Biochemical Pharmacology*** 185:114440 (2021) – \*co-corresponding authors
  17. de la Fuente Revenga M, Shah UH, Nassehi N, Jaster AM, Hemanth P, Sierra S, Dukat M, González-Maeso J. Psychedelic-like properties of quipazine and its structural analogs in mice. ***ACS Chemical Neuroscience*** 12:831-844 (2021)
  18. Sanchez-Gonzalez A, Thougard E, Tapias-Espinosa C, Cañete T, Sampedro-Viana D, Saunders JM, Toneatti R, Tobeña A, González-Maeso J, Aznar S, Fernandez-Teruel A. Increased thin-spine density in frontal cortex pyramidal neurons in a genetic rat model of schizophrenia-related features. ***European Neuropsychopharmacology*** 44:79-91 (2021).
  19. Toneatti R, Jong JM, Shah UH, Mayer CR, Saunders JM, Fribourg M, Arsenovic PT, Janssen WG, Sealfon SC, Lopez-Gimenez JF, Benson DL, Conway DE, González-Maeso J. Interclass GPCR heteromerization affects localization and trafficking. ***Science Signaling*** 13(654):eaaw3122 (2020)
  - \*20. Urjita UH, Toneatti R, Gaitonde SA, Shin JM, González-Maeso J. Site-specific incorporation of genetically encoded photo-crosslinkers locates the heteromeric interface of a GPCR complex in living cells. ***Cell Chemical Biology*** 27:1308-1317 (2020).
- This is the first article using photoactivatable unnatural amino acids in GPCR complexes
21. Saunders JM, Moreno JL, Ibi D, Sikaroodi M, Kang DJ, Muñoz-Moreno R, Dalmet SS, Garcia-Sastre A, Gillevet PM, Dozmorov MG, Bajaj JS, González-Maeso J. Gut microbiota manipulation during the prepubertal period shapes behavioral abnormalities in a mouse neurodevelopmental disorder model. ***Scientific Reports*** 10:4697 (2020)
  22. Sierra S, Lippold KM, Stevens DL, Poklis JL, Dewey WL, González-Maeso J. Adjunctive effect of the serotonin 5-HT<sub>2C</sub> receptor agonist lorcaserin on opioid-induced antinociception in mice. ***Neuropharmacology*** 167:107949 (2020)
  23. de la Fuente Revenga M, Vohra HZ, González-Maeso J Automated head-twitch behavior response in mice via ear tag reporter coupled with biphasic detection. ***Journal of Neuroscience Methods*** 334:108595 (2020).
  24. Osterbog TB, On DM, Oliveras I, Rios-Alamos C, Sanchez-Gonzalez A, Tapias-Espinosa C, Tobeña A, González-Maeso J, Fernandez-Teruel A, Aznar S.

Metabotropic glutamate receptor 2 and dopamine receptor 2 gene expression predict sensorimotor gating response in the genetically heterogenous NIH-HS rat strain. *Molecular Neurobiology* 57:1516-1528 (2020)

25. Ruso-Julve F, Pompero A, Pilar-Cuellar F, Garcia-Diaz N, Garcia-Lopez R, Juncal-Ruiz M, Castro E, Lopez-Gimenez J, Major F Jr, Valdizan E, Meana JJ, González-Maeso J, Martinez S, Vaque JP, Crespo-Facorro B. Dopaminergic control of ADAMTS2 expression through cAMP/CREB and ERK: molecular effects of antipsychotics. *Translational Psychiatry* 9:306 (2019).
26. Garcia-Bea A, Miranda-Azpiazu P, Muguruza C, Marmolejo-Martinez-Astesero S, Diez-Alarcia R, Gabilondo AM, Callado LF, Morentin B, González-Maeso J, Meana JJ. Serotonin 5-HT<sub>2A</sub> receptor expression and functionality in postmortem frontal cortex of subjects with schizophrenia: Selective biased agonist via G<sub>αi1</sub>-proteins. *European Neuropsychopharmacology* 29: 1453-1463 (2019).
27. Bajaj JS, Sikaroodi M, Fagan A, Heuman D, Gilles H, Gavis EA, Fuchs M, González-Maeso J, Nizam S, Gillevet PM, Wade JB. Posttraumatic stress disorder is associated with altered gut microbiota that modulates cognitive performance in veterans with cirrhosis. *American Journal of Physiology - Gastrointestinal and Liver Physiology* 317:G661-G669 (2019).
- \*28. de la Fuente Revenga M, Shin JM, Vohra HZ, Hideshima KS, Schneck M, Poklis JL, González-Maeso J. Fully automated head-twitch detection system for the study of 5-HT<sub>2A</sub> receptor pharmacology in vivo. *Scientific Reports* 9:14247 (2019)  
This article provides describes the first fully automated system to assay head-twitch “psychosis-like” behavior induced by psychedelics in mice
29. Liu R, Kang JD, Sartor RB, Sikaroodi M, Fagan A, Gavis EA, Zhou H, Hylemon PB, Herzog JW, Li X, Lippman RH, González-Maeso J, Wade JB, Ghosh S, Gurley E, Gillevet PM, Bajaj JS. Neuroinflammation in murine cirrhosis is dependent on gut microbiome and is attenuated by fecal transplant. *Hepatology* 71:611-626 (2019).
30. Shah HU, Gaitonde U, Moreno JL, Glennon RA, Dukat M, González-Maeso J. Revised pharmacophore model for 5-HT<sub>2A</sub> receptor antagonists derived from the atypical antipsychotic agent risperidone. *ACS Chemical Neuroscience* 10:2318-2331 (2019)
31. Hideshima KS, Hojati A, Saunders JM, On DM, de la Fuente Revenga M, Sanchez-Gonzalez A, Dunn CM, Pais AB, Pais AC, Miles MF, Wolstenholme JT, González-Maeso J. Role of mGlu2 in the 5-HT<sub>2A</sub> receptor-dependent antipsychotic activity of clozapine in mice. *Psychopharmacology* 235:3149-3165 (2018)
32. de la Fuente Revenga M, Ibi D, Cuddy T, Toneatti R, Kurita M, Ijaz MK, Miles MF, Wolstenholme JT, González-Maeso J. Chronic clozapine treatment restrains via HDAC2 the performance of mGlu2/3 agonism in a rodent model of antipsychotic activity. *Neuropsychopharmacology* 44:443-454 (2019)
33. de la Fuente Revenga M, Ibi D, Saunders JM, Cuddy T, Ijaz MK, Toneatti R, Kurita M, Holloway T, Shen L, Seto J, Dozmorov MG, González-Maeso J. HDAC2-dependent antipsychotic-like effects of chronic treatment with the HDAC inhibitor SAHA in mice. *Neuroscience* 388:102-117 (2018)

34. Mato S, Pilar-Cuellar F, Valdizan EM, González-Maeso J, Rodriguez-Puertas R, Meana JJ, Salles J, Crespo-Facorro B, Pazos A. Selective up-regulation of cannabinoid CB<sub>1</sub> receptor coupling to G<sub>o</sub>-proteins in suicide victims with mood disorders. ***Biochemical Pharmacology*** 157:258-265 (2018)
35. Ma S, de la Fuente Revenga M, Sun Z, Sun C, Murphy TW, Xie H, González-Maeso J, Lu C. Cell-type-specific brain methylomes profiled via ultralow-input microfluidics. ***Nature Biomedical Engineering*** 2:183-194 (2018)  
*Comment by* Feng-Mao Lin, Shun Chien and Zhen Chen in ***Nature Biomedical Engineering*** 2:147-148 (2018)
36. Mitchell AC, Javidfar B, Pothula V, Ibi D, Shen EY, Peter CJ, Bicks LK, Fehr T, Jiang Y, Brennand KJ, Neve RL, González-Maeso J, Akbarian S. MEF2C transcription factor is associated with the genetic and epigenetic risk architecture of schizophrenia and improves cognition in mice. ***Molecular Psychiatry*** 23: 123-132 (2018)
37. Fomsgaard L, Moreno JL, de la Fuente Revenga M, Brudek T, Adamsen D, Rio-Alamos C, Klein AB, Canete T, Bazquez G, Tobena A, Fernandez-Teruel A, González-Maeso J, Aznar S. Differences in 5-HT<sub>2A</sub> and mGlu2 receptor expression levels and repressive epigenetic modifications at the 5-HT<sub>2A</sub> promoter region in the Roman low (RLA) and High (RHA) avoidance rat strains. ***Molecular Neurobiology*** 55:1998-2012 (2018)
38. Lopez-Gimenez JF, de la Fuente Revenga M, Ruso F, Sanders JM, Moreno JL, Crespo-Facorro B, González-Maeso J. Validation of schizophrenia gene expression profile in a preclinical model of maternal infection during pregnancy. ***Schizophrenia Research*** 189: 217-218 (2017).
- \*39. Ibi D, de la Fuente Revenga M, Kezunovic N, Muguruza C, Gaitonde SA, Saunders JM, Moreno JL, Ijaz M, Santosh V, Kozlenkov A, Holloway T, Seto J, Garcia-Bea A, Kurita M, Mosley GE, Jiang Y, Christoffel DJ, Russo SJ, Dracheva S, Lopez-Gimenez JF, Ge Y, Escalante CR, Meana JJ, Akbarian S, Huntley GW, González-Maeso J. Antipsychotic-induced Hdac2 transcription via NF- $\kappa$ B leads to synaptic remodeling and cognitive side effects. ***Nature Neuroscience*** 20:1247-1259 (2017).  
*Science Signaling* Editors' Choice: Protecting cognition from antipsychotics (doi: 10.1126/scisignal.aap9121)
- This article provides the first signaling mechanism by which chronic administration of atypical antipsychotic medications induces maladaptive effects on synaptic structure and cognition.
40. Fribourg M, Logothetis DE, González-Maeso J, Sealfon SC, Galocha-Iragüen B, Las-Heras Andres F, Brezina V. Elucidation of molecular kinetic schemes from macroscopic traces using system identification. ***PLoS Computational Biology*** 13(2):e1005376 (2017)
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*Public outreach and Interviews:*

- 2023 *TEDx speaker* in Richmond, VA
- 2023 Interviewed for *abc News – 13NewsShow*
- 2023 Interviewed for *With Good Reason radio*
- 2023 Interviewed for *VCU Magazine* article “The Magical Mystery receptor”
- 2019 Interviewed for *The Sun* article “Magic mushrooms could one day cure depression, scientists claim”
- 2017 Interviewed for *El País* article “Setas alucinógenas para reducir la depresión en enfermos terminales”
- 2017 Interviewed for *La Vanguardia* article “Nuevas estrategias para el tratamiento de la esquizofrenia”
- 2016 Interviewed for *Neuroscience News* article “An alternative treatment target for schizophrenia”

- 2016 Interviewed for *MedicalXpress* article “Medical Express News: Alternative treatment target for schizophrenia”
- 2013 Interviewed for *Drug Development* article “A vital new path for schizophrenia treatment”
- 2012 Interviewed for *Psychiatry News* article “Enzyme Inhibitor Might Benefit Schizophrenia Patients”
- 2012 Interviewed for *The Scientist* article “Boosting Antipsychotic Drugs”
- 2012 Interviewed for *MedPage* article “Epilepsy Drug Boosts Memory”
- 2012 Interviewed for *El Diario Vasco* article “Descubren la razón de la resistencia a los fármacos contra la esquizofrenia”
- 2011 Interviewed for *RTVE* article “Desarrollan un método para predecir si un fármaco es antipsicótico”
- 2008 Interviewed for *CNN* article “Descubren una vía para el desarrollo de fármacos contra la esquizofrenia”
- 2008 Interviewed for *El Correo* article “Científicos de la UPV descubren una nueva vía para combatir la esquizofrenia”
- 2008 Interviewed for *EITB* article “Hallan un nuevo tratamiento contra la esquizofrenia”
- 2008 Interviewed for *La Razón* article “Alucinógenos contra la esquizofrenia”
- 2008 Interviewed for *SciBX* article “Schizophrenia develops a complex”
- 2007 Interviewed for *ABC* article “Descubren la manera en la que los alucinógenos actúan sobre el cerebro”
- 2007 Interviewed for *Clarín* article “Descubren por qué el LSD es alucinógeno”
- 2007 Interviewed for *Washington Post* article “LSD Study Probes Hallucinogen's Effect on Brain”
- 2007 Interviewed for *Scientific American* article “How Hallucinogens Play Their Mind-Bending Games”