

## Kauê Machado Costa, PhD

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### PROFESSIONAL EXPERIENCE

- 2024-Present **Assistant Professor**, Department of Psychology, University of Alabama at Birmingham (UAB)
- 2018-2023 **Postdoctoral visiting fellow**, NIDA Intramural Research Program, NIH
- 2018 **Postdoctoral research assistant**, Goethe University
- 2013-2018 **Graduate research assistant**, Goethe University

### EDUCATION

- 2012-2018 **PhD, Neuroscience**, Max Planck Institute for Brain Research and Goethe University
- 2010-2012 **MSc, Physiology**, School of Medicine of Ribeirão Preto (FMRP), University of São Paulo (USP)
- 2006-2010 **BS, Biological Sciences**, Institute of Biological Sciences, Federal University of Pará (UFPA)

### ADDITIONAL ACADEMIC APPOINTMENTS

- 2025-Present **Collaborating Professor**, Neuroscience and Cell Biology Graduate Program, UFPA
- 2024-Present **Assistant Professor (secondary)**, Department of Neurobiology, UAB
- 2024-Present **Assistant Professor (secondary)**, Department of Electrical & Computer Engineering, UAB
- 2024-Present **Assistant Professor (secondary)**, Graduate School, UAB
- 2024-Present **Associate Scientist**, Comprehensive Neuroscience Center, UAB
- 2024-Present **Associate Scientist**, Civitan International Research Center, UAB
- 2024-Present **Associate Scientist**, McKnight Brain Institute, UAB
- 2024-Present **Associate Scientist**, Center for Neuroengineering and Brain-Computer Interfaces, UAB
- 2024-Present **Associate Scientist**, Center for Addiction and Pain Prevention and Intervention, UAB
- 2024-Present **Associate Scientist**, Killion Center for Neurodegeneration and Experimental Therapeutics, UAB

### FUNDING

- 2025-2027 **Impact Award**, Parkinson's Foundation. Role: PI
- 2025-2027 **Brazil Knowledge Program: support for cooperative projects with Brazilian researchers working abroad**, 445139/2024-2, National Council for Scientific and Technological Development (CNPQ). Role: Co-I
- 2025-2027 **NARSAD Young Investigator Grant**, Brain and Behavior Research Found. Role: PI
- 2025 **UAB Summer Research Academy Scholarship**. Role: Host mentor
- 2024 **Pilot Grant**, UAB Center for Neuroengineering and Brain-Computer Interfaces. Role: PI
- 2024 **Visiting Scholar Award**, Parkinson's Foundation. Role: Host mentor (*Declined due to student illness*)
- 2024-2027 **IMPACT award for outstanding faculty recruitment**, UAB Heersink School of Medicine, Role: PI
- 2022-2027 **K99/R00 Pathway to Independence Award**, R00DA055641, NIDA/NIH, Role: PI
- 2019-2023 **Postdoctoral fellowship**, MA 8509/1-1, German Research Foundation (DFG), Role: Fellow
- 2012-2013 **Doctoral graduate fellowship**, Max Planck Society, Role: Fellow
- 2010-2012 **Master graduate fellowship**, Coordenação for the Improvement of Higher Education Personnel (CAPES), Role: Fellow
- 2006-2010 **Scientific Initiation fellowship**, CNPQ, Role: Fellow

## AWARDS AND HONORS

2023	<b>Harvard INCEPT seminar series speaker</b> , Harvard University Medical School
2022	<b>Next Generation Leader</b> , Allen Institute
2022	<b>Paper featured in collection: “Top 100 in Neuroscience”</b> , Scientific Reports
2022	<b>Exceptional poster award</b> , Gordon Research Conference - Basal Ganglia
2021	<b>Fellows Award for Research Excellence</b> , NIH
2021	<b>*Psychology &amp; Brain Sciences Early Career Colloquium speaker</b> , Johns Hopkins University
2021	<b>Baltimore Brain Series speaker</b> , Baltimore Brain Series
2021	<b>Outstanding poster award</b> , NIDA Poster Day, NIDA
2021	<b>NIDA Director’s Award of Merit for Collaboration</b> , NIDA
2021	<b>Intersections Science Associate</b> , Yale School of Medicine
2020	<b>Trainee Professional Development Award</b> , Society for Neuroscience
2020	<b>Exceptional oral presentation award</b> , Brazilian Symposium of Neurosciences
2020	<b>Travel Grant</b> , F1000Prime
2019	<b>Exceptional poster award</b> , Annual Meeting of the Baltimore SFN Chapter
2019	<b>Travel Grant</b> , F1000Prime
2018	<b>GRADE Center Brain award for best interdisciplinary poster</b> , Rhine-Main Neuroscience Network
2018	<b>Travel grant</b> , German Academic Exchange Service – DAAD
2018	<b>“Fruits of Ethology” Seminar speaker</b> , Eötvös Loránd University
2017	<b>Invited to present to the Brazilian Consul in Frankfurt at the Diplomaten-Matinée Brasilien</b> , Goethe University and the Brazilian Consulate
2017	<b>Trainee Professional Development Award</b> , Society for Neuroscience
2017	<b>Travel grant</b> , Association of Friends and Patrons of the Goethe University
2017	<b>Best oral presentation award</b> , Barcelona Young Neuroscientists Symposium
2017	<b>Travel grant</b> , Barcelona Young Neuroscientists Symposium
2016	<b>Exceptional poster award</b> , Annual meeting of the German Physiological Society
2012	<b>Exceptional poster award</b> , Brazilian Symposium of Cardiovascular Physiology
2011	<b>Exceptional poster award</b> , Brazilian Symposium of Cardiovascular Physiology
2010	<b>Award for highest final GPA of their graduating class</b> , Federal University of Pará
2008	<b>Exceptional poster award</b> , Annual Meeting of the Brazilian Fed. of Experimental Biology Societies
2006	<b>Highest score in the biol. sciences admissions process</b> , Federal University of Pará
2003	<b>José Márcio Ayres award for young naturalists</b> , Emílio Goeldi Museum

## TEACHING

2025	<b>Instructor, PY792-SAB/PY420-SAB: Introduction to Neurobiology</b> , BNS Graduate Program, UAB
2024-Present	<b>Instructor, PY253: Brain, Mind and Behavior</b> , Psychology Undergraduate Program, UAB
2024	<b>Invited facilitator, GRD717: QL Principles of Scientific Integrity</b> , Graduate School, UAB
2024	<b>Guest lecturer, PY756: Research Seminar in Behavioral Neuroscience</b> , BNS Grad. Prog., UAB
2021-2022	<b>Instructor, Methods in Neuroscience</b> , <i>In vivo ephys and fiber photometry</i> , NIDA
2019	<b>Instructor, Methods in Neuroscience</b> , <i>Neural Circuits: In vivo</i> , NIDA
2015-2018	<b>Teaching assistant, Modern Topics in Neuroscience</b> , <i>Module: Reward systems and motivation</i> , Max Planck Institute for Brain Research
2011	<b>Teaching assistant, Physiology Summer Course</b> , Department of Physiology, FMRP, USP

## LEADERSHIP AND INSTITUTIONAL SERVICE

2025-Present	<b>Member, Department of Psychology Strategic Development Research Pillar Subcommittee:</b> discusses and proposes strategies for expanding research activity in the UAB Dep. of Psychology.
2025	<b>Poster judge, KCNET research retreat:</b> judged trainee poster presentations.
2024-Present	<b>Steering Committee member, Civitan International Research Center, UAB:</b> consults and votes on programmatic decisions taken by the center, reviews and scores applications for grants and fellowships funded by the center.
2024-Present	<b>Steering Committee member, Behavioral Neuroscience Graduate Program, UAB:</b> selects applicants for the graduate program, advises on program policies and issues.
2024-Present	<b>Career Coach, Roadmap Scholars Program, UAB:</b> provides career coaching for students that are URM or are from disadvantaged backgrounds.
2024-Present	<b>Review Board Member, Iniciativa Proxima:</b> reviews applications for the initiative, which provides professional mentorship for young Brazilian scientists.
2024-Present	<b>Director, Dopamine+ club, UAB:</b> organizes discussions and meetings with dopamine-focused faculty at UAB
2022-Present	<b>Next Generation Leader, Allen Institute:</b> showcases Allen Institute projects to key partners, participates in the Allen Institute scientific advisory council and the NGL selection process, advises on internal policies, procedures, and research.
2022-Present	<b>Founding Member, Dopamine Society:</b> volunteer for organizing committees.
2019-Present	<b>Associate Faculty, H1 connect:</b> provides post-hoc commentaries on key papers.
2021-2023	<b>Director, Baltimore Brain Series:</b> coordinated the selection process, advertisement, scheduling, and hosting of a competitive seminar series.
2020-2023	<b>Member, "Return to Physical Workspaces" committee, NIDA IRP:</b> represented trainee interests, coordinated surveys, and voted on COVID-19 safety policies ( <i>Awarded NIDA Director's Award of Merit for Collaboration</i> ).
2019-2022	<b>Member, NIDA Postdoc Advisory Board:</b> advocated for trainee interests, helped organized events and initiatives to further trainee professional development.
2018-2021	<b>Organizing committee member, Baltimore Brain Series:</b> voted in the selection process, organized talks, and lead discussions for a competitive seminar series.
2019-2020	<b>Reviewer, NIDA Summer Research Internship Program:</b> judged applications for a competitive educational scholarship program.
2020	<b>Poster judge, NIH Postbac Poster Day:</b> judged trainee poster presentations.
2019	<b>Poster judge, NIDA Summer Internship Poster Day:</b> judged trainee poster presentations.
2012-2014	<b>Student representative, MPI-BR student activity organization committee:</b> organized community building events and advocated for trainee interests.
2007-2008	<b>Member, Biological Sciences Student Union, Federal University of Pará:</b> organized community building events, coordinated student card production and allocation, advocated for trainee interests.
2007	<b>Student volunteer, International Color Vision Society Symposium:</b> participated in the organization of the annual meeting of the society.
2006	<b>Student volunteer, Brazilian Society for the Advancement of Science:</b> helped organize the annual meeting of the society.

## EDITORIAL AND PEER REVIEW SERVICE

### *Editorial board member*

Scientific Reports

### *Journal peer review*

*Primary:* Nature Communications, Current Biology, eLife, PLOS Biology, Neuron, eNeuro, Cell Reports, Cerebral Cortex, Neuropsychopharmacology, Current Opinion in Behavioral Sciences, Progress in Neurobiology, Brain Structure and Function, Journal of Neurophysiology, Behavioral Neuroscience, Neuroscience Letters, Scientific Reports, Journal of Neuroscience Research, Ageing Research Reviews, iScience

*Co-reviewer:* Nature, Nature Neuroscience, Nature Reviews Neuroscience, PNAS, Frontiers in Neural Circuits, Brazilian Journal of Medical and Biological Research

### *NIH study sections*

*Ad hoc reviewer:* Pathophysiological Basis of Mental Disorders and Addictions (PMDA), Biobehavioral Regulation, Learning and Ethology (BRLE)

### *Other grants and awards*

*Primary reviewer:* Human Frontier Science Program Postdoctoral Fellowship, UAB Civitan Emerging Scholar Award, UAB Civitan McNulty Award, Allen Institute Next Generation Leader selection process

*Co-reviewer:* Helmholtz Association of German Research Centers, DFG Emmy Noether Programme

## INVITED TALKS AND LECTURES

- 2025      **Invited talk**, Goethe University, Frankfurt am Main, Germany
- 2025      **Invited talk**, University of Oxford, Oxford, UK
- 2025      **Brain and Behavior Group Seminar**, Department of Psychology, Uni. of Sydney, Sydney, Australia
- 2025      **Behavioural Neuroscience Research Seminar**, Department of Psychology, UNSW, Sydney, Australia
- 2024      **Departmental Seminar**, Department of Cell Biology and Anatomy, LSU, New Orleans, LA, USA
- 2024      **Sci-Fri Lecture**, Division of Neuroscience and Behavior, NIDA, virtual, USA
- 2024      **Lunch Talk**, Roadmap Scholars Program, UAB, Birmingham, AL, USA
- 2024      **WIPS seminar lecture**, Department of Neurobiology, UAB, Birmingham, AL, USA
- 2024      **Invited talk**, Department of Electrical and Computer Engineering, UAB, Birmingham, AL, USA
- 2023      **INCEPT Seminar**, Harvard Medical School, Cambridge, MA, USA
- 2023      **Invited talk**, Department of Neuroscience, Yale University, New Haven, CT, USA
- 2023      **Invited talk**, Department of Cognitive Linguistic & Psychological Sciences, Brown University, Providence, RI, USA
- 2023      **Invited talk**, Department of Psychological and Brain Sciences, Dartmouth University, virtual, USA
- 2023      **Invited talk**, Department of Neuroscience, University of Pittsburgh, Pittsburgh, PA, USA
- 2023      **Invited talk**, Department of Neurobiology and Behavior, SUNY Stony Brook, Stony Brook, NY, USA
- 2022      **Invited talk**, Department of Psychology, Tufts University, Boston, MS, USA
- 2022      **Invited talk**, Department of Neuroscience, UF Scripps Institute, Jupiter, FL, USA
- 2022      **Invited talk**, Department of Psychology, University of Maryland, College Park, MD, USA
- 2022      **Invited talk**, Department of Molecular, Cellular, & Developmental Biology, Uni. of Michigan, virtual, USA
- 2022      **Invited talk**, Department of Neuroscience, University of Florida, Gainesville, FL, USA
- 2022      **Invited talk**, Department of Psychology, UAB, Birmingham, AL, USA
- 2022      **Institutional Seminar**, Cellular Physiology Institute, Universidad Nacional Autónoma de México, virtual, Mexico
- 2022      **Invited talk**, Department of Psychology, Concordia University, Montreal, Canada

- 2022 **Early Career Colloquium**, Department of Psychology and Brain Sciences, Johns Hopkins University, Baltimore, MD, USA
- 2022 **Brain Week Public Lecture**, Federal University of Pará, virtual, Brazil
- 2022 **Bheja Fry Public Lecture**, The Mind Gala/Project Encephalon, virtual, India
- 2021 **Baltimore Brain Series**, University of Maryland, Baltimore, MD, USA
- 2019 **Invited talk**, Kuchibhotla Lab, Johns Hopkins University, Baltimore, MD, USA
- 2018 **“Fruits of Ethology” Seminar**, Eötvös Loránd University, Budapest, Hungary
- 2017 **Scientific seminar for the Brazilian Consul - Diplomaten-Matinée Brasilien**, Goethe University and the Brazilian Consulate at Frankfurt am Main, Germany
- 2017 **Young Investigators Colloquium**, Interdisciplinary Center for Neuroscience, Frankfurt am Main, Germany
- 2016 **Invited talk**, Schoenbaum Lab, NIDA IRP, Baltimore, MD, USA
- 2016 **Invited talk**, Uchida Lab, Harvard University, Cambridge, MA, USA
- 2016 **Invited talk**, Lammel Lab, UC Berkeley, Berkeley, CA, USA
- 2014 **Invited talk**, Kandel Lab, Columbia University, New York, NY, USA

#### INVITED/FEATURED/PANEL CONFERENCE PRESENTATIONS

- 2025 **NeuroGateways Symposium**, pilot award speaker, Birmingham, AL, USA
- 2025 **Winter Conference for Neural Plasticity**, panel chair, Fiji
- 2024 **UAB Dopamine+ club**, inaugural speaker, Birmingham, AL, USA
- 2024 **UAB CNC Retreat**, featured new faculty speaker, Gunthersville, AL
- 2024 **Allen Institute career development seminar**, career workshop panelist, virtual, USA
- 2023 **Society for Neuroscience Meeting**, minisymposium talk, Washington D.C., USA
- 2023 **Iniciativa Proxima**, career workshop panelist, virtual, USA/Brazil
- 2024 **Allen Institute Showcase Symposium**, NGL section speaker, Seattle, WA, USA
- 2022 **Dopamine 2022**, panel talk, Montreal, Canada
- 2022 **Gordon Research Seminar - Basal Ganglia**, discussion leader, Ventura, CA, USA
- 2022 **Winter Conference on Brain Research**, panel talk, Snowmass, CO, USA

#### REGULAR CONFERENCE ORAL PRESENTATIONS

- 2024 **International Stress and Behavior Conference**, Yerevan, Armenia
- 2022 **Greater Baltimore SFN Chapter Meeting**, Baltimore, MD, USA
- 2022 **RLDM Conference**, Providence, RI, USA
- 2022 **Gordon Research Conference - Basal Ganglia**, Ventura, CA, USA
- 2021 **Baltimore Fellows Symposium**, virtual, Baltimore, MD, USA
- 2020 **Brazilian Symposium of Neurosciences**, virtual, Brazil (*Award*)
- 2018 **Gordon Research Seminar - Basal Ganglia**, Ventura, CA, USA
- 2017 **Barcelona Young Neuroscientists Symposium**, Barcelona, Spain (*Travel grant & award*)
- 2014 **German Physiological Society Meeting**, Mainz, Germany
- 2012 **IMPRS for Neural Circuits Selection Seminar**, MPI for Brain Research, Frankfurt, Germany
- 2012 **ENP Selection Seminar**, Ecole des Neurosciences de Paris, Paris, France
- 2009 **CNPQ Scientific Initiation Program Meeting**, Federal University of Pará, Belém, Brazil
- 2008 **CNPQ Scientific Initiation Program meeting**, Federal University of Pará, Belém, Brazil
- 2007 **CNPQ Scientific Initiation Program meeting**, Federal University of Pará, Belém, Brazil
- 2004 **International Migratory Birds Day meeting**, Belém, Brazil

## CONFERENCE POSTER PRESENTATIONS

- 2024 **Quadrennial Meeting on Orbitofrontal Cortex Function**, Paris, France
- 2024 **Gordon Research Conference - Basal Ganglia**, Ventura, CA, USA
- 2023 **Society for Neuroscience Meeting**, Washington D.C., USA
- 2022 **Conf. on Reinforcement Learning and Decision Making (RLDM)**, Providence, RI, USA
- 2022 **Gordon Research Conference - Basal Ganglia**, Ventura, CA, USA (*Award*)
- 2021 **Champalimaud Research Symposium**, virtual, Portugal
- 2021 **Virtual Dopamine (VIDA) Conference**, virtual, USA
- 2021 **NIDA Poster Day**, virtual, USA (*Award*)
- 2020 **SFN Global Connectome Meeting**, virtual, USA (*Award*)
- 2019 **Greater Baltimore SFN Chapter Meeting**, Baltimore, MD, USA (*Award*)
- 2018 **Gordon Research Conference - Basal Ganglia**, Ventura, CA, USA (*Travel grant*)
- 2018 **Rhine-Main Neuroscience Network Meeting**, Oberwesel, Germany (*Award*)
- 2018 **Society for Neuroscience Meeting**, San Diego, CA, USA
- 2017 **Society for Neuroscience Meeting**, Washington DC, USA (*Travel grant + award*)
- 2016 **Society for Neuroscience Meeting**, San Diego, CA, USA
- 2016 **German Physiological Society Meeting**, Lübeck, Germany (*Award*)
- 2014 **Society for Neuroscience Meeting**, Washington DC, USA
- 2012 **Brazilian Symposium of Cardiovascular Physiology**, Goiania, Brazil (*Award*)
- 2011 **Joint Meeting of International Society of Autonomic Neuroscience and American Autonomic Society**, Búzios, Brazil
- 2011 **Brazilian Symposium of Cardiovascular Physiology**, São Paulo, Brazil (*Award*)
- 2011 **Meeting of the Brazilian Fed. of Exp. Biology Societies**, Rio de Janeiro, Brazil
- 2009 **Meeting of the Brazilian Fed. of Exp. Biology Societies**, Águas de Lindóia, Brazil
- 2009 **National Oceanography Week**, Belém, Brazil
- 2008 **International Brain Research Organization - Latin American Regional Committee Congress of Neurosciences**, Búzios, Brazil
- 2008 **Meeting of the Brazilian Fed. of Exp. Biology Societies**, Águas de Lindóia, Brazil (*Award*)
- 2008 **Regional Meeting of the Brazilian Fed. of Exp. Biology Societies**, Fortaleza, Brazil

## PUBLICATIONS

### *Books and chapters*

1. **Costa K.M.**, Schoenbaum G. *Dopamine beyond temporal-difference reinforcement learning*. In: Walton M., Cragg, S. *The Dopamine Handbook*. (***In press***)

### *Pre-prints*

1. Zhang Z.\*, **Costa K.M.\***, Zhuo Y., Li G., Li Y., Schoenbaum G. *Accumbal acetylcholine signals associative salience*. **bioRxiv**, 2025.01.06.631529. *\*Co-first authors (in review)*
2. **Costa K.M.**, Hammer N., Knowlton C., Schwenk J., Müller T., Schulte D., Fakler B., Canavier C.C., Roeper J. *A biophysical regulator of inhibitory integration and learning in mesolimbic dopamine neurons*. **bioRxiv**, 344499 (***in review***)
3. Kovacheva L., Shin J., Zaldivar-Diez J., Mankel J., Farassat N., **Costa K.M.**, Thakur P., Obeso J., Roeper J. *Recovery of the full in vivo firing range in post-lesion surviving DA SN neurons associated with Kv4.3-mediated pacemaker plasticity*. **bioRxiv**, 2021.08.09.455657 (***in review***)

1. **Costa K.M.**, Shimbo A., Stalnaker T., Raheja N., Mirani J., Sercander C., Schoenbaum G. *Striatal dopamine signals errors in prediction across different informational domains*. **Science Advances**, 11, eadq9684, 2025.
2. **Costa K.M.\***, Zhang Z.\*, Zhuo Y., Li G., Li Y., Schoenbaum G. *Dopamine and acetylcholine correlations in the nucleus accumbens depend on behavioral task states*. **Current Biology**, 35, 6, 1400-1407. 2025 *\*Co-first authors*
3. Zong W., Zhou J., Gardner M.P.H., Zhang Z., **Costa K.M.**, Schoenbaum G. *Hippocampal output suppresses orbitofrontal cortex schema cell formation*. **Nature Neuroscience**, 28, 1048–1060, 2025.
4. Zhang Z., **Costa K.M.**, Langdon A.J., Schoenbaum G. *The devilish details affecting TDRL models in dopamine research*. **Trends in Cognitive Sciences**, 26:S1364-6613(25)00033-6, 2025
5. Lehmann C.M., Miller N.E., Nair V.S., **Costa K.M.**, Schoenbaum G., Moussawi K. *Generalized cue reactivity in dopamine neurons after opioids*. **Nature Communications**, 16, 321, 2025.
6. Chow J.J., Pitts K.M., Schoenbaum A., **Costa K.M.**, Schoenbaum G., Shaham Y. *Different effects of peer-sex on operant responding for social interaction and striatal dopamine activity*. **The Journal of Neuroscience**, 44(10): e1887232024, 2024. *Featured in "This Week in the Journal"*
7. Cunha B.M.L., Badarane E.B.L., Sousa Filho P.V.M.S., **Costa K.M.**, da Silva Filho M. *Dysfunctional suction dynamics in newborns with ankyloglossia*. **CoDAS**, 36 (2), 2024
8. **Costa K.M.**, Scholz R., Lloyd K., Moreno-Castilla P., Gardner M.P.H., Dayan P., Schoenbaum G. *The role of the lateral orbitofrontal cortex in creating cognitive maps*. **Nature Neuroscience**, 26, 107–115, 2023
9. Wilkinson C.S., Luján M.Á., Hales C., **Costa K.M.**, Fiore V.G., Knackstedt L.A., and Kober H. *Listening to the Data: Computational Approaches to Addiction and Learning*. **The Journal of Neuroscience**, 43 (45) 7547-7553, 2023
10. **Costa K.M.**, Schoenbaum G. *Dopamine*. **Current Biology**, 32(15), PR817-R824, 2022. *Featured Primer*
11. **Costa K.M.** *Neuroscience: finding the middle ground of behavioral (in)flexibility*. **Current Biology**, 32(5), R223–R225, 2022
12. **Costa K.M.**, Sengupta A., Schoenbaum G. *The orbitofrontal cortex is necessary for learning to ignore*. **Current Biology**, 31(12), 2652–2657, 2021
13. **Costa K.M.**, Schenkel D., Roeper J. *Sex-dependent alterations in behavior, drug responses and dopamine transporter expression in heterozygous DAT-Cre mice*. **Scientific Reports**, 11, 3334, 2021. *Featured in the "Top 100 in Neuroscience" special collection for 2021 (#22)*
14. **Costa K.M.**, Schoenbaum G. *Replication efforts have limited epistemic value*. **Nature**, 599 (7884), 201-201, 2021
15. **Costa K.M.**, Schoenbaum G. *Neuroscience: what, where and how wonderful?* **Current Biology**, 31(14), 3053-3072, 2021
16. **Costa K.M.**, Sengupta A. *Short-term scholar visas are essential for science*. **Neuropsychopharmacology**, 46, 277–278, 2021.
17. Koury G.V.H., Araújo F.C.R.S, **Costa K.M.**, da Silva Filho M. *A digital filter-based method for diagnosing speech comprehension deficits*. **Mayo Clinic Proceedings: Innovations, Quality & Outcomes**, 5(2), 241-252, 2021.
18. Farassat N., **Costa K.M.**, Albert S., Kovacheva L., Shin J., Somayaji M., Schneider G., Roeper J. *In vivo functional diversity of midbrain dopamine neurons within identified axonal projections*. **eLife**, 8: e48408, 2019.
19. Schwenk J, Boudkazi S, Kocylowski M.K., Brechet A, Zolles G, Bus T, **Costa K.M.**, Kollewé A, Jordan J, Bank J, Bildl W, Sprengel R, Kulik A, Roeper J, Schulte U, Fakler B. *An ER assembly line of AMPA-Receptors controls excitatory neurotransmission and its plasticity*. **Neuron**, 104(4):680-692.e9, 2019.
20. Ribeiro L.B., Rodrigues A.R., **Costa K.M.**, da Silva Filho M. *Quantification of textual comprehension difficulty with an information theory-based algorithm*. **Palgrave Communications (Humanities and Social Sciences Communications)**, 5 (1), 1-9, 2019.

21. Iotchev I.B., **Costa K.M.** *Animal cognition: quantity has a quality of its own.* **Animal Sentience**, 23(44), 2019.
22. Messer M., **Costa K.M.**, Roeper J, Schneider G. *Multi-scale detection of rate changes in spike trains with weak dependencies.* **Journal of Computational Neuroscience**, 42(2), 187–201, 2017.
23. de Macedo M.S.F.C., **Costa K.M.**, da Silva Filho M. *Voice disorder in systemic lupus erythematosus.* **PLoS One**, 12(4): e0175893, 2017.
24. **Costa K.M.** *The effects of aging on substantia nigra dopamine neurons.* **The Journal of Neuroscience**, 34 (46), 15133-15134, 2014.
25. **Costa K.M.**, Accorsi-Mendonça D., Moraes D.J., Machado B.H. *Evolution and physiology of neural oxygen sensing.* **Frontiers in Physiology**, 5:302, 2014.
26. Moraes D.J.A., Bonagamba L.G.H., **Costa K.M.**, Costa-Silva J.H., Zoccal D.B., Machado B.H. *Short-term sustained hypoxia induces changes in the coupling of sympathetic and respiratory activities in rats.* **The Journal of Physiology**, 592: 2013–2033, 2014.
27. Granjeiro É.M., Marroni S.S., Dias D.P.M., Bonagamba L.G.H., **Costa K.M.**, do Santos J.C., Oliveira J.A.C., Machado B.H., Garcia-Cairasco N. *Behavioral and cardiorespiratory responses to bilateral microinjections of oxytocin into the central nucleus of amygdala of Wistar rats, an experimental model of compulsion.* **PLoS One**, 9(7): e99284, 2014.
28. Lourenço B.M., **Costa K.M.**, da Silva Filho M. *Voice disorder in cystic fibrosis patients.* **PLoS One**, 9(5): e96769, 2014.
29. **Costa K.M.**, Moraes D.J.A., Machado B.H. *Acute inhibition of glial cells in the NTS does not affect respiratory and sympathetic activities in rats exposed to chronic intermittent hypoxia.* **Brain Research**, 1496, 36-48, 2013.
30. Tejada J.\*, **Costa K.M.\***, Bertti P.\*, Garcia-Cairasco N. *The epilepsies: complex challenges needing complex solutions.* **Epilepsy & Behavior**. 26(3), 212-228, 2013. *\*Co-first authors*
31. da Silva Filho M., Santos D.V., **Costa K.M.** *A new low cost wide-field illumination method for photooxidation of intracellular fluorescent markers.* **PLoS One**, 8(2): e56512, 2013.
32. Santos D.V., **Costa K.M.**, Vaz M.C.G., da Silva Filho M. *Relationships between dendritic morphology, spatial distribution and firing patterns in Layer I neurons.* **Brazilian Journal of Medical and Biological Research**, 45(12), 1221-1233, 2012.
33. Costa J.C., **Costa K.M.**, Nascimento J. L. M. *Scopolamine- and diazepam-induced amnesia are blocked by systemic and intraseptal administration of substance P and choline chloride.* **Peptides**, 31(9), 1756-1760, 2010.
34. Machado B.H., Moraes D.J.A., **Costa K.M.** *Highlights in basic autonomic neurosciences: Glia and neuromodulation.* **Autonomic Neuroscience: Basic & Clinical**, 156(1-2), 1-4, 2010.

Links to publications and additional information can be found on: <https://orcid.org/0000-0002-5562-6495> and <https://scholar.google.com/citations?user=ZKL2UG0AAAAJ&hl=en>