

Publications

Research papers

- Burkhardt, J.M., Jin, X, Hilário, M.R.F., Holloway T., and **Costa R.M** (2008). Dissociable effects of dopamine on the firing rate and synchrony of striatal ensembles. **Submitted**.
- Dias-Ferreira, E., Sousa, J.C., Mesquita, A.R., Cerqueira J.J., **Costa, R.M.** Sousa N. (2008). Chronic stress causes frontostriatal reorganization and impairs decision making. **Submitted**.
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- Cui, Y., **Costa R. M.**, Murphy G. G., Elgersma, Y., Zhu, Y., Gutmann, D.H., Parada, L.F., Mody, I., Silva A. J. (2008). Neurofibromin regulation of Ras/ERK signaling modulates GABA release and learning. **Cell**, 31;135(3):549-60.
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- Hilario, M.R.F., Clouse, E., Yin, H.H., **Costa, R.M.** (2007). Endocannabinoid signaling is critical for habit formation. **Frontiers in Integrative Neuroscience**. 1:6, doi: 10.3389/neuro.07/006.2007.
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- **Costa, R.M.**, Gutierrez, R., Kloth, A., Coelho, M.R.P., de Araujo, I.E., Gainetdinov, R.R., Caron, M.G., Nicolelis M.A.L., Simon, S.A. (2007). Dopamine levels modulate the updating of tastant values. **Genes, Brain and Behavior**, **6(4):314-20.**
- Nagy, V., Bozdagi, O., Matynia, A., Balcerzyk, M., Okulski, P., Dzwonek, J., **Costa, R.M.**, Silva, A. J., Kaczmarek, L., and Huntley G. W. (2006). Matrix metalloproteinase (MMP)-9 is required for hippocampal late-phase LTP and memory. **Journal of Neuroscience**, **26**: 1923-1934.
- **Costa, R.M.**, Liu, L., Nicolelis, M.A.L., Simon, S.A. (2005). Gustatory Effects of Capsaicin that are Independent of TRPV1 Receptors. Proc. ISOT XIV, **Chemical Senses**, **30** S1:i198-i200.

- Israely, I., **Costa, R.M.**, Silva, A.J., Kosik, K., Liu, X. (2004). Deletion of the neural specific protein Delta-Catenin leads to severe cognitive and synaptic dysfunction. **Current Biology**, **14(18)**:1657-63.
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Review papers

- Hilário, M.R.F and **Costa, R.M.** (2008). High on Habits. **Frontiers in Neuroscience**, **2,2**:208-21
- Wickens, J.R., Horvitz, J.C., **Costa, R.M.**, Killcross, S. (2007). Dopaminergic mechanisms in actions and habits. **Journal of Neuroscience**, **27**:8181-3

- **Costa, R.M.**, (2007). Plastic corticostriatal circuits for action learning: What's dopamine got to do with it? In: Reward and Decision Making in Corticobasal Ganglia Networks **Annals of the New York Academy of Sciences**, **1104**:172-91.
- **Costa, R.M.**, Drew, C. and Silva, A.J. (2005). To Remember or Notch to Remember. **Trends in Neurosciences**, **28**, 429-35.
- **Costa, R.M.** and Silva, A.J. (2003). Mouse models of Neurofibromatosis type I: Bridging the GAP. **Trends in Molecular Medicine**, **9**, 19-23.
- Frankland, P.W., Ohno M., Takahashi, E., Chen, A.P., **Costa R.M.**, Kushner, S.A. and Silva, A.J. (2003). Synomics: Pharmacologically Regulated Induction of Silent Mutations (PRISM): Combined pharmacological and genetic approaches for learning and memory. **The Neuroscientist**, **9**:104-9.
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Book Chapters and Monographs

- **Costa, R.M.**, and Silva, A.J. (2004). Learning Deficits associated with NF1: from models to therapies. in **Neurofibromatose: Clínica, Genética e Terapêutica**, Ed. Mauro Geller, Editora Guanabara Koogan SA, Rio de Janeiro, Brazil (Portuguese).
- **Costa, R.M.**, Elgersma, Y. and Silva, A.J. (2003). Modeling cognitive disorders: from genes to therapies. in **Genetics and Genomics of Neurobehavioral Disorders**, Ed. Gene Fisch, Humana Press, Totowa, NJ, USA
- **Costa, R.M.** (2002). Molecular and cellular mechanisms of cognitive dysfunction in Neurofibromatosis type I. **Thesis**. Abel Salazar Biomedical Institute, University of Porto, Portugal.