NAME	POSITION TITLE
Susana Mingote, PhD	Associate Professor CUNY, Advanced Science Research Center

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
Faculdade de Ciências, Universidade de Lisboa	BA	1998	Biology
University of Connecticut	MA	2004	Behavioral Neurosci
University of Connecticut	PhD	2007	Behavioral Neurosci
Columbia University	Postdoc	2007-2010	Neuroscience

A. Personal Statement

My research investigates the brain circuits controlling learning, memory and motivation using mice models. We focus on how the dopamine system and its neuronal and glial interactions modulate behavior and cognitive functions. We also interested in how natural factors such as aging and sex, as well as pathological conditions associated with schizophrenia, contribute to changes in brain circuits and behavior.

B. Positions and Honors

Positions

2019 – present Associate Professor, Advanced Science Research Center, Graduate Center, CUNY.

2016 - 2020 Research Scientist III, Department of Molecular Therapeutics, Research Foundation for Mental Hygiene at NYS Psychiatric Institute.

2010 - 2019 Associate Research Scientist, Department of Psychiatry, Columbia University.

2007-2016 Research Scientist I, Department of Molecular Therapeutics, Research Foundation for Mental Hygiene at NYS Psychiatric Institute.

2007-2010 Postdoctoral Fellow, Department of Psychiatry, Columbia University.

2000-2007 Teaching Assistant, Behavioral Neuroscience Program, University of Connecticut.

1998- 2000 Research Assistant, Research Institute for Brain Research, Amsterdam, Netherlands.

Editor Roles

2019 – present Associated Editor for Frontiers in Behavioral Neuroscience, Research Topic "*Motivation and Reward*".

Grant Review Panels

2021 – present External Reviewer, Austrian Science Fund.

2020 – present External Reviewer, European Research Council.

2019 – present Reviewer of the ASRC Seed Grants, CUNY.

2019 – present Reviewer for the CUNY Summer Ungraduated Research Program (CSUPR).

2019 – present	External Reviewer, Fulbright Fellowships, Fulbright Commission, Portugal.
2020	Reviewer for the Doctoral Student Research Grant (DSRG), Biology Graduate Program, CUNY.

Journal Reviews

Ad hoc manuscript referee: Genes, Brain and Behavior; European Neuropsychopharmacology; Frontiers in Behavioral Neuroscience; Brain Research; Scientific Reports.

Teaching Experience and Responsibilities

2020 – present	Instructor of Graduate Center at CUNY. Course taught: Neuroscience II. Student enrollment: 20-27.
2020 – present	Instructor of Graduate Center at CUNY. Course taught: Special Topic Graduate Seminar - *Brain Circuits Regulating Learning and Memory*. Student enrollment: 5-15.
2019 – present	Instructor of Graduate Center at CUNY. Course taught: Special Topic Graduate Seminar - *Landmark Papers in Model Systems Neuroscience*. Student enrollment: 5-15.
2012-2020	Mentor honors neuroscience thesis from 5 undergraduates from Barnard College
2007	Teaching assistant at University of Connecticut. Course taught: Physiological Psychology Laboratory. Student enrollment: 18
2005	Teaching assistant at University of Connecticut. Course taught: Physiological Psychology Laboratory. Student enrollment: 12
2003- 2004	Instructor of record at University of Connecticut. Course taught: Learning and Memory. Student enrollment: 40
2000-2006	Teaching assistant at University of Connecticut. Course taught: Introductory Psychology Laboratory. Student enrollment: 20

Honors

Awards/Fellowships:

2015-2017	NIDA Exploratory/Developmental Research Grant Award (R21)
2016	Outstanding Presentation Prize, The New York Academy of Sciences, USA.
2013-2015	NARSAD Young Investigator Award, Brain and Behavior Research Foundation, USA
2010	Travel Fellowship for the NIDA mini-convention in San Diego, USA
2006	Doctoral Dissertation Fellowship, University of Connecticut, USA.
2002-2004	Neuroscience Fellowship, University of Connecticut, USA
2001-2005	PhD grant from Fundação para a Ciência e Tecnologia, Portugal
2000-2004	Fulbright PhD grant, Fulbright Commission, Portugal
1999-2000	Leonardo DaVinci Post-Graduation Fellowship, European Union
1998-1999	Erasmus Exchange Program Fellowship, European Union

Invited Lectureships:

2/2021 Psychological & Brain Sciences, University of Massachusetts, Amherst, USA. ""The functional diversity of dopamine neurons and their role in remembering the seemingly mundane".

12/2020 Psicología Básica, Clínica y Psicobiología Department, Universitat Jaume I, Spain. "Multilingual neurons: how dopamine neurons communicate through dopamine and glutamate transmission"

9/2020 Graduate Center, CUNY. "*Dopamine Neurons Control of Cortical Activity and Their Function in Memory Formation of Familiar Events*".

4/2020 Lunch and Learn Seminar, Advanced Science Research Center, CUNY**. "***Brain mechanisms for remembering the salient and the seemingly mundane."*

1/2020 Winter Conference Brain Research, BigSky, Montana*.* **"***Dissecting the functions of dopamine-glutamate neurons*."

11/2019 Neuroscience Seminar, College of Staten Island, CUNY. *"Multilingual neurons: how dopamine neurons communicate through dopamine and glutamate transmission.*"

10/2019 Molecular, Cellular, and Developmental Biology/Neuroscience Collaborative retreat, ASRC, CUNY **"***Brain mechanisms processing relevant events in the environment.*"

9/2019 Neuroscience Collaborative Colloquium, Graduate Center, CUNY. "*Multilingual neurons: how dopamine neurons communicate through dopamine and glutamate transmission."*

4/2019 Lunch and Learn Seminar, Advance Science Research Center, CUNY**. "***Dopamine Neurons and the Regulation of Motivated Behavior"*

4/2018 Neuroscience Seminar, Advanced Science Research Center, CUNY**. "***Uncovering the Function of Dopamine Neuron Glutamate Cotransmission".*

2/2018 Behavioral Neuroscience Seminar, University of Connecticut, Storrs*. "Uncovering the Function of Dopamine Neuron Glutamate Cotransmission".*

7/2017 New York State Psychiatry Institute, Medical, Columbia University Medical Center, New York "*Uncovering the Function of Dopamine Neurons Glutamate Cotransmission".*

8/2015 Columbia Translational Neuroscience Initiative, Columbia University, New York "*Uncovering the Function of Dopamine Neurons Glutamate Cotransmission".*

5/2007 54th American College of Sports Medicine Conference, New Orleans. Title: "*Forebrain circuitry involved in effort-related behaviors*"

9/2004 Institute of Psychiatry, King's College, London, UK. Title: "*Motivational functions of Accumbens Dopamine: Behavioral Activation, Effort-Related Decisions and Psychomotor Slowing*".

5/2004 Centro de Neurosciências, Universidade de Coimbra, Portugal. Title: "*GABA Mechanisms in the Substantia Nigra Pars Reticulata: Pharmacological and Behavior Studies*".

C. Research Support

Current

R21 MH123926 (Mingote, PI), NIMH, NIH (03/1/21 – 02/28/23)
Effects of Decreased Dopamine Synthesis on Glutamate Co-Transmission and Cortical Activity.
Summary. Cognitive deficits in several brain disorders are associated with decreased dopamine synthesis and release in the cortex, and have a profound emotional and financial impact in our society. This project will investigate how decreased dopamine synthesis affects the dopamine neuron control over cortical activity through the co-release of glutamate in mice. As dopamine neuron glutamate co-transmission is preserved through phylogeny and found in humans, our research will provide novel mechanistic insights into how dopamine dysregulation may affect cortical functions linked to cognitive deficits in brain disorders.

Past

R21 DA040443 (Mingote, PI and Rayport, PI), NIDA, NIH (07/01/15 - 08/31/17)
Mapping dopamine neuron cotransmission by proximity detection.
Summary. Brain function is principally encoded in synaptic connections, but it has been challenging to correlate anatomical and functional measures of connectivity, particularly because many CNS neurons release a mix of neurotransmitters. Detection of the proximity of neurotransmitter-specific molecules offers a way to visualize functional connectivity based on the neurotransmitter released, especially involving cotransmission. We will use the proximity ligation assay (PLA) to image dopamine neuron synapses throughout the forebrain.

NARSAD Young investigator Award (Mingote, PI), BBRF (01/15/13 – 01/14/15)
Does dopamine neuron glutamate signaling play a crucial role in the transition to addiction?
Summary. Stimulant drugs increase dopamine release in the brain to supra-physiological levels leading to addiction. Our lab has shown that dopamine neurons co-release glutamate, and this proposal seeks to elucidate the role of glutamate co-transmission in the development of amphetamine-induced behaviors and unveil processes involved the transition to addiction. We will investigate the effects of glutaminase deletion on glutamate co-transmission, dopamine content, and amphetamine-induced behaviors.

D. Publications

Original, peer reviewed articles

1. Beeler JA, Mourra D, Zanca RM, Kalmbach A, Gellman C, Klein BY, Ravenelle R, Serrano P, Moore H, Rayport S, **Mingote S**, Burghardt NS. Vulnerable and Resilient Phenotypes in a Mouse Model of Anorexia Nervosa. *Biological Psychiatry*, 2020; doi: 10.1016/j.biopsych.2020.06.030
2. Kosten L, Chowdhury GMI, **Mingote S**, Staelens S, Rothman DL, Behar KL, Rayport S. Glutaminase activity in GLS1 Het mouse brain compared to putative pharmacological inhibition by ebselen using ex vivo MRS. *Neurochemistry International*, 2019; 129:104508. doi: 10.1016/j.neuint.2019.104508. PMID: 31326460
3. **Mingote S***, Amsellem A, Kempf A, Rayport S, Chuhma N. Dopamine-glutamate neuron projections to the nucleus accumbens medial shell and behavioral switching. *Neurochemistry International,* 2019; 129: 104482. doi:10.1016/j.neuint.2019. PMID: 31170424 *Corresponding author.
4. Kosten L, Deleye S, Stroobants S, Wyffels L, **Mingote** S, Rayport S, Staelens S. Molecular Imaging of mGluR5 Availability with [11C]ABP68 in Glutaminase Heterozygous Mice. *Cell Mol Neurobiol*, 2019; 255-263. doi: 10.1007/s10571-018-0645-y. PMID: 30552621
5. Lander SS, Khan U, Lewandowski N, Chakraborty D, Provenzano FA, **Mingote S**, Chornyy S, Frigerio F, Maechler P, Kaphzan H, Small SA, Rayport S, Gaisler-Salomon I. Glutamate Dehydrogenase-

Deficient Mice Display Schizophrenia-Like Behavioral Abnormalities and CA1-Specific Hippocampal Dysfunction. *Schizophr Bull.*, 2019 ;45(1):127-137. doi: 10.1093/schbul/sby011. PMID: 29471549

6. Chuhma N, **Mingote S**, Yetnikoff L, Kalmbach A, Ma T, Ztaou S, Sienna AC, Tepler S, Poulin JF, Ansorge M, Awatramani R, Kang UJ, Rayport S Dopamine neuron glutamate cotransmission evokes a delayed excitation in lateral dorsal striatal cholinergic interneurons. *eLife*, 2018; 7. pii: e39786. doi: 10.7554/eLife.39786.
7. **Mingote S**, Chuhma N, Rayport S. Optogenetic mapping of synaptic connections in mouse brain slices to define the functional connectome of identified neuronal populations. *Bio-Protocols*, 2017; doi: 10.21769/BioProtoc.2090. Open access.
8. **Mingote S**, Chuhma N, Kalmbach A, Thomsen GM, Wang Y, Mihali A, Sferrazza CE, Zucker-Scharff I, Siena AC, Welch MG, Lizardi-Ortiz J, Sulzer D, Moore H, Gaisler-Salomon I, Rayport S. Dopamine neuron dependent behaviors mediated by glutamate cotransmission. *eLife*, 2017; 6. pii: e27566. doi: 10.7554/eLife.27566. PMID: 28703706
9. Aguilar JI, Dunn M, **Mingote S**, Karam CS, Farino ZJ, Sonders MS, Grygoruk A, Zhang Y, Cela C, Choi BJ, Flores J, McCabe BD, Krantz DE, Javitch JA, Sulzer D, Sames D, Rayport S, Freyberg Z. Neuronal depolarization drives increased dopamine synaptic vesicle loading. *Neuron,* 2017; 95 (5), 1074-1088. doi: 10.1016/j.neuron.2017.07.038. PMID: 28823729
10. **Mingote S**, Masson J, Gellman C, Thomsen GM, Lin C-S, Merker RJ, Gaisler-Salomon I, Wang Y, Ernst R, Hen R, and Rayport S. Genetic pharmacotherapy as an early CNS drug development strategy: testing glutaminase inhibition for schizophrenia treatment in adult mice. *Front. Syst. Neurosci.* 2016. doi: 10.3389/fnsys.2015.00165 .
11. **Mingote S**, Chuhma N, Kusnoor SV, Field B, Deutch AY, Rayport S. "Functional Connectome Analysis of Dopamine Neuron Glutamatergic Connections in Forebrain Regions". *Journal of Neuroscience*, 2015; 35. 16259-16271.
12. Chuhma N, **Mingote S**, Moore H, Rayport S. "Dopamine Neurons Control Striatal Cholinergic Neurons via Regionally Heterogeneous Dopamine and Glutamate Signaling". *Neuron*, 2014; 81(14):901-912.
13. Vontell R, Segovia KN, Betz AJ, **Mingote S,** Goldring K, Cartun K, Salamone JD. "Immunocytochemistry studies of basal ganglia adenosine A2A receptors in rat and human tissue". *Journal of Histotechology*, 2010; 33:41-48.
14. Chuhma N, Choi WY, **Mingote S**, Rayport S. "Dopamine Neuron Glutamate Cotransmission: Frequency-Dependent Modulation in the Mesoventromedial Projection". *Neuroscience*, 2009; 164 (3): 1068-1083.
15. Font L, **Mingote S**, Farrar AM, Pereira M, Worden L, Stopper C, Port R, Salamone JD. Intra-accumbens injections of the adenosine A2A agonist CGS 21680 affect effort-related choice behavior in rats. *Psychopharmacology*, 2008; 199: 515-526.
16. **Mingote S**, Font L, Farrar AM, Vontell R, Worden LT, Stopper CM, Port RG, Sink KS, Bunce JG, Chrobak JJ, Salamone JD. Nucleus accumbens adenosine A2A receptors regulate exertion of effort by acting on the ventral striatopallidal pathway. *Journal of Neuroscience*, 2008; 28:9037-9046.
17. **Mingote S,** Pereira M, Farrar AM, McLaughlin PJ, Salamone JD. Systemic administration of the adenosine A(2A) agonist CGS 21680 induces sedation at doses that suppress lever pressing and food intake. *Pharmacol Biochem Behav*, 2008;89:345-351.
18. Farrar AM, Font L, Pereira M, **Mingote S**, Bunce JG, Chrobak JJ, Salamone JD. Forebrain circuitry involved in effort-related choice: Injections of the GABA(A) agonist muscimol into ventral pallidum alter response allocation in food-seeking behavior. *Neuroscience*, 2008;152:321-330.
19. Ishiwari K, Madson LJ, Farrar AM, **Mingote SM,** Valenta JP, Digianvittorio MD, Frank LE, Correa M, Hockemeyer J, Muller C, Salamone JD. Injections of the selective adenosine A(2A) antagonist MSX-3

into the nucleus accumbens core attenuate the locomotor suppression induced by haloperidol in rats. *Behavior Brain Research*, 2007;178(2): 190-199.

20. **Mingote S,** Weber SM, Ishiwari K, Correa C, Salamone JD. Effort and time requirements of operant schedules influence sensitivity to nucleus accumbens dopamine depletions. European Journal of *Neuroscience*, 2005; 21(6): 1749-1757.
21. **Mingote S,** Bruin JPC, Feenstra MGP. Noradrenaline and dopamine efflux in the prefrontal cortex in relation to appetitive classical conditioning. *Journal of Neuroscience*, 2004; 24(10): 2475-2480.
22. Ishiwari K, Weber SM, **Mingote S,** Correa M, Salamone JD. Accumbens dopamine and the regulation of effort in food-seeking behavior: modulation of work output by different ratio or force requirements. *Behavior Brain Research*, 2004; 151(1-2): 83-91.
23. Ishiwari K, **Mingote S**, Correa C, Trevitt JT, Carlson BB, Salamone JD. The GABA uptake inhibitor beta-alanine reduces pilocarpine-induced tremor and increases extracellular GABA in substantia nigra pars reticulata as measured by microdialysis. *Journal of Neuroscience Methods*, 2004; 140(1-2): 39-46.
24. Correa M, **Mingote S,** Betz A, Wisniecki A, Salamone JD. Substantia nigra pars reticulata GABA is involved in the regulation of operant lever pressing: pharmacological and microdialysis studies. *Neuroscience*, 2003; 119(3): 759-766.
25. Correa M, Arizzi MN, Betz A, **Mingote S,** Salamone JD. Locomotor stimulant effects of intraventricular injections of low doses of ethanol in rats: acute and repeated administration. *Psychopharmacology*, 2003; 170: 368-375.
26. Correa M, Arizzi MN, Betz A, **Mingote S,** Salamone JD. Open field locomotor effects in rats after intraventricular injections of ethanol and the ethanol metabolites acetaldehyde and acetate. *Brain Research Bulletin*, 2003; 63: 197-202.

Review articles

1. Eskenazi D, Malave L, **Mingote S**, Yetnikoff L, Ztaou S, Velicu V, Rayport S, Chuhma N. Dopamine neurons that cotransmit glutamate, from synapses to circuits to behavior. Front. Neural Circuits, 2021; 15:665386. doi: 10.3389/fncir.2021.665386.
2. Chuhma N, **Mingote S,** Kalmbach A, Yetnikoff L, Rayport S. “Heterogeneity in Dopamine Neuron Synaptic Actions Across the Striatum and Its Relevance for Schizophrenia”. *Biological Psychiatry*, 2017; 81(1):43-51 doi: 10.1016/j.biopsych.2016.07.002.
3. Salamone JD, Ishiwari K, Betz AJ, Farrar AM, **Mingote SM,** Font L, Hockemeyer J, Müller CE, Correa M. Dopamine/adenosine interactions related to locomotion and tremor in animal models: possible relevance to parkinsonism. *Parkinsonism Relat Disord*, 2008;14 Suppl 2:S130-4.
4. Salamone JD, Correa M, Farrar A, **Mingote S**. Effort-related functions of nucleus accumbens dopamine and associated forebrain circuits. *Psychopharmacology*, 2007: 191(3): 461-82.
5. Salamone JD, Correa M**, Mingote S**, Weber SM. Farrar A. Nucleus accumbens dopamine and the forebrain circuitry involved in the behavioral activation and effort-related decision-making: implications fro understanding anergia and psychomotor slowing in depression. *Current Psychiatry Reviews*, 2006; 2 (2): 267-280.
6. Salamone JD, Correa M, **Mingote S**, Weber SM. Beyond the reward hypothesis: alternative functions of nucleus accumbens dopamine. *Current Opinion Pharmacology*, 2005; 5(1): 34-41.
7. Salamone JD, Correa M, **Mingote S,** Weber SM. Nucleus accumbens dopamine and the regulation of effort in food-seeking behavior: implications for studies of natural motivation, psychiatry, and drug abuse. *Journal Pharmacology and Experimental Therapies*, 2003; 305(1): 1-8.

Chapters and Books

1. Eskenazi D, Chuhma N, **Mingote S**, Ztaou S, Rayport S. "Functional Connectome Mapping" in *Compendium of In-Vivo monitoring in Real-Time Molecular Neuroscience*, Vol. 3., Wilson, G.S. and Michael, A.C., Eds., World Scientific Publishing Co., Singapore, 2020.

2. Gellman C., **Mingote S.,** Wang Y., Gaisler-Salomon I., Rayport S. "Genetic Pharmacotherapy" in *Drug Discovery and Development - Present and Future*, Izet M. Kapetanovic (Ed.), ISBN: 978-953-307-615-7, InTech, 2011.

3. Salamone JD, Correa M., Font L, Pennarola A., Farrar AM, **Mingote SM**. "Nucleus Accumbens and the Neurochemical Interactions Regulating Effort-Related Processes" in *The Nucleus Accumbens: Neurotransmitters & Related Behaviors*, ed. by David HN, Kerala: Research Signpost, 2008.

Abstracts

2021

1. Kolaric R, S Fleury, AT Sørensen, U Gether, **S Mingote.** Role of Dopamine Neurons in Familiarity. Society for Neuroscience, November 13-16, 2021.
2. S Fleury, AT Sørensen, U Gether, **S Mingote.** Chemogenetic Inhibition of Midbrain Dopamine Neurons During Object Exploration Enhances Future Novel Object Discrimination. Society for Neuroscience Global Connectome: A Virtual Event, January 11-13, 2021.

2019

1. **S Mingote**, Ztaou S, Amsellem A, Kempf A, Oh SJ, E. O'Leary, R.Logan, F. Weisel, Z. Freyberg, Kim Y, Fenno LE, Ramakrishnan C, Deisseroth K, Rayport S. Dopamine-Glutamate Neurons Facilitate Behavioral Switching under Circumstances of Altered Cue-Reinforcer Contingencies. Society for Neuroscience (SFN), Chicago, USA, October 19-23, 2019.
2. **S Mingote**, Ztaou S, Amsellem A, Kempf A, Oh SJ, E. O'Leary, R.Logan, F. Weisel, Z. Freyberg, Kim Y, Fenno LE, Ramakrishnan C, Deisseroth K, Rayport S. Dopamine-Glutamate Neurons Facilitate Behavioral Switching under Circumstances of Altered Cue-Reinforcer Contingencies. European Behavioral Pharmacology Society (EBPS), Braga, Portugal, August 28-31, 2019.

2016

1. **Mingote S**, Chuhma N, Kalmbach A, Seina AC, Wang Y, Mihali A, Sferrazza C, Zucker-Scharff I, Lizrdi-Ortiz J, Sulzer D, Gaisler-Salomon, Moore H, Rayport S. Key role of dopamine neuron glutamate cotransmission revealed in schizophrenia-relevant behaviors by conditional heterozygous reduction of glutaminase. The New York Academy of Sciences, Neuronal Connectivity in Brain Function and Disease: Novel Mechanisms and Therapeutic Targets.

2015

1. **Mingote S**, Chuhma N, Kalmbach A, Seina AC, Inbar B, Moore H, Rayport S. Amphetamine sensitization requires dopamine neuron glutamate cotransmission. Catecholamines Gordon Conference, Newry, US.
2. **Mingote S**, Chuhma N, Kalmbach A, Seina AC, Inbar B, Moore H, Rayport S. Amphetamine sensitization requires dopamine neuron glutamate cotransmission. Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience. Online.
3. Seina AC, Chuhma N, Rayport S, **Mingote S**. The distribution within the mouse striatum and specificity of transgenic expression of opsins in cholinergic interneurons. Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience. Online.

2014

1. **Mingote S**, Chuhma N, Kalmbach A, Wang Y, Mihali A, Gellman C, Zucker-Scharff I, Sferrazza C, Field BC, Hirschberg D, Welch M, Inbar BP, Krueger K, Moore H, Gaisler-Salomon I, Rayport S. Selective reduction of glutaminase in dopamine neurons impairs glutamate co-transmission and leads to a

schizophrenia resilience phenotype (2014). Society of Biological Psychiatry Annual Meeting, New York, US.

2013

1. **Mingote S**, Chuhma N, Wang Y, Mihali A, Gellman C., Zucker-Scharff I, Sferrazza C, Field BC, Inbar BP, Krueger K, Moore H, Gaisler-Salomon I, Rayport S. Selective reduction of glutaminase in dopamine neurons leads to reduced susceptibility to amphetamine sensitization: Relevance to schizophrenia resilience (2013). Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience. Online
2. Chuhma N, **Mingote S**, Moore H, Rayport S. Direct and heterogeneous control of striatal cholinergic neuron firing by midbrain dopamine neurons (2013). Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience. Online.
3. Moore H, Chohan MO, Chuhma N, **Mingote S**, Kalmbach AS, Field BC, Wachsberger S, Inbar BP, Lizardi-ortiz JE, Mosharov E, Sulzer DL, Adelman JP, Rayport S. Disrupted topography of burst-like activity in midbrain dopamine neurons of conditional SK3 knockout mice: Relevance to positive symptoms of schizophrenia (2013). Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience. Online.
4. Kalmbach AS, Chohan MO, Chuhma N, **Mingote S**, Inbar BP, Lizardi-Ortiz JE, Mosharov E, Sulzer DL, Moore H, Rayport S. Disrupted topography of burst firing in midbrain dopamine neurons of conditional NR1 knockout mice: Relevance to motivational and cognitive symptoms of schizophrenia (2013). Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience. Online.

2012

1. **Mingote S**, Chohan MO, Chuhma N, Gellman C, Inbar B, Rayport S, Moore, HM. Subtle Impact of the reduction in dopamine transporter (DAT) gene expression in DAT-Cre mice (2012). Neuroscience Meeting Planner. New Orleans, CA: Society for Neuroscience. Online.
2. Gellman C., Ernst R., **Mingote S**, Rayport S. Glutaminase inhibition via genetic pharmacotherapy in adult mice attenuates amphetamine-induced locomotion pointing to therapeutic potential for the pharmacotherapy of schizophrenia (2012). Neuroscience Meeting Planner. New Orleans, CA: Society for Neuroscience. Online

2011

1. Gellman C, **Mingote S**, Wang Y, Rayport S. Genetic pharmacotherapy: new approach to drug development for schizophrenia (2011). “Advancing drug discovery for schizophrenia” symposium at The New York Academy of Sciences.

2010

1. **Mingote S**, Choi WY, Chuhma N, Rayport S. Dopamine neurons express phosphate-activated glutaminase and vesicular glutamate transporter 2, the molecular hallmarks of glutamate cotransmission (2010). 7th Forum of European Neuroscience, Amsterdam, Netherlands.
2. **Mingote S**, Chuhma N, Choi WY, Wolfman S., Rayport S. Dopamine neurons express the glutamate biosynthetic enzyme phosphate-activated glutaminase: stereological quantification of the co-localization (2010). Frontiers in Addiction Research: 2010 NIDA Mini-Convention, San Diego, CA, USA.
3. **Mingote S**, Chuhma N, Choi WY, Wolfman S., Rayport S. Dopamine neurons express the glutamate biosynthetic enzyme phosphate-activated glutaminase: stereological quantification of the co-localization (2010). Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience. Online.

2008

1. Salamone J.D., Farrar A.M., **Mingote S**, Font L, Vontell R, Segovia KN, Nunes EJ, Collins EI, Chrobak JJ, Correa M. Forebrain circuitry involved in effort-related functions: behavioral, anatomical and neurochemical studies illustrate the importance of the ventral striatopallidal pathway (2008). Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience. Online.
2. Stopper C. M., Farrar A. M., Port R. G., **Mingote S**, Randall P. A., Mclaughlin P. J., Hockemeyer J., Müller C. E., Salamone J. D. Adenosine pharmacology and visual stimulus detection in rats: Studies

with selective and non-selective adenosine receptor antagonists (2008). Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience. Online

3. Choi W, Liu Y, **Mingote S**, Dwork AJ, Arango V, Rayport S. VGLUT2 expression in human dopamine neurons (2008) Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience. Online
4. Vontell R, **Mingote S**, McGuinness L, Dexter D, Salamone JD. Detecting Cells And Receptors In The Striatum Using Immunohistochemistry: Incorporating Antigen Retrieval (2008). Parkinson's Disease Society Research Conference, York, UK.

2007

1. **Mingote S**., Font L., Farrar A. M., Vontell R., Worden L., Stopper C., Port R., Mott A., Salamone J. D. Forebrain circuitry involved in effort-related functions: intra-accumbens injections of the adenosine A2A agonist CGS 21680 increased extracellular GABA levels in the ventral pallidum and decreased lever pressing behavior on a schedule with high work requirements (2007). Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
2. Vontell R. T., **Mingote S.,** Bunce J. G., Salamone J. D., Worden L. Forebrain circuitry involved in effort-related functions: ventral striatopallidal neurons projecting from nucleus accumbens to ventral pallidum also contain adenosine A2A receptor immunoreactivity as indicated by combined retrograde tracer/ immunohistochemistry methods (2007) Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
3. Farrar A. M., Font L., Pereira M., **Mingote S**., Bunce J. G., Chrobak J. J., Salamone J. D., Forebrain circuitry involved in effort-related choice: injections of the GABA-A agonist muscimol into ventral pallidum alters response allocation in food-seeking behavior (2007) Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online
4. Salamone J. D., Font L., **Mingote S.,** Worden L., Stopper C., Farrar A. M. Forebrain circuitry involved in effort-related functions: intra-accumbens injections of the adenosine A2A agonist CGS 21680 produce an impairment in response allocation similar to that produced by accumbens dopamine depletions. (2007) Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online

2006

1. **Mingote S**, Farrar AM, Font L, Pereira M, Velasco F, Correa M, Salamone JD. Systemic injections of the adenosine A2A agonist CGS 21680 reduce lever-pressing behavior: interaction with the work requirements of the task. Program No. 675.5. *2006 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience. Online. 36th Annual Meeting of the Society for Neuroscience, Washington, DC, USA.
2. Ishiwari K, Madson LM, Farrar AM, **Mingote S**, Digianvittorio MD, Valenta JP, Frank LE, Hockemeyer J, Müller C, Correa M, Salamone JD. Systemic and intra-accumbens injections of the selective adenosine A2a antagonist MSX-3 reverse the locomotor suppression induced by haloperidol in rats: Possible relevance to parkinsonism. Program No. 675.1. *2006 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience. Online. 36th Annual Meeting of the Society for Neuroscience, Washington, DC, USA
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