

Curriculum Vitae – 2025

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Place and Date of Birth

Buenos Aires, Argentina, December 28, 1952.

United States citizen since March 24, 1999.

Degrees

Licentiate in Psychology, University of Buenos Aires, Argentina, 1976.

Doctor in Psychology, University of San Lu s, Argentina, 1986.

Full Time Appointments

Texas Christian University	Professor	Since 2000
Texas Christian University	Associate Professor	1994-2000
Texas Christian University	Assistant Professor	1990-1994
University of Hawaii	Post-Doctoral Fellow	1988-1990
Institute of Experimental Biology and Medicine, Argentina	Assistant Researcher (Conicet)	1987-1988
University of Buenos Aires,	Assistant Professor	1985-1987
Institute for Research on Marsupials and Edentates, Argentina	Fellow (Conicet)	1982-1985
University of Pennsylvania	Fellow (Conicet)	1982
University of Minnesota	Fellow (Conicet)	1980-1982
Department of Biology, University of Buenos Aires.	Research-Teaching Assistant	1976-1980

Visiting Lecturer/Researcher Appointments

University of Seville	Visiting lecturer	March, 2020
University of Jaen	Visiting scientist	January-June, 2019

University of Seville	Visiting lecturer	December, 2017
University of Seville	Visiting lecturer	December, 2016
University of Jaen	Fulbright US Scholar	February-June, 2015
University of Seville	Visiting lecturer	December, 2013
Brooklyn College	Visiting scientist	April, 2012
University of Texas, Arlington	Visiting scientist	January-March, 2012
University of Seville	Visiting lecturer	May, 2011
National University of Colombia	Visiting lecturer	June, 2009
National Autonomous University of Mexico	Visiting lecturer	September, 2008
National University of Colombia	Visiting lecturer	September, 2005
University of Seville	Visiting lecturer	November, 1998
Osaka University of Education	Visiting scientist/lecturer	October-December, 1997
University of York	Visiting scientist	August-October, 1997
University of Buenos Aires	Visiting lecturer	May, 1997
University of Seville	Visiting scientist/lecturer	Summer, 1996
National Autonomous University of México	Graduate seminar	April, 1994
University of Hawaii	Visiting scientist	Summer, 1992
University of Minnesota	Visiting scientist	August, 1987
University of Mar del Plata	Visiting lecturer	June, 1986
University of Bahia Blanca	Visiting lecturer	October, 1986
University of Minnesota	Visiting scientist	August, 1984

Publications – Books and Special Issues

1. Papini, M. R., & Leising, K. J. (in press). *Comparative learning and cognition*. Taylor & Francis.
2. Krause, M., Hollis, K., & Papini, M. R. (Eds.) (2022). *Evolution of learning and memory mechanisms*. Cambridge University Press.
3. Papini, M. R. (2021). *Comparative psychology. Evolution and development of brain and behavior*. Third Edition. Taylor & Francis.
4. Gutierrez, G., & Papini, M. R. (Eds.) (2011). *Darwin and the behavioral sciences*. National University of Colombia Press. [In Spanish]
5. Papini, M. R. (2009). Comparative neuroscience of emotion (guest editor, special issue). *International Journal of Comparative Psychology*, Vol. 22, No. 3.
6. Papini, M. R. (2008). *Comparative psychology. Evolution and development of behavior*. Second Edition. Psychology Press.
7. Papini, M. R. (2008). Nurturing human nature (guest editor, special issue). *Advances in Latin American Psychology*, Vol. 26, No. 1.
8. Papini, M. R. (2002). *Comparative psychology. Evolution and development of behavior*. Prentice-Hall.

- a. Papini, M. R. (2005). *Papini's comparative psychology. Evolution and development of behavior* (Translated to Japanese). Kitaohji-Shobou.
 - b. Papini, M. R. (2009). *Psicología comparada. Evolucion y desarrollo del comportamiento* (Translated to Spanish). Manual Moderno.
9. Papini, M. R. (1986). Comparative psychology (guest editor, special issue). *Revista Latinoamericana de Psicología*, Vol. 18, No. 2. [In Spanish]

Publications – Empirical Articles

1. Hagen, C. W., Suárez, J. A., & Papini, M. R. (2025). Frustrative nonreward, sucrose consumption, and the basal ganglia: Role of chemogenetic activation of projections from the nucleus accumbens to the globus pallidus internus, globus pallidus externus, and ventral pallidum. *Neurobiology of Learning and Memory*, 220, 108073.
<https://doi.org/10.1016/j.nlm.2025.108073>
2. Suarez, J. A., Hagen, C. W., Adame, A., & Papini, M. R. (2025). Frustrative nonreward after extensive training in the consummatory successive negative contrast task. *Learning and Motivation*, 91, 102162. <https://doi.org/10.1016/j.lmot.2025.102162>
3. Ortega, L. A., & Papini, M. R. (2024). Effects of chronic nicotine on autoshaping acquisition and extinction. *Revista Argentina De Ciencias Del Comportamiento*, 16, 86-95.
<https://doi.org/10.32348/1852.4206.v16.n4.41760>
4. Hagen, C., Hoxha, M., Chitale, S., White, A. O., Ogallar, P. M., Expósito, A. N., Agüera, A. D. R., Torres, C., Papini, M. R., & Sabariego M. (2024). Flexible behavioral adjustment to frustrative nonreward in anticipatory behavior, but not in consummatory behavior, requires the dorsal hippocampus. *Hippocampus*, 7.
<https://doi.org/10.1002/hipo.23642>
5. Fernández, R. C., Puddington, M. M., Papini, M. R., & Muzio, N. R. (2024). Runway extinction in terrestrial toads (*Rhinella arenarum*): Instrumental or Pavlovian? *Behavioural Processes*, 220, 105070.
<https://doi.org/10.1016/j.beproc.2024.105070>
6. Arjol, D., Agüera, A. D. R., Hagen, C., Papini, M. R. (2024). Frustrative nonreward: Detailed c-Fos expression patterns in the amygdala after consummatory successive negative contrast. *Neurobiology of Learning and Memory*, 213, 107942.
<https://doi.org/10.1016/j.nlm.2024.107942>
7. Rodríguez, M., Puddington, M. M., Papini, M. R., & Muzio, R. N. (2024). Transfer between tasks involving frustrative nonreward in rats: From consummatory to instrumental successive negative contrast. *Learning & Motivation*, 87, 101998.
<https://doi.org/10.1016/j.lmot.2024.101998>
8. Fernández, R. C., Puddington, M. M., Klinger, R., Del Core, J., Jure, I., Labombarda, F., Papini, M. R., & Muzio, N. R. (2024). Instrumental successive negative contrast in rats: Trial distribution, reward magnitude, and prefrontal cortex activation. *Physiology & Behavior*, 278, 114511.
<https://doi.org/10.1016/j.physbeh.2024.114511>
9. Hagen, C., Ogallar, P., & Papini, M. R. (2023). Open field activity is linked to, but is not affected by, the rate of recovery from reward downshift in female Wistar rats. *Behavioural Processes*, 213, 104966.
<https://doi.org/10.1016/j.beproc.2023.104966>

10. Agüera, A. D. R., Cándido, C., Donaire, R., Papini, M. R., & Torres, C. (2023). Ketamine retards recovery from reward downshift and supports conditioned taste aversion. *Pharmacology Biochemistry and Behavior*, 233, 173671.
<https://doi.org/10.1016/j.pbb.2023.173671>
11. Muzio, R. N., Yohena, A., & Papini, M. R. (2022). Evidence of successive negative contrast in terrestrial toads (*Rhinella arenarum*): Central or peripheral effect? *Animal Cognition*, 25, 1453-1460.
<https://doi.org/10.1007/s10071-022-01626-4>
12. Guarino, S., Hagen, C., Nguyen, Q., & Papini, M. R. (2023). Frustrative nonreward and the basal ganglia: Chemogenetic inhibition and excitation of the nucleus accumbens and globus pallidus externus during reward downshift. *Neurobiology of Learning & Memory*, 200, 107736.
<https://doi.org/10.1016/j.nlm.2023.107736>
13. Hagen, C., Ogallar, P. M., Guarino, S., & Papini, M. R. (2023). Behavioral and neural correlates of licking for 66% alcohol in Wistar rats: Caloric balance or sensation/novelty seeking? *Physiology & Behavior*, 263, 114114.
<https://doi.org/10.1016/j.physbeh.2023.114114>
14. Ruiz-Salas, J. C., de la Casa, L. G., Torres, C., & Papini, M. R. (2022). Psychological pain and opioid receptors: Reward downshift is disrupted when tested in a context signaling morphine. *Pharmacology, Biochemistry & Behavior*, 216, 173306.
<https://doi.org/10.1016/j.pbb.2022.173386>
15. Conrad, S. E., Davis, D., Vilcek, N., Thompson, J. B., Guarino, S., Papini, S., & Papini, M. R. (2022). Frustrative nonreward and cannabinoid receptors: Chronic (but not acute) WIN 55,212-2 treatment increased resistance to change in two reward downshift tasks. *Pharmacology, Biochemistry, & Behavior*, 213, 173320.
<https://doi.org/10.1016/j.pbb.2021.173320>
16. Donaire, R., Cándido, C., Papini, M. R., & Torres, C. (2022). Frustrative nonreward and emotional self-medication: Factors modulating alcohol consumption following reward downshift in rats. *Physiology & Behavior*, 245, 113688
<https://doi.org/10.1016/j.physbeh.2021.113688>
17. Thompson, J. B., Conrad, S. E., Peterman, J. L., & Papini, M. R. (2021). Reinforcing properties of alcohol in rats: Progressive ratio licking performance reinforced with 66% alcohol. *Physiology & Behavior*, 235, 113393
<https://doi.org/10.1016/j.physbeh.2021.113393>
18. Fuentes-Verdugo, E., Pellón, R., Papini, M. R., Torres, C., & Anselme, P. (2021). Partial reinforcement in rat autoshaping with a long CS: Effects of pramipexole and chlordiazepoxide on sign and goal tracking. *Psicológica*, 42, 85-108
<https://doi.org/10.2478/psicolj-2021-0005>
19. Thompson, J. B., Daniel, A. M., Rushing, B. G., & Papini, M. R. (2021). Recovery profiles from reward downshift are correlated with operant licking maintained by alcohol, but not with genetic variation in the mu opioid receptor. *Physiology & Behavior*, 228, 113192
<https://doi.org/10.1016/j.physbeh.2020.113192>
20. Thomas, B. L., & Papini, M. R. (2020). Shifts in intertrial interval duration in autoshaping with rats: Implications for path dependence. *Learning & Motivation*, 72, 101687
<https://doi.org/10.1016/j.lmot.2020.101687>

21. Guarino, S., Conrad, S. E., & Papini, M. R. (2020). Control of free-choice consummatory behavior by absolute reward value. *Learning & Motivation*, 72, 101682
<https://doi.org/10.1016/j.lmot.2020.101682>
22. Conrad, S. E., Guarino, S., & Papini, M. R. (2020). Surprising nonreward and response effort: Extinction after progressive-ratio training in rats and pigeons. *Learning & Motivation*, 72, 101676.
<https://doi.org/10.1016/j.lmot.2020.101676>
23. Fuentes-Verdugo, E., Pellón, R., Papini, M. R., Torres, C., Fernández-Teruel, A., & Anselme, P. (2020). Effects of partial reinforcement on autoshaping in inbred Roman high- and low-avoidance rats. *Physiology & Behavior*, 225, 113111
<https://doi.org/10.1016/j.physbeh.2020.113111>
24. Donaire, R., Papini, M. R., & Torres, C. (2020). Effects of alcohol consumption induced by reward loss on behavior in the hole-board test. *Behavioural Processes*, 176, 104135
<https://doi.org/10.1016/j.beproc.2020.104135>
25. Guarino, S., Conrad, S. E., & Papini, M. R. (2020). Frustrative nonreward: Chemogenetic inactivation of the central amygdala abolishes the effect of reward downshift without affecting alcohol intake. *Neurobiology of Learning & Memory*, 169, 107173
<https://doi.org/10.1016/j.nlm.2020.107173>
26. Ruiz-Salas, J. C., de la Casa, L. G., & Papini, M. R. (2020). Dimensions of sucrose solutions in the successive negative contrast effect. *Learning & Motivation*, 69, 101615
<https://doi.org/10.1016/j.lmot.2020.101615>
27. Thompson, J. B., Conrad, S. E., Torres, C., & Papini, M. R. (2020). Inescapable exposure to the Barnes maze increases preference for alcohol over water in rats: Implications for depression and anxiety. *Learning & Motivation*, 69, 101602
<https://doi.org/10.1016/j.lmot.2019.101602>
28. Donaire, R., Morón, I., Blanco, S., Villatoro, A., Gámiz, F., Papini, M. R., & Torres, C. (2019). Lateral habenula lesions disrupt appetitive extinction, but do not affect voluntary alcohol consumption. *Neuroscience Letters*, 703, 184-190
<https://doi.org/10.1016/j.neulet.2019.03.044>
29. Jiménez-García, A.M., Ruiz-Leyva, L., Vázquez-Ágredos, A., Torres, C., Papini, M. R., Cendán, C.M., & Morón, I. (2019). Consummatory successive negative contrast in rats. *Bio-protocol*, 9, e3201.
<https://doi.org/10.21769/BioProtoc.3201>
30. Conrad, S. E., & Papini, M. R. (2018). Reward shifts in forced-choice and free-choice autoshaping with rats. *Journal of Experimental Psychology: Animal Learning and Cognition*, 44, 422-440.
<https://www.doi.org/10.1037/xan0000187>
31. Glueck, A. C., Torres, C., & Papini, M. R. (2018). Transfer between anticipatory and consummatory tasks involving reward loss. *Learning & Motivation*, 63, 105-125.
<https://www.doi.org/10.1016/j.lmot.2018.05.001>
32. Donaire, R., Conrad, S. E., Thompson, J. B., Papini, M. R., & Torres, C. (2018). Augmented voluntary consumption of ethanol induced by reward downshift increases locomotor activity of male Wistar rats in the elevated plus maze. *Behavioural Processes*, 150, 59-65.
<https://www.doi.org/10.1016/j.beproc.2018.02.013>

33. De la Casa, L. G., Mena, A., Ruiz-Salas, J. C., Quintero, E., & Papini, M. R. (2018). Reward devaluation disrupts latent inhibition in fear conditioning. *Learning & Behavior*, *46*, 49-59.
<https://www.doi.org/10.3758/s13420-017-0282-1>
34. Rick, P., Donaire, R., Papini, M. R., Torres, C., & Pellón, R. (2018). Can surprising nonreward and adjunctive behavior influence each other? *Animal Behavior & Cognition*, *5*, 139-153.
35. Puddington, M. M., Papini, M. R., Muzio, R. N. (2018). Retention and delayed extinction of an instrumental response in the toad *Rhinella arenarum*: Effects of overtraining. *Advances in Latin American Psychology*, *36*, 129-138.
36. Puddington, M.M., Papini, M. R., & Muzio, R.N. (2017). Duration of extinction trials as a determinant of instrumental extinction in terrestrial toads (*Rhinella arenarum*). *Animal Cognition*, *21*, 165-174.
37. Kawasaki, K., Annicchiarico, I., Glueck, A. C., Morón, I., & Papini, M. R. (2017). Reward loss and the basolateral amygdala: A function in reward comparisons. *Behavioural Brain Research*, *331*, 205-213.
<https://doi.org/10.1016/j.bbr.2017.05.036>
38. Jiménez-García, A. M., Ruiz-Leyva, L., Cendán, C. M., Torres, C., Papini, M. R., & Moron, I. (2016). Hypoalgesia induced by reward devaluation in rats. *PLoS One*, *10*, 1-15.
<https://doi.org/10.1371/journal.pone.0164331>
39. Puddington, M. M., Daneri, M. F., Papini, M. R., & Muzio, R. N. (2016). Telencephalic neural activation following passive avoidance learning in a terrestrial toad. *Behavioural Brain Research*, *315*, 75-82.
<http://dx.doi.org/10.1016/j.bbr.2016.08.003>
40. Torres, C., Glueck, A. C., Conrad, S. E., Morón, I., & Papini, M. R. (2016). Dorsomedial striatum lesions affect adjustment to reward uncertainty, but not to reward devaluation or omission. *Neuroscience*, *332*, 13-25.
<http://dx.doi.org/10.1016/j.neuroscience.2016.06.041>
41. Annicchiarico, I., Glueck, A. C., Cuenya, L., Kawasaki, K., Conrad, S. E., & Papini, M. R. (2016). Complex effects of reward upshift on consummatory behavior. *Behavioural Processes*, *129*, 54-67.
42. Kawasaki, K., Glueck, A. C., Annicchiarico, I., & Papini, M. R. (2015). Function of the centromedial amygdala in reward devaluation and open field activity. *Neuroscience*, *303*, 73-81.
<http://dx.doi.org/10.1016/j.neuroscience.2015.06.053>
43. Cuenya, L., Annicchiarico, I., Serafini, M., Glueck, A. C., Mustaca, A. E., & Papini, M. R. (2015). Effects of shifts in food deprivation on consummatory successive negative contrast. *Learning & Motivation*, *52*, 11-21.
44. Cuenya, L., Sabariego, M., Donaire, R., Fernandez-Teruel, A., Torres, C., & Papini, M. R. (2015). Transfer across reward devaluation tasks in inbred Roman rat strains. *Learning & Motivation*, *52*, 22-31.
45. Manzo, L., Gomez, M. J., Callejas-Aguilera, J. E., Fernandez-Teruel, A., Papini, M. R., & Torres, C. (2015). Partial reinforcement reduces vulnerability to anti-anxiety self-medication during appetitive extinction. *International Journal of Comparative Psychology*, *28*, 1-8.

46. Glueck, A. C., Dennis, T. S., Perrotti, L. I., Torres, C., & Papini, M. R. (2015). Brain expression of pCREB in rats exposed to consummatory successive negative contrast. *Neuroscience Letters*, 587, 93-97.
<https://www.doi.org/10.1016/j.neulet.2014.12.036>
47. Manzo, L., Donaire, R., Sabariego, M., Papini, M. R., & Torres, C. (2015). Anti-anxiety self-medication in rats: Oral consumption of chlordiazepoxide and ethanol after reward devaluation. *Behavioural Brain Research*, 278, 90-97.
<https://www.doi.org/10.1016/j.bbr.2014.09.017>
48. Papini, S., Galatzer-Levy, I.R., & Papini, M. R. (2014). Identifying profiles of recovery from reward devaluation in rats. *Behavioural Brain Research*, 275, 212-218.
<https://doi.org/10.1016/j.bbr.2014.09.006>
49. Manzo, L., Gómez, M. J., Callejas-Aguilera, J. E., Donaire, R., Sabariego, M., Fernández-Teruel, A., Cañete, A., Blázquez, G., Papini, M. R., & Torres, C. (2014). Relationship between ethanol preference and sensation/novelty seeking. *Physiology & Behavior*, 133, 53-60.
<http://dx.doi.org/10.1016/j.physbeh.2014.05.003>
50. Ortega, L.A., Norris, J.N., Lopez-Seal, M.F., Ramos, T., & Papini, M. R. (2014). Correlates of recovery from incentive downshift: A preliminary selective breeding study. *International Journal of Comparative Psychology*, 27, 160-186.
51. Ortega, L. A., Glueck, A. C., & Papini, M. R. (2014). Anisomycin disrupts consummatory behavior after incentive downshift via conditioned taste aversion. *International Journal of Psychology & Psychological Therapy*, 14, 71-84.
52. Manzo, L., Gómez, M. J., Callejas-Aguilera, J. E., Fernández-Teruel, A., Papini, M. R., & Torres, C. (2014). Anti-anxiety self-medication induced by incentive loss in rats. *Physiology & Behavior*, 123, 86-92.
<http://dx.doi.org/10.1016/j.physbeh.2013.10.002>
53. Ortega, L. A., Glueck, A. C., Daniel, A. M., Prado-Rivera, M. A., White, M. M., & Papini, M. R. (2014). Memory interfering effects of chlordiazepoxide on consummatory successive negative contrast. *Pharmacology Biochemistry & Behavior*, 116, 96-106.
<https://www.doi.org/10.1016/j.pbb.2013.11.031>
54. Puddington, M., Papini, M. R., & Muzio, R. N. (2013). Vulnerability of long-term memory to temporal delays in amphibians. *Behavioural Processes*, 99, 7-11.
55. Ortega, L. A., Prado-Rivera, M. A., Cardenas-Poveda, D. C., McLinden, K. A., Glueck, A. C., Gutierrez, G., Lamprea, M. R., & Papini, M. R. (2013). Tests of the aversive summation hypothesis in rats: Effects of restraint stress on consummatory successive negative contrast and extinction in the Barnes maze. *Learning & Motivation*, 44, 159-173.
<http://dx.doi.org/10.1016/j.lmot.2013.02.001>
56. Ortega, L. A., Glueck, A. C., Uhelski, M., Fuchs, P. N., & Papini, M. R. (2013). Role of the ventrolateral orbital cortex and medial prefrontal cortex in incentive downshift situations. *Behavioural Brain Research*, 244, 120-129.
<http://dx.doi.org/10.1016/j.bbr.2013.01.029>
57. Buritica, J., Ortega, L. A., Papini, M. R., & Gutiérrez, G. (2013). Extinction of food-reinforced instrumental behavior in Japanese quail (*Coturnix japonica*). *Journal of Comparative Psychology*, 127, 33-39.
58. Manzo, L., Gómez, M.J., Callejas-Aguilera, J., Fernández-Teruel, A., Papini, M. R., & Torres, C. (2012). Oral ethanol self-administration in inbred Roman high- and low-

- avoidance rats: Gradual versus abrupt ethanol presentation. *Physiology & Behavior*, *108*, 1-5.
59. Justel, N., Ruetti, E., Bentosela, M., Mustaca, A. E., & Papini, M. R. (2012). Effects of testosterone administration and gonadectomy on incentive downshift and open field activity in rats. *Physiology & Behavior*, *106*, 657-663.
 60. Justel, N., Ruetti, E., Mustaca, A. E., & Papini, M. R. (2012). Effects of pretraining treatment with testosterone on successive and anticipatory negative contrast. *Physiology & Behavior*, *105*, 933-937.
 61. Kranjac, D., McLinden, K., Deodati, L., Papini, M. R., Chumley, M., & Boehm, G. (2011). Peripheral bacterial endotoxin administration triggers both memory consolidation and reconsolidation deficits in mice. *Brain, Behavior & Immunity*, *26*, 109-121.
 62. Ortega, L. A., Uhelski, M., Fuchs, P. N., & Papini, M. R. (2011). Impairment of recovery from incentive downshift after lesions of the anterior cingulate cortex: Emotional or cognitive deficits? *Behavioral Neuroscience*, *6*, 988-995.
 63. Muzio, R. N., Pistone-Creydt, V., Iurman, M., Rinaldi, M. A., Sirani, B., & Papini, M. R. (2011). Incentive or habit learning in amphibians? *PLoS One*, *6*, 1-12.
<https://doi.org/10.1371/journal.pone.0025798>
 64. Norris, J., Ortega, L., & Papini, M. R. (2011). Posttrial D-cycloserine enhances the emotional memory of an incentive downshift event. *Behavioural Brain Research*, *223*, 348-355.
 65. Ortega, L. A., Daniel, A. M., Davis, J. B., Fuchs, P. N., & Papini, M. R. (2011). Peripheral pain enhances the effects of incentive downshifts. *Learning & Motivation*, *42*, 203-209.
 66. Kamenetzky, G. V., Mustaca, A. E., Pedron, V. T., Cuenya, L., & Papini, M. R. (2009). Ethanol facilitates consummatory extinction. *Behavioural Processes* *82*, 352-354.
 67. Norris, J. N., Perez-Acosta, A. M., Ortega, L. A., & Papini, M. R. (2009). Naloxone facilitates appetitive extinction and eliminates escape from frustration. *Pharmacology, Biochemistry & Behavior*, *94*, 81-87.
 68. Daniel, A. M., Ortega, L. A., & Papini, M. R. (2009). Role of the opioid system in incentive downshift situations. *Neurobiology of Learning & Memory*, *92*, 439-450.
 69. Bentosela, M., Jakovcevic, A., Elgier, A. M., Mustaca, A. E., & Papini, M. R. (2009). Incentive contrast in domestic dogs (*Canis familiaris*). *Journal of Comparative Psychology*, *123*, 125-130.
 70. Ruetti, E., Justel, N., Mustaca, A. E., & Papini, M. R. (2009). Posttrial corticosterone administration enhances the effects of incentive downshift: Exploring the boundaries of this effect. *Behavioral Neuroscience*, *123*, 137-144.
 71. Kamenetzky, G. V., Mustaca, A. E., & Papini, M. R. (2008). An analysis of the anxiolytic effects of ethanol on consummatory successive negative contrast. *Advances in Latin American Psychology*, *26*, 135-144.
 72. Norris, J. N., Daniel, A. M., & Papini, M. R. (2008). Spontaneous recovery of consummatory behavior, but not of consummatory successive negative contrast. *Learning & Motivation*, *39*, 296-312.
 73. Pellegrini, S., Lopez Seal, M. F., & Papini, M. R. (2008). Scaling relative incentive value: Different adjustments to incentive downshift in pigeons and rats. *Behavioural Processes*, *79*, 182-188.

74. Wood, M. D., Norris, J. N., Daniel, A. M., & Papini, M. R. (2008). Trial-selective effects of U50,488H, a κ -opioid receptor agonist, on consummatory successive negative contrast. *Behavioural Brain Research, 193*, 28-36.
75. Boughner, R. L., & Papini, M. R. (2008). Assessing the relationship between latent inhibition and the partial reinforcement extinction effect in autoshaping with rats. *Pharmacology, Biochemistry & Behavior, 89*, 432-443.
76. Daniel, A. M., Wood, M., Pellegrini, S., Norris, J. N., & Papini, M. R. (2008). Can contextual cues control consummatory successive negative contrast? *Learning & Motivation, 39*, 146-162.
77. Daneri, M. F., Papini, M. R., & Muzio, R. N. (2007). Toads learn to anticipate and avoid hyperosmotic saline solutions. *Journal of Comparative Psychology, 121*, 419-427.
78. Pellegrini, S., & Papini, M. R. (2007). Scaling relative incentive value in anticipatory behavior. *Learning & Motivation, 38*, 128-154.
79. Bentosela, M., D'Ambros, M. A., Mustaca, A. E., & Papini, M. R. (2006). Consummatory successive negative contrast in young and middle-aged rats. *International Journal of Psychology & Psychological Therapy, 6*, 291-300.
80. Papini, M. R., & Pellegrini, S. (2006). Scaling relative incentive value in consummatory behavior. *Learning & Motivation, 37*, 357-378.
81. Boughner, R. L., & Papini, M. R. (2006). Survival of the partial reinforcement extinction effect after contextual shifts. *Learning & Motivation, 37*, 304-323.
82. Muzio, R. N., Ruetti, E., & Papini, M. R. (2006). Determinants of instrumental extinction in terrestrial toads (*Bufo arenarum*). *Learning & Motivation, 37*, 346-356.
83. Bentosela, M., Ruetti, E., Muzio, R. N., Mustaca, A. E., & Papini, M. R. (2006). Administration of corticosterone after the first downshift trial enhances consummatory successive negative contrast. *Behavioral Neuroscience, 120*, 371-376.
84. Wood, M., Daniel, A. M., Daniels, E., & Papini, M. R. (2006). Effects of housing on consummatory successive negative contrast in rats: Wire-bottom cages versus polycarbonate tubs. *LabAnimal, 35*, 34-38.
85. Boughner, R. L., & Papini, M. R. (2006). Appetitive latent inhibition in rats: Preexposure performance does not predict conditioned performance. *Behavioural Processes, 72*, 42-51.
86. Mustaca, A. E., & Papini, M. R. (2005). Consummatory successive negative contrast induces hypoalgesia. *International Journal of Comparative Psychology, 18*, 255-262.
87. Pellegrini, S., Wood, M., Daniel, A. M., & Papini, M. R. (2005). Opioid receptors modulate recovery from consummatory successive negative contrast. *Behavioural Brain Research, 164*, 239-249.
88. Wood, M., Daniel, A. M., & Papini, M. R. (2005). Selective effects of the μ opioid receptor agonist DPDPE on consummatory successive negative contrast. *Behavioral Neuroscience, 119*, 446-454.
89. Pellegrini, S., Muzio, R. N., Mustaca, A. E., & Papini, M. R. (2004). Successive negative contrast after partial reinforcement in the consummatory behavior of rats. *Learning & Motivation, 35*, 303-321.
90. Boughner, R. L., Thomas, B. L., & Papini, M. R. (2004). Effects of nonreinforced preexposure to the context on autoshaping in rats: Methodological implications for demonstrations of latent inhibition. *International Journal of Comparative Psychology, 17*, 168-184.

91. Portavella, M., Torres, B., Salas, C., & Papini, M. R. (2004). Lesions of the medial pallium, but not of the lateral pallium, disrupt spaced-trial avoidance learning in goldfish (*Carassius auratus*). *Neuroscience Letters*, *362*, 75-78.
92. Boughner, R. L., & Papini, M. R. (2003). Appetitive latent inhibition in rats: Now you see it (sign tracking), now you don't (goal tracking). *Learning & Behavior*, *31*, 387-392.
93. Stout, S. C., Boughner, R. L., & Papini, M. R. (2003). Reexamining the frustration effect in rats: Aftereffects of surprising reinforcement and nonreinforcement. *Learning & Motivation*, *34*, 437-456.
94. Portavella, M., Salas, C., Vargas, J. P., & Papini, M. R. (2003). Involvement of the telencephalon in spaced-trial avoidance learning in the goldfish (*Carassius auratus*). *Physiology & Behavior*, *80*, 49-56.
95. Thomas, B. L., & Papini, M. R. (2003). Mechanisms of spaced-trial runway extinction in pigeons. *Learning & Motivation*, *34*, 104-126.
96. Mustaca, A. E., Freidin, E., & Papini, M. R. (2002). Extinction of consummatory behavior in rats. *International Journal of Comparative Psychology*, *15*, 1-10.
97. Papini, M. R., Thomas, B. L., & McVicar, D. G. (2002). Between-subject PREE and within-subject reversed PREE in spaced-trial extinction with pigeons. *Learning & Motivation*, *33*, 485-509.
98. Stout, S. C., Muzio, R. N., Boughner, R. L., & Papini, M. R. (2002). Aftereffects of the surprising presentation and omission of appetitive reinforcers on key pecking performance in pigeons. *Journal of Experimental Psychology: Animal Behavior Processes*, *28*, 242-256.
99. Papini, M. R., Ludvigson, H. W., Huneycutt, D., & Boughner, R. L. (2001). Apparent contrast effects in autoshaping with rats. *Learning & Motivation*, *32*, 434-456.
100. Thomas, B., & Papini, M. R. (2001). Adrenalectomy eliminates the extinction spike in autoshaping with rats. *Physiology & Behavior*, *62*, 543-547.
101. Mustaca, A. E., Martinez, C., & Papini, M. R. (2000). Surprising nonreward reduces aggressive behavior in rats. *International Journal of Comparative Psychology*, *13*, 91-100.
102. Duran, E., Vargas, J. P., Salas, C., & Papini, M. R. (2000). Effect of telencephalic ablation on appetitive instrumental learning in the goldfish (*Carassius auratus*). *Psicothema*, *12*, 520-524.
103. Mustaca, A. E., Bentosela, M., & Papini, M. R. (2000). Consummatory successive negative contrast in mice. *Learning & Motivation*, *31*, 272-282.
104. Thomas, B., Huneycutt, D., & Papini, M. R. (1998). Reward magnitude, but not time of day, influence the trial spacing effect in autoshaping with rats. *Physiology & Behavior*, *65*, 423-427.
105. Papini, M. R., & Hollingsworth, P. R. (1998). Role of nonreinforcement in the fixed-interval performance of pigeons. *Psychonomic Bulletin & Review*, *5*, 84-90.
106. Papini, M. R., & Thomas, B. (1997). Spaced-trial learning with purely instrumental contingencies in pigeons (*Columba livia*). *International Journal of Comparative Psychology*, *10*, 128-136.
107. Papini, M. R. (1997). Role of reinforcement in spaced-trial operant learning in pigeons (*Columba livia*). *Journal of Comparative Psychology*, *111*, 275-285.
108. Dudley, R. T., & Papini, M. R. (1997). Amsel's frustration effect: A replication with control for frequency and distribution of rewards. *Physiology & Behavior*, *61*, 627-629.

109. Ishida, M., & Papini, M. R. (1997). Massed-trial overtraining effects on extinction and reversal performance in turtles (*Geoclemys reevesii*). *Quarterly Journal of Experimental Psychology*, *50B*, 1-16.
110. Papini, M. R. (1995). Effects of unsignaled reinforcers on response form as a function of reinforcer quality and distribution. *Mexican Journal of Behavior Analysis*, *21*, 11-21.
111. Papini, M. R., Muzio, R. N., & Segura, E. T. (1995). Instrumental learning in toads (*Bufo arenarum*): Reinforcer magnitude and the medial pallium. *Brain, Behavior & Evolution*, *46*, 61-71.
112. Dudley, R. T., & Papini, M. R. (1995). Pavlovian performance of rats following unexpected reward omissions. *Learning & Motivation*, *26*, 63-82.
113. Papini, M. R., & White, N. (1994). Performance during signals for reward omission. *Learning & Motivation*, *25*, 45-64.
114. Papini, M. R., & Brewer, M. (1994). Response competition and the trial-spacing effect in autoshaping with rats. *Learning & Motivation*, *25*, 201-215.
115. Papini, M. R., & Ishida, M. (1994). Role of magnitude of reinforcement in spaced-trial instrumental learning in turtles (*Geoclemys reevesii*). *Quarterly Journal of Experimental Psychology*, *47B*, 1-13.
116. Muzio, R. N., Segura, E. T., & Papini, M. R. (1994). Learning under partial reinforcement in the toad (*Bufo arenarum*): Effects of lesions in the medial pallium. *Behavioral & Neural Biology*, *61*, 36-46.
117. Papini, M. R., & Mustaca, A. E. (1993). [Appetitive contextual conditioning in rats: Preliminary studies of the role of the intersession interval.] *Mexican Journal of Behavior Analysis*, *19*, 33-47. [In Spanish]
118. Papini, M. R., & Dudley, R. T. (1993). Effects of the number of trials per session on autoshaping in rats. *Learning & Motivation*, *24*, 175-193.
119. Muzio, R. N., Segura, E. T., & Papini, M. R. (1993). Effects of lesions in the medial pallium on instrumental learning in the toad (*Bufo arenarum*). *Physiology & Behavior*, *54*, 185-188.
120. Ishida, M., & Papini, M. R. (1993). Spaced training and instrumental performance in the turtle (*Geoclemys reevesii*). *Memoirs of Osaka Kyoiku University*, *41*, 153-161.
121. Muzio, R.N., Segura, E.T., & Papini, M. R. (1992). Effect of schedule and magnitude of reinforcement on instrumental learning in the toad, *Bufo arenarum*. *Learning & Motivation*, *23*, 406-429.
122. Mustaca, A. E., Gabelli, F., Papini, M. R., & Balsam, P. D. (1991). The role of the interreinforcement interval in appetitive contextual learning. *Animal Learning & Behavior*, *19*, 125-138.
123. Papini, M. R., & Bitterman, M. E. (1991). Appetitive conditioning in *Octopus cyanea*. *Journal of Comparative Psychology*, *105*, 107-114.
124. Papini, M. R., & Ramallo, P. (1990). Primary frustration in the red opossum, *Lutreolina crassicaudata*. *International Journal of Comparative Psychology*, *3*, 235-242.
125. Papini, M. R., & Silingardi, C. (1989). Mechanisms of acquisition of behavioral sequences in rats. *Learning & Motivation*, *20*, 73-86.
126. Papini, M. R., Hermitte, G., Mustaca, A. E., & Haut, G. (1989). [Spatial learning in marsupial and placental mammals.] *Revista Latinoamericana de Psicología*, *21*, 57-66. [In Spanish]

127. Papini, M. R. (1988). Associative learning in the marsupials *Didelphis albiventris* and *Lutreolina crassicaudata*. *Journal of Comparative Psychology*, *102*, 21-27.
128. Papini, M. R. (1988). Associative learning in the marsupial *Didelphis albiventris*: Behavior under single-alternation schedules. *Journal of Comparative Psychology*, *102*, 28-34.
129. Papini, M. R., Mustaca, A. E., & Bitterman, M.E. (1988). Successive negative contrast in the consummatory responding of didelphid marsupials. *Animal Learning & Behavior*, *16*, 53-57.
130. Papini, M. R., Linwick, D., & Overmier, J. B. (1987). Preconditioning exposure to contextual cues and the acquisition of the keypeck behavior in autoshaping by pigeons. *Bulletin of the Psychonomic Society*, *25*, 486-488.
131. Papini, M. R., Mustaca, A. E., Tiscornia, G., & DiTella, M. (1987). Context learning in the marsupial *Lutreolina crassicaudata*. *International Journal of Comparative Psychology*, *1*, 126-134.
132. Overmier, J. B., & Papini, M. R. (1986). Factors modulating the effects of teleost telencephalon ablation on retention, relearning, and extinction of instrumental avoidance behavior. *Behavioral Neuroscience*, *100*, 190-199.
133. Papini, M. R., Mustaca, A. E., & Affanni, J. M. (1985). Discrimination learning in the armadillo *Chaetophractus villosus*: A study of positional strategies. *Journal of General Psychology*, *112*, 119-127.
134. Papini, M. R. (1985). Avoidance learning after simultaneous vs. serial telencephalic ablations in the goldfish. *Bulletin of the Psychonomic Society*, *23*, 160-163.
135. Overmier, J. B., & Papini, M. R. (1985). Serial ablations of the telencephalon and avoidance learning by goldfish (*Carassius auratus*). *Behavioral Neuroscience*, *99*, 509-520.
136. Papini, M. R., & Overmier, J.B. (1985). Partial reinforcement and autoshaping of the pigeon's key-peck behavior. *Learning & Motivation*, *16*, 109-123.
137. Mustaca, A. E., Papini, M. R., & Affanni, J. M. (1985). [Probability learning in the armadillo *Chaetophractus villosus*.] *Interamerican Journal of Psychology*, *19*, 45-56. [In Spanish]
138. Papini, M. R., Mustaca, A. E., & Affanni, J. M. (1984). Spatial learning in South American opossums and armadillos. *Journal of General Psychology*, *111*, 45-55.
139. Papini, M. R. (1984). [A procedure for the study of response-chain acquisition in the maze.] *Revista Latinoamericana de Psicología*, *16*, 235-246. [In Spanish]
140. Campagna, C., Papini, M. R., & Affanni, J. M. (1984). [Observations on the intraspecific aggressive behavior of the armadillo *Chaetophractus villosus* under laboratory conditions.] *Revista Latinoamericana de Psicología*, *16*, 443-458. [In Spanish]
141. Papini, M. R., & Overmier, J. B. (1984). Autoshaping in pigeons: Effects of partial reinforcement on acquisition and extinction. *Interamerican Journal of Psychology*, *18*, 75-86.
142. Papini, M. R. (1983). Autoshaping and reinforcement patterning in the pigeon. *Interamerican Journal of Psychology*, *17*, 97-108.
143. Affanni, J. M., Papini, M. R., Filipello, A. M., & Mustaca, A. E. (1981). [Effect of olfactory peduncle section on the retention of a visual discrimination, on general activity, and on emotionality, in the armadillo.] *Revista Latinoamericana de Psicología*, *13*, 281-291. [In Spanish]

144. Papini, M. R., Filipello, A. M., García Samartino, L., & Affanni, J. M. (1979). [Effects of haloperidol on visual discrimination learning and extinction in the armadillo *Chaetophractus villosus*.] *Revista Latinoamericana de Psicología*, *11*, 115-122. [In Spanish]

Publications – Book Chapters and Review Articles

1. Papini, M. R., Green, T. A., Mármol Contreras, Y., Torres, C., Ogawa, M., & Li, Z. (2024). Frustrative nonreward: Behavior, circuits, neurochemistry, and disorders. *Journal of Neuroscience*, *44*, e1021242024.
<https://doi.org/10.1523/JNEUROSCI.1021-24.2024>
2. Papini, M. R. (2024). Behavioral plasticity in aneural organisms. *Psychological Review*. Advance online publication.
<https://dx.doi.org/10.1037/rev0000483>
3. Torres, C., & Papini, M. R. (2024). Comparative psychology of frustrative nonreward. In Al-Shawaf, L., & Shackelford, T. (Eds.), *Oxford Handbook of Evolution and the Emotions* (pp. 830-846). Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780197544754.001.0001>
4. Torres, C., Morillo-Rivero, L., Donaire, R., & Papini, M.R. (2022). [Frustration: From real life to the lab (and viceversa)]. In Simón, M. J., Gámiz, F., & Zafra, M. A. (Eds.), *Neurociencia del comportamiento: del laboratorio a la vida real* (pp. 191-230). Aula Magna McGraw-Hill Interamericana. [In Spanish]
5. Papini, M. R. (2022). Mechanisms underlying absolute and relative reward value in vertebrates. In Krause, M., Hollis, K.L., & Papini, M. R. (Eds.), *Evolution of learning and memory mechanisms* (pp. 176-192). Cambridge University Press.
6. Krause, M., Hollis, K. L., & Papini, M. R. (2022). Perspectives on the evolution of learning and memory mechanisms. In Krause, M., Hollis, K.L., & Papini, M. R. (Eds.), *Evolution of learning and memory mechanisms* (pp. 1-12). Cambridge University Press.
7. Papini, M. R., Guarino, S., Hagen, C., & Torres, C. (2022). Incentive disengagement and the adaptive significance of frustrative nonreward. *Learning & Behavior*, *50*, 372-388.
<https://doi.org/10.3758/s13420-022-00519-3>
8. Torres, C., Morillo-Rivero, L., & Papini, M. R. (2021). [When losses hurt: Biological basis of frustration.] *Interamerican Journal of Psychology*, *55*, E1443. [In Spanish]
<https://journal.sipsych.org/index.php/IJP/article/view/1443/1057>
9. Papini, M. R., Penagos-Corzo, J.C., & Pérez-Acosta, A.M. (2019). Avian emotions: Comparative perspectives on fear and frustration. *Frontiers in Psychology*, *9*, 2707.
<https://www.doi.org/10.3389/fpsyg.2018.02707>
10. Torres, C., & Papini, M. R. (2017). Incentive relativity. In J. Vonk & T.K. Shackelford (Eds.), *Encyclopedia of animal cognition and behavior* (pp. 1-13). Springer.
https://doi.org/10.1007/978-3-319-47829-6_1079-1
11. Torres, C., & Papini, M. R. (2017). Reward uncertainty and the dorsomedial striatum: A response to Anselme (2017). *Neuroscience*, *357*, 413.
12. Papini, M. R., & Conrad, S. E. (2017). Associative learning. In J. Vonk & T.K. Shackelford (Eds.), *Encyclopedia of animal cognition and behavior* (pp. 1-13). Springer.
https://doi.org/10.1007/978-3-319-47829-6_1067-1

13. Ortega, L. A., Solano, J. L., Torres, C., & Papini, M. R. (2017). Reward loss and addiction: Opportunities for cross-pollination. *Pharmacology, Biochemistry, & Behavior*, *154*, 39-52. <https://doi.org/10.1016/j.pbb.2017.02.001>
14. Papini, M. R., & Torres, C. (2017). Comparative learning and evolution. In J. Call (Ed.), *APA handbook of comparative psychology, Vol. 2* (pp. 267-286). American Psychological Association.
15. Torres, C., & Papini, M. R. (2016). Emotional self-medication and addiction. In V. Preedy (Ed.), *Neuropathology of addiction, Vol 3* (pp. 71-81). Elsevier.
16. Papini, M. R., Fuchs, P. N., & Torres, C. (2015). Behavioral neuroscience of psychological pain. *Neuroscience & Biobehavioral Reviews*, *48*, 53-69. <https://doi.org/10.1016/j.neubiorev.2014.11.012>
17. Papini, M. R. (2014). Diversity of adjustments to reward downshift in vertebrates. *International Journal of Comparative Psychology*, *27*, 420-445.
18. Papini, M. R. (2012). [Neural mechanisms of emotional memory: Incentive contrast as a model.] In J. S. Moysén & L. F. Sánchez-Anguiano, & C. Y. Martínez-López (Eds.), [Research and education in public health, pp. 41-47]. Instituto de Investigación Científica & University Juárez of Durango Press. [In Spanish]
19. Papini, M. R. (2012). Evolution of learning. *Encyclopedia of the Sciences of Learning*. Part 5 (pp. 1188-1192). Springer.
20. Papini, M. R., & Ortega, L. A. (2011). Endogenous opioids, opioid receptors, and incentive processes. In V. R. Preedy, R. R. Watson, & C. R. Martin (Eds.), *Handbook of behavior, food, and nutrition* (pp. 1011-1019). Springer.
21. Papini, M. R. (2011). [Mental (and neural) continuity (and discontinuity)]. In G. Gutierrez & M. R. Papini (Eds.), *Darwin and the behavioral sciences* (pp. 99-114). National University of Colombia Press. [In Spanish]
22. Norris, J. N., & Papini, M. R. (2010). Comparative psychology. In I. B. Weiner & W. E. Craighead (Eds.), *The Corsini encyclopedia of psychology, Fourth Edition* (pp. 367-369). Wiley & Sons.
23. Papini, M. R. (2009). Role of opioid receptors in incentive contrast. *International Journal of Comparative Psychology*, *22*, 170-187.
24. Mustaca, A. E., Bentosela, M., Ruetti, E., Kamenetzky, G., Cuenya, L., Justel, N., Lopez Seal, F., Fosachecha, S., & Papini, M. R. (2009). [Similarities and differences in two animal models of frustration.] In M. C. Richaud de Minzi & E. Moreno (Eds.), *Recientes avances iberoamericanos en investigación en ciencias del comportamiento, Vol. 2* (pp. 921-940). Ediciones CIIPME-CONICET. [In Spanish]
25. Papini, M. R. (2008). Colamus humanitatem: Nurturing human nature. *Advances in Latin American Psychology*, *26*, 15-29.
26. Papini, M. R. (2008). Integrating learning, emotion, behavior theory, development, and neurobiology: The enduring legacy of Abram Amsel (1922-2006). *American Journal of Psychology*, *121*, 663-671.
27. Daniel, A. M., & Papini, M. R. (2008). Comparative psychology. In S. Davis (Ed.), *21st century psychology: A reference handbook* (pp. 294-298). SAGE.
28. Mustaca, A. E., Bentosela, M., Pellegrini, S., Kamenetzky, G., Ruetti, E., Lopez Seal, F., Elgier, A. M., Jakovcevic, A., Cuenya, L., Pedron, V., Justel, N., Papini, M. R., Gomez, J. M., de la Torre, L., Delegido, B., Escarabajal, M. D., Aguero, A., Tobena, A., Fernandez-Teruel, A., & Torres, C. (2007). [Theoretical and experimental progress in the comparative

- study of frustration.] In M. C. Richaud & M. Ison (Eds.), *Avances en investigacion en ciencias del comportamiento en Argentina* (pp. 981-1011). Editorial de la Universidad del Aconcagua. [In Spanish]
29. Ortega, L. A., & Papini, M. R. (2007). [The study of contrast among incentives: The contribution of Abram Amsel.] *Revista Latinoamericana de Psicología*, *39*, 609-621. [In Spanish]
 30. Papini, M. R. (2007). [Comparative psychology of learning.] In O. Pineno, M. A. Vadillo, & H. Matute (Eds.), *Psicología del aprendizaje* (pp. 7-22). Abecedario. [In Spanish]
 31. Papini, M. R., Wood, M., Daniel, A. M., & Norris, J. N. (2006). Reward loss as psychological pain. *International Journal of Psychology and Psychological Therapy*, *6*, 189-213.
 32. Papini, M. R. (2006). Role of surprising nonreward in associative learning. *Japanese Journal of Animal Psychology*, *56*, 1-20.
 33. Papini, M. R. (2006). Classical conditioning. In N. J. Salkind (Ed.), *Encyclopedia of Human Development, Vol. 1* (pp. 269-270). Sage.
 34. Papini, M. R. (2005). [Toward an understanding of psychological pain: Opioid mechanisms.] In J. R. Vivas (Ed.), *Las ciencias del comportamiento en los albores del Siglo XXI* (pp. 7-12). Editorial de la Universidad Nacional de Mar del Plata. [In Spanish]
 35. Papini, M. R. (2005). [Evolution of learning, the Baldwin effect, and genetic assimilation.] In J. R. Vivas (Ed.), *Las ciencias del comportamiento en los albores del Siglo XXI* (pp. 305-312). Editorial de la Universidad Nacional de Mar del Plata. [In Spanish]
 36. Papini, M. R. (2004). Comparative psychology. In M. Bekoff (Ed.), *Encyclopedia of animal behavior* (pp. 422-426). Greenwood.
 37. Papini, M. R. (2004). Evolution of learning mechanisms. In M. Bekoff (Ed.), *Encyclopedia of animal behavior* (pp. 703-708). Greenwood.
 38. Papini, M. R. (2003). Comparative psychology. In S. Davies (Ed.), *Handbook of research methods in experimental psychology* (pp. 211-240). Blackwell.
 39. Papini, M. R. (2003). Comparative psychology of surprising nonreward. *Brain, Behavior and Evolution*, *62*, 83-95. <https://doi.org/10.1159/000072439>
 40. Papini, M. R. (2002). Pattern and process in the evolution of learning. *Psychological Review*, *109*, 186-201. <https://doi.org/10.1037/0033-295X.109.1.186>
 41. Papini, M. R., Salas, C., & Muzio, R. N. (1999). [Comparative analysis of learning in vertebrates.] *Revista Latinoamericana de Psicología*, *31*, 15-34. [In Spanish]
 42. Papini, M. R. (1998). [Evolution of learning: Metatheoretical foundations a century after Thorndike's Dissertation.] *Apuntes de Psicología*, *16*, 243-258. [In Spanish]
 43. Papini, M. R. (1998). Classical conditioning. In G. Greenberg & M. Haraway (Eds.), *Comparative psychology: A handbook* (pp. 523-530). Garland.
 44. Papini, M. R., & Ishida, M. (1998). Comparative psychology of learning: Recent issues and problems. *Memoirs of Osaka Kyoiku University*, *47*, 1-9.
 45. Papini, M. R., & Dudley, R. T. (1997). Consequences of surprising reward omissions. *Review of General Psychology*, *1*, 175-197.
 46. Papini, M. R. (1996). Nerve cells, brain circuits, and the evolution of learning. A review of E. M. Macphail's *The Neuroscience of Animal Intelligence*. *Contemporary Psychology*, *31*, 150-152.

47. Muzio, R. N., Segura, E. T., & Papini, M. R. (1996). [Comparative aspects of associative learning: Frustration and the paradoxical reward effects.] *Anuario de Investigaciones*, 4, 1-14. [In Spanish]
48. Papini, M. R., & Ludvigson, H. W. (1994). Language and heuristics of the neobehaviorist approach to learning. *American Journal of Psychology*, 107, 604-612.
49. Papini, M. R., & Bitterman, M.E. (1993). The two-test strategy in the study of inhibitory conditioning. *Journal of Experimental Psychology: Animal Behavior Processes*, 19, 342-352.
50. Papini, M. R., & Bitterman, M.E. (1990). The role of contingency in classical conditioning. *Psychological Review*, 97, 396-403.
51. Papini, M. R. (1988). Influence of evolutionary biology in the early (1891-1930) development of experimental psychology in Argentina. *International Journal of Comparative Psychology*, 2, 131-138.
52. Papini, M. R. (1987). The quest for divergent mechanisms in vertebrate learning. *Behavioral and Brain Sciences*, 10, 676-677.
53. Papini, M. R. (1987). The study of animal behavior in Argentina. In E. Tobach (Ed.), *Historical perspectives and the international status of comparative psychology* (pp. 173-181). Erlbaum.
54. Papini, M. R. (1986). [Comparative psychology of marsupials.] *Revista Latinoamericana de Psicología*, 18, 215-246. [In Spanish]
55. Papini, M. R. (1986). [Problems and approaches to the comparative psychology of learning.] *Mexican Journal of Behavior Analysis*, 12, 169-184. [In Spanish]
56. Papini, M. R. (1985). [Jose Ingenieros' view of comparative psychology.] *Revista de Historia de la Psicología*, 6, 61-78. [In Spanish]
57. Papini, M. R. (1985). [A note on experimental psychology in Argentina: Brief historiographic review.] *Revista de Historia de la Psicología*, 3, 213-226. [In Spanish]
58. Papini, M. R., & Mustaca, A. E. (1979). [Argentine experimental psychology between 1956 and 1978.] *Revista Latinoamericana de Psicología*, 11, 349-361. [In Spanish]
59. Papini, M. R. (1978). [Argentine experimental psychology during the 1930-1954 period.] *Revista Latinoamericana de Psicología*, 10, 227-258. [In Spanish]
60. Papini, M. R., & Piña, A. (1978). [An approach to some characteristics of the present teaching of psychology at the University of Buenos Aires.] *Neuropsiquiatría*, 9, 88-93. [In Spanish]
61. Papini, M. R. (1976). [Data for a history of experimental psychology in Argentina (to 1930).] *Revista Latinoamericana de Psicología*, 8, 319-335. [In Spanish]

Invited Conferences, Talks, Posters, and Seminars

1. Papini, M. R. *Loss: From vulnerability to resilience*. Invited conference, V Jornadas Interuniversitarias de Estudiantes de Doctorado en Psicología, Universidades de Granada, Malaga, and Jaen, Spain, July, 2025.
2. Papini, M. R. *Frustrative nonreward: Behavior, circuits, neurochemistry, and disorders*. Symposium chair and organizer, Society for Neuroscience Meeting, Chicago, IL, October, 2024.

3. Hagen, C., Suarez, J., & Papini, M. R. *Frustrative nonreward: Role of outputs from the nucleus accumbens in reward downshift*. Society for Neuroscience Meeting, Chicago, IL, October, 2024.
4. Fernández, R. C., Puddington, M. M., Papini, M. R., & Muzio, R. N. *Instrumental extinction in toads (*Rhinella arenarum*): Is it really instrumental?* 34th International Conference, Spanish Society for Comparative Psychology, Baeza, Spain, September, 2024.
5. Torres, C., Valero, M., Expósito, A., Papini, M. R., & Agüera, A. D. R. *Exploring sex differences and neural mechanisms of frustrative nonreward*. 34th International Conference, Spanish Society for Comparative Psychology, Baeza, Spain, September, 2024.
6. Suarez, J. A., Hagen, C., Rice, E., & Papini, M. R. *Frustrative nonreward and reward relativity*. 34th International Conference, Spanish Society for Comparative Psychology, Baeza, Spain, September, 2024.
7. Agüera, A. D. R., Arjol, D., Hagen, C., & Papini, M. R. *Detailed c-Fos expression patterns in the amygdala after frustrative nonreward*. 5th International Congress of Psychobiology, Madrid, Spain, July, 2024.
8. Papini, M. R. *Behavioral plasticity in aneural organisms*. Invited conference, UNED, Madrid, Spain, May, 2024.
9. Papini, M. R. *Comparative psychology of incentive relativity*. Invited conference, Interamerican Society for Psychology, Online talk (in Spanish), April, 2024. (<https://youtu.be/EYMiYxEug9A>)
10. Papini, M. R. *Comparative analysis of incentive relativity in vertebrates*. Invited conference, International Society for Comparative Psychology, Online Lecture Series, March, 2024. (<https://www.youtube.com/watch?v=HgKzMpu96F8>)
11. Hagen, C. W., Ogallar, P., & Papini, M. R. *Frustrative nonreward: Role of the accumbens-to-globus pallidus pathway in reward downshift*. Society for Neuroscience Meeting, Washington, DC, November, 2023.
12. Papini, M. R. *Neurobiology of surprising reward devaluations*. Invited conference. First Iberoamerican Virtual Symposium of Neurosciences: From Molecules to Behavior, Oviedo, Spain, October, 2023.
13. Hagen, C. W., Brice, K. N., Braden-Kuhle, P. N., & Papini, M. R. *Acute inflammation disrupts behavior in a Pavlovian, but not a consummatory, model of reward loss in rats*. Annual Meeting of the Pavlovian Society, Austin, TX 2023.
14. Agüera, A. D. R., Esposito, A. N., Zafra, D., Sabariego, M., Papini, M. R., & Torres, C. *Surprising reward downshift activates the lateral habenula, but not the medial habenula, as measured in terms of c-Fos*. IBRO World Congress of Neuroscience, Granada, Spain, September, 2023.
15. Papini, M. R. *Neurobiology of frustration*. Invited conference, 19th Biennial Meeting, Argentine Society for Behavioral Sciences, Buenos Aires, August, 2023.
16. Papini, M. R. *Neurobiology of surprising reward downshifts*. Invited conference, the D. O. Hebb Distinguished Scientific Contributions Award talk, American Psychological Association, Washington DC, August, 2023.
17. Hagen, C., Guarino, S., Hoxha, M., White, A. O., Navarro-Expósito, A., Agüera, A. D. R., Torres, C., Papini, M. R., & Sabariego, M. *Flexible behavioral adjustment to frustrative nonreward in anticipatory behavior, but not in consummatory behavior, requires the dorsal hippocampus*. Society for Neuroscience Meeting, San Diego, CA, November, 2022.

18. Papini, M. R. *Mechanisms underlying absolute and relative reward value in vertebrates*. 32nd International Conference, Spanish Society for Comparative Psychology, Almeria, Spain, September, 2022.
19. Hagen, C., Guarino, S., Hoxha, M., Torres, C., Papini, M. R., & Sabariego, M. *Reevaluating the function of the hippocampus in frustrative nonreward*. 32nd International Conference, Spanish Society for Comparative Psychology, Almeria, Spain, September, 2022.
20. Gonzalez, G., Cintado, M. A., Carcel, L., Torres, C., Papini, M. R., & De la Casa, L. G. *Evaluating reward downshift in a context signaling naloxone*. 32nd International Conference, Spanish Society for Comparative Psychology, Almeria, Spain, September, 2022.
21. Agüera, A. D. R., Donaire, R., Cándido, C., García-Tristell, D., Sánchez, A. I., Papini, M. R., & Torres, C. *Effects of acute administration of ketamine on a frustrative nonreward task*. International Congress of Psychobiology, Valencia, Spain, July, 2022.
22. Papini, M. R. *Neurobiology of frustration*. Invited conference (online), PhD programs in psychology, University of Jaen and University of Seville, Spain, March, 2022.
23. Papini, M. R. *Neurobiology of frustration*. Invited conference (online), Center for Behavioral Research, University of Guadalajara, Mexico, February, 2022.
24. Guarino, S., Hagen, C., & Papini, M. R. *Chemogenetic manipulations of the globus pallidus externus in frustration: Selective effects during the early stages of reward downshift*. Society for Neuroscience, Online Conference, November, 2021.
25. Hagen, C., Guarino, S., & Papini, M. R. *Blood alcohol concentration, open field activity, and c-Fos expression after oral exposure to 66% alcohol: Pharmacological or sensation-seeking effect?* Society for Neuroscience, Online Conference, November, 2021.
26. Papini, M. R. *Neurobiology of frustration*. Invited conference (online), Department of Psychology, University of the Sabana, Bogota, Colombia, November, 2021.
27. Papini, M. R. *Neurobiology of frustration*. Invited conference (online), 17th meeting of the Argentinean Society for Behavioral Sciences, Mar del Plata, Argentina, September, 2021.
28. Papini, M. R., Guarino, S., Hagen, C., & Nguyen, Q. *Chemogenetic inhibition and excitation of globus pallidus neurons in reward downshift and open field tasks: Motor or emotional effects?* Society for Neuroscience Global Connectome, Online Conference, January, 2021.
29. Papini, M. R., Conrad, S. E., Guarino, S., Donaire, R., & Torres, C. *Lateral habenula lesions impair absolute, but not relative reward comparisons*. Society for Neuroscience, Chicago, IL, October, 2019.
30. Guarino, S., Conrad, S. E., & Papini, M. R. *Relative and absolute reward value in free-choice consummatory behavior*. 31st International Congress, Spanish Society for Comparative Psychology, Malaga, Spain, September, 2019.
31. Donaire, R., Serrano, N., Papini, M. R., & Torres, C. *Augmented alcohol consumption induced by reward loss: Effects on behavior in the hole-board test*. 31st International Congress, Spanish Society for Comparative Psychology, Malaga, Spain, September, 2019.
32. Ruiz-Salas, J. C., Papini, M. R., Torres, C., & De La Casa, L. G. *Contextual modulation of consummatory successive negative contrast*. 31st International Congress, Spanish Society for Comparative Psychology, Malaga, Spain, September, 2019.
33. Papini, M. R., Conrad, S. E., Guarino, S., Donaire, R., Villatoro, A., Gámiz, F., Morón, I., Torres, C. *Lateral habenula lesions impair appetitive extinction, but spare consummatory successive negative contrast*. 3rd International Congress of Psychobiology, Granada, Spain, May, 2019.

34. Papini, M. R. *Loss: From vulnerability to resilience*. Invited Conference, Faculty of Psychology, University of Salamanca, Spain, May, 2019.
35. Papini, M. R. *Incentive relativity: Motivation, emotion, and memory*. Invited Conference, Institute of Neuroscience for Castilla & Leon, Salamanca, May, 2019.
36. Papini, M. R., Puddington, M., Thompson, J., & Torres, C. *Norepinephrine and frustration: Methylphenidate and propranolol affect reward devaluation and ethanol self-administration*. Society for Neuroscience, San Diego, CA, November, 2018.
37. Papini, M. R. *Comparative psychology: A debate about the psychology of the species*. Invited speaker, discussion panel. 30th International Congress, Spanish Society for Comparative Psychology, Avila, Spain, September, 2018.
38. Thompson, J. B., Conrad, S. E., Torres, C., & Papini, M. R. *Does exposure to the Barnes maze induce alcohol consumption in rats?* 30th International Congress, Spanish Society for Comparative Psychology, Avila, Spain, September, 2018.
39. Ruiz-Salas, J. C., Mena, A., De La Casa, L. G., & Papini, M. R. *Motivational modulation of consummatory successive negative contrast*. 30th International Congress, Spanish Society for Comparative Psychology, Avila, Spain, September, 2018.
40. Donaire, R., Martinez, L., Papini, M. R., & Torres, C. *Alcohol consumption induced by reward loss: Effects on behavior in the elevated plus maze*. 30th International Congress, Spanish Society for Comparative Psychology, Avila, Spain, September, 2018.
41. Papini, M. R., & Torres, C. *Role of the amygdala in reward loss*. Southwestern Comparative and Behavioral Neuroscience Association, Houston, TX, April 2018.
42. Torres, C., Papini, M. R., Donaire, R., Villatoro, A., Gamiz, F., & Moron, I. *Effects of lateral habenula lesions on instrumental and consummatory extinction*. Southwestern Comparative and Behavioral Neuroscience Association, Houston, TX, April 2018.
43. *Reward relativity and psychological pain*. Graduate seminar, Brain and Behavior Master Seminar, University of Seville, Spain, December, 2017.
44. Conrad, S., Davis, D., Papini, M. R., Papini, S., & Thompson, J. *Effects of chronic CBI agonist administration on coping with multiple reward devaluations*. Society for Neuroscience, Washington DC, November 2017.
45. Donaire, R., Fernandez, M., Merino, C., Papini, M. R., Reina, A., & Torres, C. *Voluntary oral ethanol consumption as emotional self-medication*. Society for Neuroscience, Washington DC, November 2017.
46. *Brain mechanisms of reward loss*. Symposium “Psychobiology of reward loss: Devaluation, omission, and uncertainty,” 29th International Congress, Spanish Society for Comparative Psychology, Oviedo, Spain, September, 2017.
47. *Loss: From vulnerability to resilience*. Invited conference, University of Navarra, Pamplona, Spain, March, 2017.
48. *Incentive relativity: Motivation, emotion, and memory*. Invited conference, University of Navarra, Pamplona, Spain, March, 2017.
49. *Evolution, brain, and behavior*. Invited conference, University of Jaen, Jaen, Spain, March, 2017.
50. *Psychological pain: From vulnerability to resilience*. Graduate seminar, Brain and Behavior Master Seminar, University of Seville, Spain, December, 2016.
51. *Incentive relativity: Motivation, emotion, and memory*. Graduate seminar, Brain and Behavior Master Seminar, University of Seville, Spain, December, 2016.

52. *Dorsomedial striatum lesions affect adjustment to reward uncertainty, but not to reward devaluation or omission.* Society for Neuroscience, San Diego, CA, November, 2016.
53. *Action and habit in a reward devaluation/inflation paradigm.* Society for Neuroscience, San Diego, CA, November, 2016.
54. *Incentive effects of acute or chronic nicotine on acquisition and extinction.* Society for Neuroscience, San Diego, CA, November, 2016.
55. *What makes us human? Invited panelist,* Ronald E. Moore Humanities Symposium, Texas Christian University, Fort Worth, November, 2016.
56. *From bad to worse: Ethanol and water consumption after an unexpected increase in restraint stress.* 28th International Congress, Spanish Society for Comparative Psychology, Barcelona, Spain, September, 2016.
57. *No evidence of transfer between instrumental running in a runway and scheduled-induced running.* 28th International Congress, Spanish Society for Comparative Psychology, Barcelona, Spain, September, 2016.
58. *Testing the emotional self-medication hypothesis: Effects of voluntary consumption of anxiolytics on anxiety.* 28th International Congress, Spanish Society for Comparative Psychology, Barcelona, Spain, September, 2016.
59. *Psychological pain and emotional self-medication. Invited conference,* Meeting of the Southwestern Psychological Association, Dallas, TX, 2016.
60. *Role of prefrontal cortex in successive negative contrast.* 12th Meeting of the International Society for Neuroethology, Montevideo, Uruguay, April, 2016.
 - a. *How does reward devaluation control behavior? Expectancy and S-R habits in appetitive conditioning.* Society for Neuroscience, Chicago, IL, October, 2015.
61. *Symmetrical transfer effects between instrumental and consummatory tasks in rats selected for low-avoidance/high-anxiety.* Society for Neuroscience, Chicago, IL, October, 2015.
62. *Pandora's box in the animal learning lab: From expectancy to habits, and back. Invited conference,* 27th International Congress, Spanish Society for Comparative Psychology, Seville, Spain, September, 2015.
63. *Incentive contrast: A comparative analysis. Invited conference,* Department of Psychology, University of Barcelona, Barcelona, Spain, May, 2015.
64. *Nothing in neuroscience makes sense, except in the light of behavior. A personal testimony. Invited conference,* Institute of Neuroscience, Autonomous University of Barcelona, Bellaterra, Spain, May, 2015.
65. *Psychological pain: From vulnerability to resilience. Invited conference,* Department of Psychology, Universidad Nacional de Educación a Distancia, Madrid, Spain, April, 2015.
66. *Invited conference,* Faculty of Psychology, University of Seville, Seville, Spain, April, 2015.
67. *Invited conference,* Institute of Neuroscience, Autonomous University of Barcelona, Bellaterra, Spain, May, 2015.
68. *Emotional memory: A neuroevolutionary approach. Graduate seminar (30 hours),* Department of Psychology, University of Jaén, Jaén, Spain, May, 2015.
69. *Frustration, loss, and anxiety disorders: Clinical and experimental evidence. Graduate seminar (30 hours),* Department of Psychology, University of Jaén, Jaén, Spain, March-April, 2015.

70. *Lidocaine infusions in the centromedial amygdala reduce successive negative contrast, without affecting anticipatory negative contrast.* Society for Neuroscience, Washington, DC, November, 2014.
71. *Anti-anxiety self-medication: Ethanol and chlordiazepoxide oral consumption after reward devaluation.* Society for Neuroscience, Washington, DC, November, 2014.
72. *Psychological pain: From vulnerability to resilience.* Invited conference, Center for Research on Mind, Brain, and Behavior, University of Granada, Granada, Spain, September, 2014.
73. *Taste-taste transfer of training between Pavlovian and consummatory tasks.* 26th International Congress, Spanish Society for Comparative Psychology, Braga, Portugal, September, 2014.
74. *Partial reinforcement and anti-anxiety self-medication.* 26th International Congress, Spanish Society for Comparative Psychology, Braga, Portugal, September, 2014.
75. *Complex effects of reward upshift on consummatory behavior in rats.* Biennial Meeting, International Society for Comparative Psychology, Bogota, Colombia, September.
76. *Consummatory successive negative contrast in rats: Memory interference versus incentive learning.* Biennial Meeting, International Society for Comparative Psychology, Bogota, Colombia, September.
77. *Psychological pain: Contribution of animal models.*
78. *Comparing incentives: Expectations, motivation, emotion, and memory.* Invited lectures, Faculty of Psychology, University of Seville, Spain, 2013.
79. *Comparative psychology of incentive contrast.* Invited lectures, Faculty of Psychology, University of Seville, Spain, 2013.
80. *Brain expression of pCREB in rats exposed to incentive downshift.* Society for Neuroscience, San Diego, CA, 2013.
81. *Instrumental successive negative contrast in rats: Preliminary studies on the role of the prefrontal cortex.* 28th Congress of the Argentinean Society for Neuroscience Research, Córdoba, Argentina, 2013.
82. *Transfer of training between consummatory and anticipatory tasks involving incentive downshift.* 25th International Congress, Spanish Society for Comparative Psychology, San Sebastián, Spain, 2013.
83. *Extinction of instrumental behavior in the amphibian *Rhinella arenarum* under different acquisition conditions: Amount of practice vs. magnitude of reinforcement.* 25th International Congress, Spanish Society for Comparative Psychology, San Sebastián, Spain, 2013.
84. *Motivational influences on consummatory contrast.* 3rd International Meeting of the Argentinean Association for Behavioral Sciences, Cordoba, Argentina, 2013.
85. *Diversity of adjustments to incentive downshifts in vertebrates.* American Psychological Association Convention, Honolulu, HI, 2013.
86. *Psychological and physical pain: From neural networks to social networks.* Symposium chair and organizer (Speakers: Y. B. Peng, P. N. Fuchs, G. Boehm, C. Cox, C. Torres). Southwestern Comparative Psychology Association, Fort Worth, TX, 2013.
87. *Cortical pCREB levels after incentive downshift.* Southwestern Comparative Psychology Association, Fort Worth, TX, 2013.
88. *Testing frustration theory: Transfer experiments.* Southwestern Comparative Psychology Association, Fort Worth, TX, 2013.

89. *Genetic and experiential factors modulate ethanol consumption in rats*. Society for Neuroscience, New Orleans, LA, 2012.
90. *Restraint stress enhances the effects of incentive downshifts in consummatory negative contrast and Barnes-maze extinction*. Society for Neuroscience, New Orleans, LA, 2012.
91. *Comparative psychology of incentive contrast*. Invited conference, University of Barcelona, Barcelona, Spain, 2012.
92. *Some comparative psychology: Honoring Jeff Bitterman*. Symposium chair and organizer (Speakers: R. Menzel, R. N. Muzio, R. Pellon, G. Gutierrez, P. A. Couvillon), Joint Meeting, International Society for Comparative Psychology & Spanish Society for Comparative Psychology, University of Jaén, Jaén, Spain, 2012.
93. *Some comparative psychology: The case of incentive contrast*. Presidential address, APA Division 6 (Behavioral Neuroscience & Comparative Psychology), American Psychological Association, Orlando, FL, 2012.
94. *Comparative analysis of learning: Bitterman's legacy*. Symposium chair and organizer (Speakers: P. A. Couvillon, B. H. Smith, P. D. Balsam, D. A. Washburn, J. B. Overmier), American Psychological Association, Orlando, FL, 2012.
95. *Neural activation during passive avoidance learning in the terrestrial toad, *Rhinella arenarum**. American Psychological Association, Orlando, FL 2012.
96. *Adjustment to incentive devaluations: Comparative analysis*. Invited conferences, National Congress of Ethology and Comparative Psychology, Santiago, Chile, 2011.
97. *Round table: Learning and cognition*. Invited conferences, National Congress of Ethology and Comparative Psychology, Santiago, Chile, 2011.
98. *Lesions of the ventro-lateral orbital cortex, but not of the medial prefrontal cortex, impair adjustment to incentive downshifts*. Society for Neuroscience, Washington, DC, 2011.
99. *Reinterpreting the role of chlordiazepoxide in reward downshift: Emotion, memory, or both?* APA Convention, Washington, DC, 2011.
100. *Adjustment to incentive loss: Theory and experimental evidence*. Graduate seminar, University of Seville, Spain, 2011.
101. *Experimental analysis of learning and cognition*. Invited conference, University of Seville, Spain, 2011.
102. *Psychobiology of incentive contrast*. Invited conferences, University of Jaen, Spain, 2011.
103. *Incentive contrast: Emotion, memory, and behavior*. Invited conferences, University of Jaen, Spain, 2011.
104. *Role of prefrontal cortex in negative contrast*. Southwestern Psychological Association, San Antonio, TX, 2011.
105. *Cingulate cortex and psychological pain: Electrolytic lesions of the ACC retard recovery from consummatory successive negative contras*. Society for Neuroscience, San Diego, CA, 2010.
106. *Contrasting incentives: Emotion, memory, and behavior*. Keynote address, 20th Mexican Congress of Behavior Analysis, Oaxtepec, Mexico, 2010.
107. *Adjustment of incentive downshift: A comparative analysis*. Invited conference, 118th Convention of the American Psychological Association, San Diego, California, 2010.
108. *Social consequences of surprising incentive devaluations*. Plenary conference, 44th Congress of the International Society for Applied Ethology, Uppsala, Sweden, 2010.
109. *Failed expectancies: Incentive contrast as an animal model*. Invited conference, University of Malaga, Ronda, Spain, 2010.

110. *Behaviors correlated with incentive contrast: An artificial selection study.* Invited conference, University of Jaen, Jaen, Spain, 2010.
111. *Nothing in neuroscience makes sense, except in the light of behavior: A personal testimony.* Presidential address, 15th Biennial Conference of the International Society for Comparative Psychology, Hyogo, Japan, 2010.
112. *Developmental and neurological consequences of selective breeding for recovery from incentive downshift.* Keynote address, Southwestern Psychological Association, Dallas, TX, 2010.
113. *Neural mechanisms of emotional memory: Incentive contrast as a model.* Invited conference, Institute of Scientific Research, Juarez University, Durango, Mexico, 2009.
114. *Interaction of physical pain (formalin test) and psychological pain (negative contrast).*
115. *D-cycloserine retards recovery from consummatory successive negative contrast.* Society for Neuroscience, Chicago, IL, 2009.
116. *In search of the emotional memory of loss: Incentive contrast as a model*
117. *Natura, nurtura, and epigenesis: Contributions from comparative psychology.* Invited conferences. 1st International Meeting of the Argentinean Association of Behavioral Sciences, Buenos Aires, Argentina, 2009.
118. *Mental continuity (and discontinuity): Darwin's legacy for comparative psychology.* Invited conference, National University of Colombia, Bogota, Colombia, 2009.
119. *Factors influencing incentive contrast: An artificial selection approach.* Society for Neuroscience, Washington, DC, 2008.
120. *Emotion and cognition in incentive contrast*
121. *Assessing the relationship between incentive downshift and place preference in rats*
122. *Corticosterone enhances the effects of incentive downshift: The boundaries of this effect.* 14th Biennial Meeting, International Society for Comparative Psychology, Buenos Aires, Argentina, 2008.
123. *Role of the opioid system in psychological pain.* Invited conference, 2nd Annual Meeting, Argentinean Association for Behavioral Sciences, Buenos Aires, Argentina, 2008.
124. *Role of the opioid system in psychological pain*
125. *Adjustment to situations involving incentive loss: Theory and experimental evidence.* Invited conferences, National Autonomous University of Mexico, Mexico City, 2008.
126. *Role of the opioid system in reward and surprising-nonreward situations in rats.* 79th Annual Meeting, Eastern Psychological Association, Boston, MA, 2008.
127. *Bidirectional effects of U50,488H, a kappa-opioid receptor agonist, on consummatory successive negative contrast*
128. *Opioid modulation of the aversive memory of incentive downshift.* Society for Neuroscience, San Diego, CA, 2007.
129. *Posttrial administration of naloxone enhances consummatory suppression after incentive downshift.*
130. *Within-trial oscillations in consummatory behavior during incentive shifts*
131. *Relapse after recovery from consummatory successive negative contrast.* Southwestern Psychological Association, Fort Worth, TX, 2007.
132. *Contextual control of consummatory successive negative contrast.* 78th Annual Meeting, Eastern Psychological Association, Philadelphia, PA, 2007.
133. *Contextual control of consummatory successive negative contrast.* 4th Scientific Meeting, Instituto de Investigaciones Médicas Lanari, Buenos Aires, Argentina, 2007.

134. *Bidirectional opioid effects on incentive contrast*. 13th Biennial Meeting, International Society for Comparative Psychology, Christchurch, New Zealand, 2006.
135. *Role of surprising nonreward in associative learning*. Invited conference, Southwestern Psychological Association, Austin, TX, 2006.
136. *Within-trial oscillations in sipper contact: A measure of approach-avoidance conflict in consummatory successive negative contrast?*
137. *Administration of the kappa opioid agonist U-50,488H after the first downshift trial prolongs recovery from consummatory successive negative contrast*. 52nd Annual Meeting, Southwestern Psychological Association, Austin, TX, 2006.
138. *Understanding psychological pain: Role of the opioid system*. Invited conference, National Science Foundation, Washington, DC, 2005.
139. *Opioid receptors and individual differences in consummatory successive negative contrast*
140. *Contextual control of consummatory successive negative contrast*. 46th Annual Meeting, Psychonomic Society, Toronto, Ontario, Canada, 2005.
141. *Reward loss as psychological pain: Role of the opioid system*. 65th Annual Meeting, Japan Society for Animal Psychology, Chiba, Japan, 2005.
142. *Comparative biopsychology of surprising reward loss*. Invited conference, International Institute for Advanced Studies, Keihanna, Japan, 2005.
143. *An analysis of incentive relativity*. Invited conference, Kwansai Gakuin University, Hyogo, Japan, 2005.
144. *Psychological pain and the opioid system*. Invited conference, 4th Meeting of Researchers in the Behavioral Sciences, Bogota, Colombia, 2005.
145. *Toward an understanding of psychological pain: Opioid mechanisms*
146. *Evolution of learning, the Baldwin effect, and genetic assimilation*
147. *Effects of corticosterone on frustration memory*. 10th Meeting of the Argentinean Association of Behavioral Sciences, Mar del Plata, Argentina, 2005.
148. *The relationship between latent inhibition and the PREE*. *Southwestern Comparative Psychological Association, Memphis, TN, 2005*.
149. *Role of the opioid system in consummatory successive negative contrast*. 45th Annual Meeting, Psychonomic Society, Minneapolis, MN, 2004.
150. *Understanding psychological pain: The role of the opioid system*. Invited conference, Department of Neuroscience and Cell Biology, University of Texas Medical Branch, Galveston, October, 2004.
151. *Scaling relative incentive value*. 12th Biennial Meeting, International Society for Comparative Psychology, Oviedo, Spain, 2004.
152. *Evolution of learning mechanisms: General processes and modularity*. Invited conference, Symposium on the Biology of Learning, organized by the International Union of Biological Sciences, Graduate University for Advanced Studies, Hayama, Japan, 2003.
153. *Scaling incentive value*. 44th Annual Meeting, Psychonomic Society, Vancouver, Canada, 2003.
154. *Emotional regulation of behavior: Frustration and persistence*. 9th Meeting, Argentinean Association for Behavioral Sciences, Cordoba, Argentina, 2003.
155. *Comparative psychology of surprising nonreward*. Invited conference, 14th Annual Karger Workshop on Evolutionary Perspectives in Cognition, Orlando, FL, 2002. Invited conference, Department of Psychology, University of Texas, Arlington, TX, 2002.
156. *Partial reinforcement attenuates consummatory successive negative contrast*. 43rd Annual

- Meeting, Psychonomic Society, Kansas City, MO, 2002.
157. *CS- and context-preexposure effects in appetitive conditioning with rats*. Biennial Meeting, International Society for Comparative Psychology, Chicago, IL, 2002.
 158. *The frustration effect controversy: They were all right (and wrong)*. Invited conference, Deusto University, Bilbao, Spain, 2001.
 159. *Signal- and context-preexposure effects in autoshaping with rats*. International Meeting of the Spanish Society for Comparative Psychology, San Sebastian, Spain, 2001.
 160. *The role of response form in latent inhibition in rats*.
 161. *Role of DPDPE in consummatory successive negative contrast*.
 162. *Analysis of the frustration effect in pigeons*. Annual Convention of the Southwestern Psychological Association, Houston, TX, 2001.
 163. *Another look at the frustration effect*. Invited conference, Eastern Psychological Association, Washington, DC, 2001
 164. *Different sources of the frustration effect in rats and pigeons: Evolutionary implications*. Annual Meeting of the Comparative Cognition Society, Melbourne, FL, 2001.
 165. *Evolution of learning: Pattern and process*. Invited conference, American Psychological Association, Washington, DC, 2000
 166. *Effects of partial reinforcement on successive negative contrast in consummatory behavior*. International Congress of Psychology, Stockholm, Sweden, 2000.
 167. *Neurochemical analysis of the spaced-trial PREE in pigeons*. International Society for Comparative Psychology, Warsaw, Poland, 2000.
 168. *Comparative psychology of reward loss*. Invited conference, Southwestern Comparative Psychology Association, Dallas, TX, 2000.
 169. *Consummatory contrast in hedgehogs*.
 170. *Latent inhibition of the CS and context in autoshaping with rats*. Southwestern Comparative Psychology Association, Dallas, TX, 2000.
 171. *Effects of surprising reward omissions: More frustrating for the pigeon or the experimenter?* Invited conference, 71st. Meeting of the Eastern Psychological Association, Baltimore, MD, 2000.
 172. *Consequences of surprising nonreward in pigeons*.
 173. *Spaced-trial avoidance learning in the goldfish (Carassius auratus)*. 11th. Meeting of the Spanish Society of Comparative Psychology, Baeza, Spain, 1999.
 174. *Context manipulations influence the size of the trial-spacing effect in autoshaping with rats*. Conference on Comparative Cognition, Melbourne, FL, 1999.
 175. *DFT: A real-time model of the effects of surprising nonreward*. 39th. Annual Meeting, Psychonomic Society, Dallas, TX, 1998.
 176. *Evolution of learning: Metatheoretical foundations a century after Thorndike's dissertation*. 4th. International Congress on Behaviorism and the Sciences of Behavior, Seville, Spain, 1998.
 177. *Dissociation of reward-schedule effects in pigeons (Columba livia)*. 10th Annual Meeting, American Psychological Society, Washington, DC, 1998.
 178. *Effect of context preexposure on autoshaping in rats*.
 179. *Analysis and data regarding apparent contrast effects from stimulus preexposure in autoshaping with rats*.
 180. *Fixed interval operant performance of pigeons following expected versus unexpected nonreinforcement*. 44th. Annual Convention, Southwestern Psychological Association, New

- Orleans, LA, 1998.
181. *Comparative psychology of reward loss*. Invited conference, University of Seville, Spain, 1997.
 182. *Comparative psychology of reward loss*. Invited conference, University of Tsukuba, Japan, 1997.
 183. *Comparative psychology of reward loss*. Invited conference, Kwansai Gakuin University, Japan, 1997.
 184. *Comparative psychology of reward loss*. Invited conference, Hiroshima University, Japan, 1997.
 185. *Comparative psychology of reward loss*. Invited conference, Kanazawa University, Japan, 1997.
 186. *Evolution and learning in vertebrates*. Invited conference, Nagoya University, Japan, 1997;
 187. *Evolution and learning in vertebrates*. Invited conference, Osaka University, Japan, 1997.
 188. *Evolution and learning in vertebrates*. Invited conference, Osaka University of Education, Japan, 1997.
 189. *Methods and problems in the comparative psychology of learning*. Invited conference, Hiroshima University, Japan, 1997.
 190. *Methods and problems in the comparative psychology of learning*. Invited conference, Osaka University of Education, 1997.
 191. *US preexposure effects in autoshaping with rats*. Invited conference: behavioral neuroscience group, University of York, UK, 1997.
 192. *Emotional regulation of learning*. Invited seminar, University of Buenos Aires, Argentina, 1997.
 193. *Unsignaled reinforcers in rat autoshaping*. 38th. Annual Meeting, Psychonomic Society, Philadelphia, PA, 1997.
 194. *Arousal and the trial spacing effect in autoshaping with rats*.
 195. *Chlordiazepoxide and rats' odorous reactions to reward and nonreward*.
 196. *Effects of shifts in reward quality and magnitude on autoshaping performance in rats*. Annual Meeting, Southwestern Comparative Psychology Association, Fort Worth, TX, 1997.
 197. *Effects of surprising reward shifts on instrumental learning: Comparative analysis*. Invited conference, University of Texas, Austin, TX, February, 1997.
 198. *Effects of surprising reward shifts on instrumental learning: Comparative analysis*. Invited conference, University of Texas, Arlington, TX, April, 1997;
 199. *Effects of surprising reward shifts on instrumental learning: Comparative analysis*. Invited conference, Midwestern Psychological Association, Chicago, IL, May, 1997.
 200. *Instrumental learning in toads (Bufo arenarum): Role of reinforcement and nonreinforcement*.
 201. *Sensorimotor Coordination: Amphibians, Models & Comparative Studies*. Sedona, AZ, 1996.
 202. *Spaced-trial operant learning in pigeons*. 37th. Annual Meeting. Psychonomic Society, Chicago, IL, 1996.
 203. *Role of reinforcement in the spaced-trial instrumental performance of pigeons*.
 204. *Amount of reinforcement and instrumental performance in toads (Bufo arenarum)*. 8th Biennial Meeting, International Society for Comparative Psychology, Montreal, Canada, 1996.

205. *Frustration, timing, and the performance of pigeons in fixed-interval schedules*. 42nd Annual Convention, Southwestern Psychological Association, Houston, TX, 1996.
206. *US preexposure effects in autoshaping with rats*. 36th Annual Meeting, Psychonomic Society, Los Angeles, CA, 1995.
207. *Unexpected reward shifts facilitate Pavlovian performance*. 35th Annual Meeting, Psychonomic Society, Saint Louis, MO, 1994.
208. *Proactive effects of surprising reward omissions on autoshaping with rats*. 34th Annual Meeting, Psychonomic Society, Washington, D.C., 1993.
209. *The frustration effect in autoshaping with rats*. 39th Annual Convention, Southwestern Psychological Association, Corpus Christi, TX, 1993.
210. *Adjustment to partial reinforcement and role of the primordium hippocampi in the instrumental performance to toads (*Bufo arenarum*)*. 33rd Annual Meeting, Psychonomic Society, Saint Louis, MO, 1992.
211. *Role of the intersession interval on appetitive contextual conditioning in rats*. Iberian American Congress of Psychology, Madrid, Spain, 1992.
212. *The trials per session effect in autoshaping with rats*.
213. *Reinforcement and learning in the amphibian *Bufo arenarum**. 38th Annual Convention, Southwestern Psychological Association, Austin, TX, 1992.
214. *Appetitive instrumental learning in the amphibian *Bufo arenarum**. 32nd Annual Meeting, Psychonomic Society, San Francisco, CA, 1991.
215. *Comparative aspects of the paradoxical effects of reward*. Invited conference, University of Texas at Austin, 1991.
216. *Distribution of trials and partial reinforcement effects in the amphibian *Bufo arenarum**. 2nd Meeting, North Texas Society for Animal Learning and Behavior, Fort Worth, TX, 1991.
217. *Discussant in the roundtable on evolution and learning*. 9th Winter Conference on Animal Learning, Winter Park, CO, 1991.
218. *Effects of varying the interreinforcement interval on appetitive contextual conditioning*. 31st Annual Meeting, Psychonomic Society, New Orleans, LA, 1990.
219. *Present status of the contingency theory of classical conditioning*. 7th Winter Conference on Animal Learning, Winter Park, CO, 1989.
220. *Early development of experimental psychology in Argentina*. 6th Annual International Conference on the History of the Behavioural Sciences, University of Sussex, England, 1987.
221. *Contextual learning in rats*. 20th International Ethological Conference, University of Wisconsin, Madison, WI, 1987.
222. *Mechanisms of contextual learning in rats*.
223. *Processes of associative learning in marsupials*. 1st Argentine Meeting of Animal Behavior, Carlos Paz, Argentina, 1987.
224. *Associative learning in *Didelphis albiventris* and *Lutreolina crassicaudata**. 2nd Argentine Meeting of Mastozoology, Buenos Aires, Argentina, 1986.
225. *The study of mammalian behavior in Argentina*. 1st Argentine Meeting of Mastozoology, Mendoza, Argentina, 1985.
226. *Learning, wild species, and animal production*. 10th Pan American Congress of Veterinary and Zootecnic, Buenos Aires, 1985.
227. *Optimal foraging in the armadillo *Chaetophractus vellerosus**. 19th International Ethological Conference, Universite Paul Sabatier, Toulouse, France, 1985.

228. *A comparative study of the organization of a behavioral sequence in marsupial and placental mammals*. 2nd Meeting, International Society for Comparative Psychology, Acapulco, Mexico, 1984.
229. *Quantitative description of the song of Junco capensis in Eastern Argentina*. 20th Meeting, Animal Behavior Society, Cheney, WA, 1984.
230. *Serial ablations of the telencephalon and avoidance learning by goldfish*. 24th Annual Meeting, Psychonomic Society, Santa Monica, CA, 1983.
231. *The behavior of marsupials: A critical review of field and laboratory research*. Argentine Society for the Study of Mammals, Buenos Aires, Argentina, 1983.
232. *Psychobiology of learning: Biological meaning, general processes, and human behavior*. 3rd Latin American Congress of Education, Buenos Aires, Argentina, 1983.
233. *Comparative analysis of learning in Didelphis albiventris and Chaetophractus villosus*.
234. *Observations on the aggressive behavior of armadillos*. 3rd Iberoamerican Meeting on Vertebrate Zoology and Conservation, Buenos Aires, Argentina, 1982.
235. *Spatial probability learning in the armadillo*. Argentine Society of Biology, Buenos Aires, Argentina, 1979.
236. *Effects of the section of the olfactory peduncle on the retention of a visual discrimination, on general activity, and on emotionality in the armadillo*.
237. *Complex learning in Chaetophractus villosus and Didelphis albiventris*.
238. *The behavior of edentates*. 7th Argentine Congress of Biology, Mendoza, Argentina, 1978.
239. *Origins and development of psychology in Argentina*. Invited conference, University of Buenos Aires, Buenos Aires, Argentina, 1978.
240. *Effects of haloperidol on visual discrimination learning and extinction in the armadillo*.
241. *Learning under delayed and simultaneous reinforcement in the armadillo*. Argentine Society of Biology, Buenos Aires, Argentina, 1978.
242. *Learning processes in the armadillo*. 1st Interdisciplinary Meeting, Faculty of Natural Sciences, University of Buenos Aires, Buenos Aires, Argentina, 1977.

Research Grants Received

- “*Functional Neural Network Analysis of frustration*” (2025). SERC grant to Jessica A. Suarez, TCU College of Science and Engineering (\$1,942).
- “*Role of the Pathway from the Basolateral Amygdala to the Nucleus Accumbens on Frustration and Emotional Resilience*” (2025). SERC grant to Adrienne Drickamer, TCU College of Science and Engineering (\$1,464).
- “*Behavioral neuroscience of recovery from frustration*” (2024). RCAF grant # 61027 (\$4,483).
- “*Role of the Subthalamic Nucleus to Globus Pallidus Pathway in Reward Loss*” (2023). SERC grant to Christopher Hagen, TCU College of Science and Engineering (\$1,876).
- “*Corticosterone levels with two magnitudes of reward disparity during successive negative contrast*” (2023). SERC grant to Jessica Suarez, TCU College of Science and Engineering (\$1,918).
- “*Assessing Baseline Neural Activity in Two Paradigms of Reward Loss*” (2023). SERC grant to Emily Rice, TCU College of Science and Engineering, (\$1,184).
- “*Neural Activity in Basolateral Amygdala and the Central Amygdala during Reward Loss*” (2023). Honors Project grant to Morgen Crosby, TCU Honors College (\$3,294).
- “*Neurobiology of reward loss*” (2022). Dean’s Opportunity Fund, TCU College of Science &

- Engineering (\$13,800).
- “Effects of neural inhibition of the ventral hippocampus on different paradigms of reward loss”* (2022). SERC grant to Francesca Vignolo, TCU College of Science and Engineering (\$1,297).
- “Neural Activity in Basolateral Amygdala and the Central Amygdala during Reward Loss”* (2022). SERC grant to Morgen Crosby, TCU College of Science and Engineering (\$1,257).
- “Neurobiology of mammalian frustration”* (2022). TCU Invests in Scholarship, Grant # 66054 (\$19,190).
- “Your brain on loss: Toward a brain connectome for reward loss”* (2022). TCU Research and Creative Activities Fund, Grant # 60984 (\$4,436).
- “Pathways underlying behavior induced by the unexpected reduction in reward in rats”* (2021). National Institute of Drug Abuse, Clozapine-N-Oxide (free of charge; 1.7 g, estimated value: \$67,046).
- “Effects of Neural Inhibition of BLA-NAc Pathway on Reward Devaluation”* (2021). SERC grant # UG210428 to J. Wrobel, TCU College of Science and Engineering (\$1,320).
- “Effects of Neural Excitation of BLA-NAc Pathway on Reward Devaluation”* (2021). SERC grant # UG210427 to P. Watters, TCU College of Science and Engineering (\$1,320).
- “Validating chemogenetic manipulation of brain activity using c-Fos expression”* (2021). SERC grant # UG210417 to A. Ayestas, TCU College of Science and Engineering (\$1,323).
- “Role of the hippocampus in successive negative contrast”* (2021). SERC grant # 210321 to C. Hagen, TCU College of Science and Engineering (\$1,500).
- “Effects of neural excitation the nucleus accumbens on the initial and recovery stages of reward loss”* (2020). SERC grant # UG200736 to Q. Nguyen, TCU College of Science and Engineering (\$1,498).
- “Effects of neural manipulation of the nucleus accumbens on reward loss”* (2020). SERC grant # UG190630 to A. DeMarco, TCU College of Science and Engineering (\$1,498).
- “Role of the basolateral amygdala in a Pavlovian negative contrast paradigm”* (2020). GSRF grant # G200409 to C. Hagen (\$1,849).
- “Effects of neural manipulation of the BLA-CeA pathway on reward loss”* (2020). GSRF grant # G200408 to S. Guarino (\$2,000).
- “Investigating the behavioral and neurological effects of voluntary consumption of high concentration alcohol in rats”* (2020). SERC grant # UG200735 to A. DeMarco, TCU College of Science and Engineering (\$1,275).
- “Effects of neural inhibition of the nucleus accumbens on reward loss”* (2019). SERC grant # UG190630 to A. DeMarco, TCU College of Science and Engineering (\$1,498).
- “The lateral habenula’s influence on the neural circuitry of reward loss”* (2019). GSRF grant # G 190413 to C. Hagen (\$1,960).
- “Role of the gustatory thalamus and insular cortex in reward loss”* (2019). Psi Chi Undergraduate Research Grant # 23728 (Co-PI: Q. Nguyen) (\$3,000).
- “Role of the amygdala in reward loss”* (2019). National Institute of Drug Abuse, Clozapine-N-Oxide (free of charge; 1.5 g, estimated value: \$54,000).
- “Role of the gustatory thalamus and insular cortex in reward loss”* (2019). GSRF grant # G190319 to S. Guarino (\$2,000).
- “Resilience-vulnerability to frustration and variation in mu-opioid receptor gene”* (2019). TCU Research and Creative Activities Fund, Grant # 60917 (\$3,161)

- “Role of the gustatory thalamus in reward loss circuitry”* (2019). SERC grant # UG190318 to T. Bradley, TCU College of Science and Engineering (\$1,500).
- “Role of the amygdala in reward loss”* (2018). National Institute of Drug Abuse, Clozapine-N-Oxide (free of charge; 2.2 g, estimated value: \$76,212).
- “Role of the pathway from the basolateral amygdala to the nucleus accumbens in the reward loss circuitry”* (2018). SERC grant # UG180534 to Q. Nguyen, TCU College of Science and Engineering (\$1,490).
- “Neural mechanisms of frustration and reward loss”* (2018). TCU Invests in Scholarship grant # 66040 (\$17,074).
- “Exploring the function of the central amygdala in reward loss circuitry”* (2018). SERC grant # 180329 (To Z. Wade), TCU College of Science and Engineering (\$1,500).
- “Role of basolateral amygdala efferents in incentive devaluation in rats”* (2018). GSRF grant # G180612 to S. E. Conrad (\$2,000).
- “Role of the central amygdala in emotional self-medication”* (2018). GSRF grant # G180614 to S. Guarino (\$2,000).
- “Reinforcing value of high alcohol concentrations”* (2018). GSRF grant # G180616 to J. Thompson (\$1,920).
- “Neural mechanisms of frustration”* (2017). Department of Psychology Research Fund, (\$3,300).
- “Role of basolateral amygdala efferents in reward loss”* (2017). GSRF grant # 17007 to S. E. Conrad (\$2,978).
- “Emotional self-medication”* (2017). GSRF grant # 17006 to J. B. Thompson (\$2,967).
- “Role of the amygdala in emotional self-medication”* (2017). GSRF grant # 17005 to S. Guarino (\$2,779).
- “Role of dopamine in the emotional self-medication effect”* (2017). Special Funds (to M. Puddington), TCU Research Office, CSE Dean’s Office, and Psychology (\$1,000).
- “Role of the central amygdala in loss-induced emotional self-medication”* (2017). SERC grant # 170338 (to Z. Wade), TCU College of Science and Engineering (\$1,442).
- “Role of the pathway from the basolateral amygdala to the nucleus accumbens in an incentive devaluation situation”* (2017). SERC grant # 170126 (to N. Vilcek), TCU College of Science and Engineering (\$1,472).
- “Effects of codeine on emotional self-medication”* (2016). SERC grant # 160325 (to C. Ramos Acuna), TCU College of Science and Engineering (\$1,308).
- “Cannabinoid brain receptors and reward loss”* (2016). SERC grant # 160117 (to J. Bosaker), TCU College of Science and Engineering (\$1,394).
- “Effects of reward loss on the consumption of substances with addictive potential”* (2015). TCU Invests in Scholarship grant # 66022 (\$18,000).
- “Effects of chronic exposure to a cannabinoid receptor agonist on coping with unexpected reward loss”* (2015). SERC grant # 150113 (to D. Davis), TCU College of Science and Engineering (\$1,441).
- “Comparative neuroscience of emotion and memory”* (2015). Fulbright US Scholar Award (\$15,200).
- “Neural substrate of a reward-loss memory”* (2014).

- TCU Research and Creative Activities Fund, Grant # 33502 (\$3,999)
"Psychobiology of contrast effects" (2013).
Funds provided by Hoshi University, Japan, for Dr. K. Kawasaki's Sabbatical (\$9,738)
- "Effects of testosterone on positive emotion"* (2013).
SERC grant # 130125, TCU College of Science and Engineering (\$1,180)
- "Role of the amygdala in psychological pain"* (2012).
SERC grant # 120322, TCU College of Science and Engineering (\$571)
- "Brain mechanisms of frustration"* (2012).
Texas Christian University Invests in Scholarship (\$6,000).
- "Brain mechanisms of surprising loss"* (2012).
Texas Christian University Research Fund, Grant # 60672 (\$3,666).
- "Neural basis of psychological pain"* (2010).
Undergraduate Research and Creative Activities Initiative, TCU (\$1,250).
- "Effects of protein-synthesis inhibition on negative contrast: Systemic approach"* (2010).
SERC grant # 100115, TCU College of Science and Engineering (\$2,415)
- "Effects of protein-synthesis inhibition on negative contrast: Microinjection approach"* (2010).
SERC grant # 100103, TCU College of Science and Engineering (\$2,159)
- "Brain mechanisms underlying incentive loss: Protein-synthesis inhibition and endogenous opioid release in the amygdala"* (2009).
SERC grant # 90321, TCU College of Science and Engineering (\$2,000).
- "Effects of the inhibition of protein synthesis on unexpected incentive loss"* (2009).
SERC grant # 90307, TCU College of Science and Engineering (\$2,000).
- "Selective breeding for recovery from reward downshift: Sixth generation"* (2009).
Undergraduate Research and Creative Activities Initiative, TCU (\$1,250).
- "Brain mechanisms underlying psychological pain"* (2009).
Texas Christian University Research Fund, Grant # 60562 (\$3,897).
- "Coping with stress: Effects of anxiolytics on behavioral suppression and stress hormones"* (2009).
SERC grant # 90110, TCU College of Science and Engineering (\$2,340).
- "Memory for frustrating event: The effects of inhibiting protein synthesis"* (2009).
SERC grant # 90105, TCU College of Science and Engineering (\$2,227).
- "Effects of D-cycloserine on escape from loss-induced anxiety"* (2008).
SERC grant # 80301, TCU College of Science and Engineering (\$1,462).
- "Role of the opioid system in anxiety induced by incentive loss"* (2008).
SERC grant # 80107, TCU College of Science and Engineering (\$750).
- "Understanding the physiological basis of acute stress induced by incentive loss"* (2008).
SERC grant # 80104, TCU College of Science and Engineering (\$750).
- "Identifying the components of the brain circuit involved in reward loss"* (2007).
Texas Christian University Research Fund, Grant # 60497 (\$ 3,965).
- "Memory mechanisms in the development of anxiety"* (2007).
SERC grant, TCU College of Science and Engineering (\$1,403).
- "Understanding psychological pain: Role of the opioid system"* (2006).
Texas Christian University Research Fund, Grant # 60453 (\$ 3,288).
- "Opioid mechanisms underlying negative contrast in rats"* (2003).
Texas Christian University Research Fund, Grant # 60277 (\$ 2,493).
- "Reward loss and immune function: Toward an animal model of acute stress disorder"* (2001).

- Texas Christian University Research Fund, Grant # 60213 (\$ 3,026).
"Emotional modulation of immune function" (2000).
- Texas Christian University Research Fund, Grant # 60171 (\$ 3,088).
"Comparative analysis of learning" (1997).
- Japan Society for the Promotion of Science (\$ 12,000).
"Emotional regulation of learning" (1997).
- Texas Christian University Research Fund, Grant # 5-23625 (\$ 3,005).
"Frustration and timing in pigeons" (1996).
- Texas Christian University Research Fund, Grant # 5-23832 (\$ 1,860).
"Pituitary-adrenal modulation of stress-induced behavior in rats" (1995).
- Texas Christian University Research Fund, Grant # 5-23756 (\$ 2,186).
"Effects of serotonergic compounds on stress-induced behavior in pigeons" (1994).
- Texas Christian University Research Fund, Grant # 5-23710 (\$ 2,600).
"Mechanisms of Contextual Conditioning" (1992).
- Texas Christian University Research Fund, Grant # 5-23622 (\$ 3,489).
"Mechanisms of Reinforcement Anticipation in Marsupials" (1986).
- National Council for Scientific and Technological Research, Argentina (approximately \$ 5,000).

Visiting Scientists

- Arjol-Echeverría, D., University of Seville, Spain, 2023 (3 months).
Rodríguez-Agüera, A., University of Jaén, Spain, 2023 (3 months).
Ogallar, P., University of Jaén, Spain, 2022 (1 year).
Puddington, M., University of Buenos Aires, Argentina, 2018 (4 months).
Donaire, R., University of Jaén, Spain, 2018 (3 months).
Ortega, L., National University of Colombia, Colombia, 2016 (3 months).
Kawasaki, K., Hoshi University, Japan, 2013 (1 year).
Cuenya, L., University of Buenos Aires, Argentina, 2012 (6 months).
Torres, C., University of Jaén, Spain, 2012 (3 months).
Prado-Rivera, M., National University of Colombia, Colombia, 2010 (3 months).
Cárdenas, C., National University of Colombia, Colombia, 2010 (3 months).
Lopez-Seal, F., University of Buenos Aires, Argentina, 2008 (3 months).
Pérez-Acosta, A. M., University del Rosario, Colombia, 2005 (3 months).
Pellegrini, S., University of Buenos Aires, Argentina, 2003 (1 year).
Muzio, R., University of Buenos Aires, Argentina, 2002 (3 months).
Arias, M., University of Seville, Spain, 2001 (3 months).

Graduate Dissertations and Theses Directed

- Hagen, Christopher (PhD, TCU) 2024.
Guarino, Sara (Master's Degree, TCU, 2017; Ph.D. Psychology, TCU) 2021.
Conrad, Shannon (Master's Degree, TCU, 2016).
Thompson, Joanna (Master's Degree, TCU, 2016; Ph.D. Psychology TCU) 2019.
Annicchiarico, Ivan (Master's Degree, TCU) 2016.
Glueck, Amanda C. (Master's Degree, TCU, 2012; Ph.D. Psychology, TCU) 2015.

Ortega, Leonardo A. (Master's Degree, TCU, 2008; Ph.D. Psychology, TCU) 2011.
 Justel, Nadia (Doctorate in Psychology, University of Cordoba; co-director) 2010.
 Norris, Jacob N. (Master's Degree, Psychology, TCU, 2007; Ph.D. Psychology, TCU) 2009.
 Ruetti, Eliana (Doctorate in Psychology, University of Cordoba; co-director) 2009.
 Daniel, Alan M. (Master's Degree, 2005; Ph.D. Psychology, TCU) 2008.
 Kamenetzky, Giselle (Doctorate in Psychology, University of Cordoba; co-director) 2008.
 Wood, Michael D. (Ph.D., Psychology, TCU), 2006.
 Bentosela, Mariana (Doctorate in Psychology, University of Buenos Aires; co-director) 2006.
 Pellegrini, Santiago (Doctorate in Psychology, University of Buenos Aires; co-director) 2005.
 Boughner, Robert L. (Ph.D., Psychology, TCU) 2003.
 Mustaca, Alba E. (Doctorate in Psychology, University of San Luis; co-director) 2001.
 Thomas, Brian L. (Master's Degree, 1997; Ph.D. Psychology, TCU) 2001.
 Stout, Steven (Master's Degree, 1998; Ph.D. Psychology, TCU) 2001.
 Castro, Eugene (Master's Degree, TCU) 2000.
 Muzio, Ruben N. (Doctorate in Biology, University of Buenos Aires; co-director) 1995.
 Dudley, Robert T. (Ph.D. in Psychology, TCU) 1994.
 Wilner, Eduardo (Licentiate in Biology, Caece University, Buenos Aires) 1985.
 Ramallo, Patricia (Licentiate in Biology, Caece University, Buenos Aires) 1985.
 Cassini, Marcelo (Licentiate in Biology, University of Buenos Aires) 1984.
 Dunayevich, Bernardo (Licentiate in Biology, Caece University, Buenos Aires) 1984.
 Yorio, Pablo (Licentiate in Biology, University of Buenos Aires) 1984.

Reviewer for Journals, Universities, and Grant Agencies

Acta Biologica Colombiana, 2009.
Animal Behaviour, 2008-09.
Animal Cognition, 2011, 2014, 2018.
Animal Learning and Behavior, 1988, 1992-96, 1998, 2000.
Asociacion Argentina de Ciencias del Comportamiento, 2011.
Avances en Psicologia Latinoamericana, 2007.
Behavior Research Methods, Instruments, & Computers, 1995.
Behavioral Neuroscience, 1993, 1998.
Behavioural Brain Research, 2007-08, 2012-14, 2016-17, 2020.
Behavioural Processes, 2007, 2009-11, 2013-14, 2019.
Bowling Green State University, Academic Review Committee (external reviewer), 2021.
Brain Research, 2012.
Columbia University Press, 2008.
Developmental Psychobiology, 2016, 2020.
Emotion, 2010.
Ethology, 1998.
Frontiers in Behavioral Neuroscience, 2021.
Georgia State University, Department of Psychology Academic Review Committee (external reviewer), 2004.
Hormones and Behavior, 2008.
Instituto de Investigacion Medica M. & M. Ferreyra, Conicet, Cordoba, Argentina (external reviewer), 2010.

Interamerican Journal of Psychology, 1986.
International Journal of Comparative Psychology, 1998. 2006-07, 2010-11, 2014, 2018.
Israel Science Foundation, 1994.
Journal of Comparative Psychology, 1995, 1997-98, 2011-12, 2015, 2023.
Journal of Experimental Psychology: Animal Behavior Processes or Animal Learning and Cognition, 1989, 1992-93, 2000, 2010, 2013, 2019, 2022-25.
Journal of the American Association for Laboratory Animal Science, 2007.
Journal of the Experimental Analysis of Behavior, 1994.
Kansas State University, Academic Review Committee (external reviewer), 2014.
La Trobe University, Department of Psychology, PhD Dissertation by Rolf U. Willig (external reviewer), Victoria, Australia, 1990.
Learning and Behavior, 2003, 2008, 2010, 2025.
Learning and Motivation, 1991, 1993-95, 1997, 2000-10, 2015, 2017-20, 2022.
Mexican Journal of Psychology, 2007.
M. J. Murdock Charitable Trust, Life Sciences proposal, 2011.
National Council for Scientific and Technological Research (Argentina), Psychology Fellows (external reviewer), 1987.
National Institutes of Health, 2004-06.
National Science Foundation, 1991, 1993, 1995, 1999, 2000, 2006-07.
Neurobiology of Learning & Memory, 2020, 2023.
Neuroscience, 2017.
Oklahoma State University, Academic Review Committee (external reviewer), 1996.
Pearson Education, MyLab review, 2012.
Perceptual and Motor Skills, 1997, 2011.
Physiology and Behavior, 2006, 2011, 2019, 2021, 2024.
Psicologica, 2011.
Psychological Bulletin, 1994, 1996.
Psychological Medicine, 2025.
Psychological Review, 2003.
Psychonomic Bulletin & Review, 2019.
Quarterly Journal of Experimental Psychology, 2000.
Revista de Historia de la Psicología, 2019.
Routledge Publishing, Handbook of Comparative Psychology, by A. R. Ridley, P. d'Ettorre, & T. M. Freeberg (reviewer), 2020.
Saint Joseph's University, Academic Review Committee (external reviewer), 2017.
Thomas F. and Kate Miller Jeffress Memorial Trust, research proposal, 2006.
Tufts University, Academic Review Committee (external reviewer), 1998.
University of California, Los Angeles, Academic Review Committee (external reviewer), 2007, 2012.
University of Evansville, Academic Review Committee (external reviewer), 2023.
University of Guelph, Canada, Academic Review Committee (external reviewer), 2013.
University of Hawaii at Manoa, Academic Review Committee (external reviewer), 1996, 2001, 2004.
University of Jaen, Spain, PhD Dissertation by Marta Sabariego (committee chair), 2013.
University of Seville, Spain, PhD Dissertation by M. F. Arias Holgado (external reviewer), 1999.
University of Seville, Spain, PhD Dissertation by M. Reiriz Rojas (external reviewer), 2017.

University of Seville, Spain, PhD Dissertation by A. Mena (external reviewer), 2017.
University of Seville, Spain, PhD Dissertation by A. Jimenez Soto (external reviewer), 2019.
University of Seville, Spain, PhD Dissertation by Juan C. Ruiz Salas (external reviewer), 2020.
University of Texas at Austin, Department of Psychology, PhD Dissertation by M. B. Burns (external reviewer), 1999.
University of Texas at San Antonio, Academic Review Committee (external reviewer), 2020.
University of Western Australia, Department of Psychology, PhD Dissertation by Kathryn Bonney (external reviewer), 2002.

Membership to Professional Organizations

American Psychological Association (Fellow, 2002; Member, 1996-2024), Division 6, Behavioral Neuroscience and Comparative Psychology. Chair of Division 6 Membership Committee, 1999-2000. Chair of Division 6 Awards Committee, 2006-2007. President of Division 6, 2011-2012.
International Society for Comparative Psychology (Member since 1983; Secretary: 1984-1988; Treasurer, 1996-2000, President-elect, 2006-2008, President, 2008-2010).
Society for Neuroscience (Member since 2007).

Professional Honors

D. O. Hebb Distinguished Scientific Contributions Award, American Psychological Association, Division 6 Society for Behavioral Neuroscience and Comparative Psychology, Washington DC, August, 2023.
Fulbright US Scholar Award, to collaborate with the graduate programs in psychology, University of Jaen, Spain, February-June, 2015.
Honorary member, Argentinean Association for Behavioral Sciences, for distinguished scientific contributions. Tucuman, Argentina, 2015.
College of Science and Engineering 2015 Award for Distinguished Achievement as a Creative Teacher and Scholar, Texas Christian University, 2014.
College of Science and Engineering 2014 Award for Distinguished Achievement as a Creative Teacher and Scholar, Texas Christian University, 2014.
President, *American Psychological Association, Division 6 (Behavioral Neuroscience and Comparative Psychology)*, 2011-12.
President, *International Society for Comparative Psychology*, 2008-10.
Editor, *International Journal of Comparative Psychology*, 2000-2005.
Associate Editor, *Learning and Motivation*, since 2000.
Associate Editor, *International Journal of Psychology and Psychological Therapy*, since 2012.
Consulting Editor, *Archives of Scientific Psychology*, 2012-2015.
Member of the Editorial Board, *Mexican Journal of Psychology*, since 2006.
Member of the Editorial Advisory Board, *Apuntes de Psicología*, since 1998.
Member of the Editorial Committee, *Revista Latinoamericana de Psicología*, since 2006.
Member of the Board of Editors, *International Journal of Psychology and Psychological Therapy*, 2001-2012.
Member of the Editorial Board, *Revista Colombiana de Psicología*, since 2009.
Member of the Editorial Advisory Board, *International Journal of Comparative Psychology*,

1996-2000.

Member of the Scientific Board, *Revista Colombiana de Psicología*, since 2006.

Elected Fellow of the American Psychological Association “in recognition of outstanding and unusual contributions to the science and profession of psychology,” 2002.

Program Chair, 12th Biennial Meeting, International Society for Comparative Psychology, University of Oviedo, Spain, 2004.

Program Chair, 1996 Annual Convention, Southwestern Comparative Psychology Association, Houston, TX, 1996.

Award Encouragement to Scientific Research, University of Buenos Aires, Argentina, 1979.