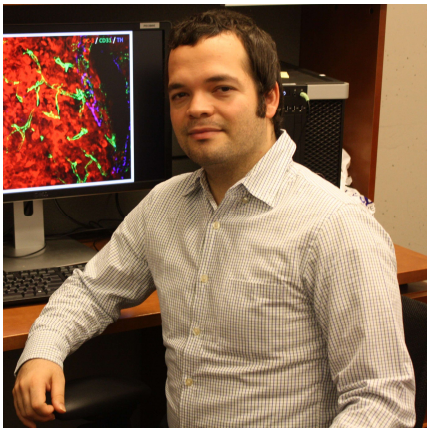
CURRICULUM VITAE (Updated on January 25, 2021)



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PERSONAL DETAILS

Date of birth: August 24, 1986
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Israeli Passport: 22577285; Greencard: USCIS# 207-495-554; Brazilian Passport: YC063246
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Additional personal information:
Marital status: Married with Veranika Ushakova (American, Accountant, CPA)
Children: Tamar (October 14, 2015) and Emuna (March 6, 2018).

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Mendeley: https://www.mendeley.com/profiles/alexander-birbrair/
Loop: https://loop.frontiersin.org/people/139729/overview
ResearchGate: https://www.researchgate.net/profile/Alexander_Birbrair2
Linkedin: https://www.linkedin.com/in/alexander-birbrair-07023686/?originalSubdomain=br
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Twitter: https://twitter.com/birbrairlab
Youtube: https://www.youtube.com/c/AlexanderBirbrair/featured

Global Young Academy: https://globalyoungacademy.net/abirbrair/
Brazilian Academy of Sciences: http://www.abc.org.br/membro/alexander-birbrair/

HIGHER EDUCATION

(2005 - 2009) **B.S.**, Biomedical Science, *Universidade Estadual de Santa Cruz, UESC*, Ilheus, Brazil, Field of Study: Genetics of microorganisms, Advisors: Rachel Passos Rezende, Ph.D. and Joao Carlos Teixeira Dias, Ph.D.

(2010 – 2014) **Ph.D.**, Neuroscience Program, *Wake Forest School of Medicine*, Winston-Salem, NC, USA, Field of Study: Stem cell biology, Advisor: Osvaldo Delbono, Ph.D., MD.
#1-14, 16 [Explanation: Items number 1-14 and 16 in the List of Publications resulted from this research.]

(2014 – 2016) **Posdoc**, *Albert Einstein College of Medicine*, Bronx, NY, USA, Field of Study: Stem cell biology, Host: Paul S. Frenette, MD.
#15, 17, 29 [Explanation: Items number 15, 17 and 29 in the List of Publications resulted from this research.]

POSITIONS AND EMPLOYMENTS

(2009 – 2010) **Research Scholar**, *Wake Forest School of Medicine*, Winston-Salem, NC, USA, Field of Study: Muscle biology, Advisor: Osvaldo Delbono, Ph.D, MD.

(2016 – 2019) **Professor**, Department of Pathology, *Federal University of Minas Gerais*, Belo Horizonte, MG, Brazil.

(2019 – present) **Tenured Professor**, Department of Pathology, *Federal University of Minas Gerais*, Belo Horizonte, MG, Brazil.

(2017 – present) **Visiting Professor**, Department of Radiology, *Columbia University Medical Center*, NY, USA.

AWARDS AND HONORS

2006. “Best poster (Genetic diversity between isolates of Chromobacterium violaceum) presented in the area of biological sciences during the XII Seminário de Iniciação Científica da Universidade Estadual de Santa Cruz – UESC, Ilhéus – Bahia.”

2008. “Metagenome of soil contaminated with petroleum.” Scholarship from : Fundação de Amparo à Pesquisa do Estado da Bahia (FAPESB), Brazil.

2012. Wake Forest University Graduate and Postdoctoral Students Research Day (Troponin T nuclear localization and its role in skeletal muscle aging) (12th annual competition) (First place) (Co-author)

2013. Awarded with the Glenn/AFAR Scholarship for Research in the Biology of Aging (https://glennfoundation.org/awards-programs/glennafar-scholarships-for-research-in-the-biology-of-aging/)

2014. Editor's choice in Journal of Gerontology Biological Sciences Volume 69 Issue 12 December 2014 for the manuscript "Human Slow Troponin T (TNNT1) Pre-mRNA Alternative Splicing is An Indicator of Skeletal Muscle Response to Resistance Exercise in Older Adults." by Zhang T, Choi SJ, Wang ZM, **Birbrair A**, Messi ML, Jin J-P, Marsh AP, Nicklas B, and Delbono O.

2014. Winner of 3-minute thesis (3MT) oral competition (2014 Fourteenth Annual Wake Forest University Graduate Student & Postdoc Research Day) (https://www.youtube.com/watch?v=tOaXWX8a3A4)

2015. Recipient of Gordon A. Melson Outstanding Doctoral Student Award for 2015

2017. Elected Affiliated Member of the Brazilian Academy of Sciences (http://www.abc.org.br/en/membro/alexander-birbrair/)

2017. Won the prestigious Instituto Serrapilheira Grant 2017-Call

2019. Elected Member of the Global Young Academy (https://globalyoungacademy.net/abirbrair/)

2019. Renewed the prestigious Instituto Serrapilheira Grant 2017-Call (1 million reals) (https://serrapilheira.org/en/serrapilheira-renews-support-for-researchers-with-r12-million-investment/)

2020. "Professor Tafuri Award" for the best Master Thesis in Pathology for Caroline Leonel under the mentorship of Dr. Alexander Birbrair

2020. CNPq Productivity Brazilian Fellowship (Bolsista de Produtividade em Pesquisa do CNPq - Nível 2)

LIST OF PUBLICATIONS

Complete List of Published Work in MyBibliography:
http://www.ncbi.nlm.nih.gov/pubmed/?term=Alexander+Birbrair

(1) **Birbrair A**, ZM Wang, ML Messi, GN Enikolopov and O Delbono. (2011). **Nestin-GFP transgene reveals neural precursor cells in adult skeletal muscle**. **PLoS One** 6:e16816. PMID: 21304812.
Impact Factor: 2.740

(2) Zhang T, **Birbrair A**, ZM Wang, J Taylor, ML Messi and O Delbono. (2013). **Troponin T nuclear localization and its role in aging skeletal muscle**. **Age (Dordr).** 35(2):353-70. PMID: 22189912.
Impact Factor: 4.648

(3) **Birbrair A**, T Zhang, ZM Wang, ML Messi, GN Enikolopov, A Mintz and O Delbono. (2013). **Skeletal muscle pericyte subtypes differ in their differentiation potential**. **Stem Cell Research** 10:67-84. PMID: 23128780.
Impact Factor: 4.489

(4) **Birbrair A**, T Zhang, ZM Wang, ML Messi, GN Enikolopov, A Mintz and O Delbono. (2013). **Skeletal muscle neural progenitor cells exhibit properties of NG2-glia**. **Experimental Cell Research** 319:45–63. PMID: 22999866.
Impact Factor: 3.383

(5) Zhang, T, **Birbrair, A**, and Delbono, O. (2013). **Nonmyofilament-Associated Troponin T3 Nuclear and Nucleolar Localization Sequence and Leucine Zipper Domain Mediate Muscle Cell Apoptosis. Cytoskeleton (Hoboken).** 70(3):134-47. PMID: 23378072.
Impact Factor: 1.700

(6) **Birbrair A**, T Zhang, ZM Wang, ML Messi, GN Enikolopov, A Mintz and O Delbono. (2013). **Role of Pericytes in Skeletal Muscle Regeneration and Fat Accumulation. Stem Cells and Development**. 22 (16): 2298-314. PMID: 23517218.
Impact Factor: 3.082
One of the Most Cited Articles of this journal
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(7) **Birbrair A**, T Zhang, ZM Wang, ML Messi, A Mintz and O Delbono. (2013). **Type-1 Pericytes Participate in Fibrous Tissue Deposition in Aged Skeletal Muscle. American Journal of Physiology-Cell Physiology**. 305 (11): C1098-C1113. PMID: 24067916.
Impact Factor: 3.485

(8) Zhang T, Choi SJ, Wang ZM, **Birbrair A**, Messi ML, Jin J-P, Marsh AP, Nicklas B, and Delbono O. (2014). **Human Slow Troponin T (TNNT1) Pre-mRNA Alternative Splicing is An Indicator of Skeletal Muscle Response to Resistance Exercise in Older Adults. Journals of Gerontology Series A-Biological Sciences and Medical Sciences**. 69(12):1437-47. PMID: 24368775.
Impact Factor: 5.236

(9) **Birbrair A**, Zhang T, Wang ZM, Messi ML, Olson JD, Mintz A and Delbono O. (2014). **Type-2 Pericytes Participate in Normal and Tumoral Angiogenesis. American Journal of Physiology-Cell Physiology**. 307 (1): C25-C38. PMID: 24788248.
Impact Factor: 3.485

(10) **Birbrair A**, Zhang T, Wang ZM, Messi ML, Mintz A and Delbono O. (2014). **Pericytes: Multitasking Cells in the Regeneration of Injured, Diseased, and Aged Skeletal Muscle. Frontiers in Aging Neuroscience**. 6:245. PMID: 25278877.
Impact Factor: 4.362

(11) **Birbrair A**, Zhang T, Files DC, Mannava S, Smith T, Wang ZM, Messi ML, Mintz A, Delbono O. (2014). **Type-1 pericytes accumulate after tissue injury and produce collagen in an organ-dependent manner. Stem Cell Research & Therapy**. 5(6):122. PMID: 25376879.
Impact Factor: 5.116

(12) Zhang T, **Birbrair A**, Wang ZM, Messi ML, Marsh AP, Leng I, Nicklas BJ, Delbono O. (2015). **Improved knee extensor strength with resistance training associates with muscle specific miRNAs in older adults. Experimental Gerontology**. 62:7-13. PMID: 25560803.
Impact Factor: 3.376

(13) **Birbrair A**, Zhang T, Wang ZM, Messi ML, Mintz A and Delbono O. (2015). **Pericytes at the intersection between tissue regeneration and pathology. Clinical Science**. 128(2): 81–93. PMID: 25236972.
Impact Factor: 5.223

(14) **Birbrair A** and Delbono O. (2015). **Pericytes are Essential for Skeletal Muscle Formation. Stem Cell Reviews and Reports**. 11(4):547-8. PMID: 25896402.
Impact Factor: 5.316

(15) Khan JA, Mendelson A, Kunisaki Y, **Birbrair A**, Kou Y, Arnal A, Pinho S, Ciero P, Nakahara F, Ma'ayan A, Bergman A, Merad M and Frenette PS. (2015) **Identification of a portal vessel-associated fetal liver hematopoietic stem cell niche. Science**. 351:176-180. PMID: 26634440.
Impact Factor: 41.845

(16) Zhang T, Pereyra AS, Wang ZM, **Birbrair A**, Reisz JA, Files DC, Purcell L, Feng X, Messi ML, Feng H, Chalovich J, Jin JP, Furdui C, Delbono O. (2016) **Calpain inhibition rescues troponin T3 fragmentation, increases Cav1.1, and enhances skeletal muscle force in aging sedentary mice. Aging Cell**. 15(3):488-98. PMID: 26892246.
Impact Factor: 7.238

(17) **Birbrair A** and Frenette PS. (2016). **Niche heterogeneity in the bone marrow. Annals of the New York Academy of Sciences**. 1370(1):82-96. PMID: 27015419.
Impact Factor: 4.728

(18) **Birbrair A**. (2016) **Learn new languages to get ahead. Nature Biotechnology**. 34:1073-1074. PMID: 27727214.
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(19) **Birbrair A**, Borges IDT, Gilson Sena IF, Almeida GG, da Silva Meirelles L, Gonçalves R, Mintz A, Delbono O. (2017) **How Plastic Are Pericytes? Stem Cells and Development**. 26(14):1013-1019. PMID: 28490256.
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(20) Sena IFG, Prazeres PHDM, Santos GSP, Borges IT, Azevedo PO, Andreotti JP, Almeida VM, Paiva AE, Guerra DAP, Lousado L, Souto L, Mintz A, **Birbrair A.** (2017) **LepR+ cells dispute hegemony with Gli1+ cells in bone marrow fibrosis. Cell Cycle**. 16(21):2018-2022. PMID: 28976809.
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(21) Paiva AE, Lousado L, Almeida VM, Andreotti JP, Santos GSP, Azevedo PO, Sena IFG, Prazeres PHDM, Borges IT, Azevedo V, Mintz A, **Birbrair A.** (2017) **Endothelial cells as precursors for osteoblasts in the metastatic prostate cancer bone. Neoplasia**. 19(11):928-931. PMID: 28957694.
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(22) Lousado L, Prazeres PHDM, Andreotti JP, Paiva AE, Azevedo PO, Santos GSP, Filev R, Mintz A, **Birbrair A**. (2017) **Schwann cell precursors as a source for adrenal gland chromaffin cells. Cell Death & Disease**. 8(10):e3072. PMID: 28981120.
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(23) Azevedo PO, Lousado L, Paiva AE, Andreotti JP, Santos GSP, Sena IFG, Prazeres PHDM, Filev R, Mintz A, **Birbrair A**. (2017) **Endothelial cells maintain neural stem cells quiescent in their niche. Neuroscience**. 363:62-65. PMID: 28893649.
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(24) Coatti GC, Frangini M, Valadares MC, Gomes JP, Lima NO, Cavaçana N, Assoni AF, Pelatti MV, **Birbrair A**, de Lima ACP, Singer JM, Rocha FMM, Da Silva GL, Mantovani MS, Macedo-Souza LI, Ferrari MFR, Zatz M. (2017) **Pericytes Extend Survival of ALS SOD1 Mice and Induce the Expression of Antioxidant Enzymes in the Murine Model and in IPSCs Derived Neuronal Cells from an ALS Patient. Stem Cell Reviews and Reports**. 13:686-698. PMID: 28710685.
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(25) Sena IFG, Prazeres PHDM, Santos GSP, Borges IT, Azevedo PO, Andreotti JP, Almeida VM, Paiva AE, Guerra DAP, Lousado L, Souto L, Mintz A, **Birbrair A**. (2017) **Identity of Gli1+ cells in the bone marrow. Experimental Hematology**. 54:12-16. PMID: 28690072.
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(26) Borges I, Sena I, Azevedo P, Andreotti J, Almeida V, Paiva A, Santos G, Guerra D, Prazeres P, Mesquita LL, Silva LSB, Leonel C, Mintz A, **Birbrair A.** (2017) **Lung as a Niche for Hematopoietic Progenitors. Stem Cell Reviews and Reports**. 13: 567-574. PMID: 28669077.
Impact Factor: 5.316

(27) Pereira LX, Viana CTR, Orellano LAA, Almeida SA, Vasconcelos AC, Goes AM, **Birbrair A**, Andrade SP, Campos PP. (2017) **Synthetic matrix of polyether-polyurethane as a biological platform for pancreatic regeneration. Life Sciences**. 176:67-74. PMID: 28336399.
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(28) Dias Moura Prazeres PH, Sena IFG, Borges IDT, de Azevedo PO, Andreotti JP, de Paiva AE, de Almeida VM, de Paula Guerra DA, Pinheiro Dos Santos GS, Mintz A, Delbono O, **Birbrair A**. (2017) **Pericytes are heterogeneous in their origin within the same tissue. Developmental Biology**. 427(1):6-11. PMID: 28479340.
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(29) Asada N, Kunisaki Y, Pierce H, Wang Z, Fernandez NF, **Birbrair A**, Ma'ayan A, Frenette PS. (2017) **Differential cytokine contributions of perivascular haematopoietic stem cell niches. Nature Cell Biology**. 19(3):214-223. PMID: 28218906.
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(30) **Birbrair A**, Sattiraju A, Zhu D, Zulato G, Batista I, Nguyen VT, Messi ML, Solingapuram Sai KK, Marini FC, Delbono O, Mintz A. (2017) **Novel Peripherally Derived Neural-Like Stem Cells as Therapeutic Carriers for Treating Glioblastomas. Stem Cells Translational Medicine**. 6(2):471-481. PMID: 28191774.
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(31) Andreotti JP, Lousado L, Magno LAV, **Birbrair A**. (2017) **Hypothalamic Neurons Take Center Stage in the Neural Stem Cell Niche. Cell Stem Cell**. 21(3):293-294. PMID: 28886362.
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(32) Azevedo PO, Paiva AE, Santos GSP, Lousado L, Andreotti JP, Sena IFG, Tagliati CA, Mintz A, **Birbrair A**. (2018) **Cross-talk between lung cancer and bones results in neutrophils that promote tumor progression. Cancer and Metastasis Reviews**. 37(4):779-790. PMID: 30203108.
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(33) de Alvarenga EC, Silva WN, Vasconcellos R, Paredes-Gamero EJ, Mintz A, **Birbrair A**. (2018) **Promyelocytic leukemia protein in mesenchymal stem cells is essential for leukemia progression. Annals of Hematology**. 97(10):1749-1755. PMID: 30069705.
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(34) Guerra DAP, Paiva AE, Sena IFG, Azevedo PO, Silva WN, Mintz A, **Birbrair A**. (2018) **Targeting glioblastoma-derived pericytes improves chemotherapeutic outcome. Angiogenesis**. 21(4):667-675. PMID: 29761249.
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(35) Azevedo PO, Sena IFG, Andreotti JP, Carvalho-Tavares J, Alves-Filho JC, Cunha TM, Cunha FQ, Mintz A, **Birbrair A**. (2018) **Pericytes modulate myelination in the central nervous system. Journal of Cellular Physiology**. 233(8):5523-5529. PMID: 29215724.
Impact Factor: 5.546
Cover of the journal (Volume 233, Number 8, August 2018)

(36) Silva WN, Leonel C, Prazeres PHDM, Sena IFG, Guerra DAP, Heller D, Diniz IMA, Fortuna V, Mintz A, **Birbrair A**. (2018) **Role of Schwann cells in cutaneous wound healing. Wound Repair and Regeneration**. 26(5):392-397. PMID: 30098299.
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(37) Sena IFG, Paiva AE, Prazeres PHDM, Azevedo PO, Lousado L, Bhutia SK, Salmina AB, Mintz A, **Birbrair A**. (2018) **Glioblastoma-activated pericytes support tumor growth via immunosuppression. Cancer Medicine**. 7(4):1232-1239. PMID: 29479841.
Impact Factor: 3.491

(38) Rodrigues ACZ, Messi ML, Wang ZM, Abba MC, Pereyra A, **Birbrair A**, Zhang T, O'Meara M, Kwan P, Lopez EIS, Willis MS, Mintz A, Files DC, Furdui C, Oppenheim RW, Delbono O. (2018) **The sympathetic nervous system regulates skeletal muscle motor innervation and acetylcholine receptor stability. Acta Physiologica**. 225(3):e13195. PMID: 30269419.
Impact Factor: 5.542

(39) Naik PP, **Birbrair A**, Bhutia SK. (2018) **Mitophagy-driven metabolic switch reprograms stem cell fate. Cellular and Molecular Life Sciences**. 76(1):27-43. PMID: 30267101.
Impact Factor: 6.496

(40) Santos GSP, Magno LAV, Romano-Silva MA, Mintz A, **Birbrair A**. (2019) **Pericytes plasticity in the brain. Neuroscience Bulletin**. 35(3):551-560. PMID: 30367336.
Impact Factor: 4.326

(41) Prazeres PHDM, Turquetti AOM, Azevedo PO, Barreto RSN, Miglino MA, Mintz A, Delbono O, **Birbrair A**. (2018) **Perivascular cell αv integrins as a target to treat skeletal muscle fibrosis. International Journal of Biochemistry & Cell Biology**. 99:109-113. PMID: 29627438.
Impact Factor: 3.673

(42) Andreotti JP, Paiva AE, Prazeres PHDM, Guerra DAP, Silva WN, Vaz RS, Mintz A, **Birbrair A**. (2018) **The role of natural killer cells in the uterine microenvironment during pregnancy. Cellular & Molecular Immunology**. 15(11):941-943. PMID: 29572543.

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(43) Andreotti JP, Prazeres PHDM, Magno LAV, Romano-Silva MA, Mintz A, **Birbrair A**. (2018) **Neurogenesis in the postnatal cerebellum after injury. International Journal of Developmental Neuroscience**. 67:33-36. PMID: 29555564.
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(44) Silva WN, Prazeres PHDM, Paiva AE, Lousado L, Turquetti AOM, Barreto RSN, de Alvarenga EC, Miglino MA, Gonçalves R, Mintz A, **Birbrair A**. (2018) **Macrophage-derived GPNMB accelerates skin healing. Experimental Dermatology**. 27(6):630-635. PMID: 29505115.
Impact Factor: 3.368
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(45) Costa MA, Paiva AE, Andreotti JP, Cardoso MV, Cardoso CD, Mintz A, **Birbrair A** [PI]. (2018) **Pericytes constrict blood vessels after myocardial ischemia. Journal of Molecular and Cellular Cardiology**. 116:1-4. PMID: 29371134.
Impact Factor: 4.133
ISI ranking: 36/138 (Cardiac & Cardiovascular System) (Q2); 75/195 (Cell Biology) (Q2).
Number of citations minus the number of own citations: 9
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(46) Prazeres PHDM, Almeida VM, Lousado L, Andreotti JP, Paiva AE, Santos GSP, Azevedo PO, Souto L, Almeida GG, Filev R, Mintz A, Gonçalves R, **Birbrair A**. (2018) **Macrophages Generate Pericytes in the Developing Brain. Cellular and Molecular Neurobiology**. 38(4):777-782. PMID: 28894964.
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(47) Guerra DAP, Paiva AE, Sena IFG, Azevedo PO, Batista ML Jr, Mintz A, **Birbrair A**. (2018) **Adipocytes role in the bone marrow niche. Cytometry Part A**. 93(2):167-171. PMID: 29236351.
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(48) Santos GSP, Prazeres PHDM, Mintz A, **Birbrair A**. (2018) **Role of pericytes in the retina. Eye**. 32(3):483-486. PMID: 29125148.
Impact Factor: 2.455

(49) Almeida VM, Paiva AE, Sena IFG, Mintz A, Magno LAV, **Birbrair A**. (2018) **Pericytes make spinal cord breathless after injury. Neuroscientist**. 24(5):440-447. PMID: 29283016.
Impact Factor: 6.500

(50) Henriques F, Lopes MA, Franco FO, Knobl P, Santos KB, Bueno LL, Correa VA, Bedard AH, Guilherme A, **Birbrair A**, Peres SB, Farmer SR, Batista ML Jr. (2018) **Toll-Like Receptor-4 Disruption Suppresses Adipose Tissue Remodeling and Increases Survival in Cancer Cachexia Syndrome. Scientific Reports**. 8(1):18024. PMID: 30575787.
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(51) Paiva AE, Lousado L, Guerra DAP, Azevedo PO, Sena IFG, Andreotti JP, Santos GSP, Gonçalves R, Mintz A, **Birbrair A**. (2018) **Pericytes in the Premetastatic Niche. Cancer Research**. 78(11):2779-2786. PMID: 29789421.
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(52) Andreotti JP, Silva WN, Costa AC, Picoli CC, Bitencourt FCO, Coimbra-Campos LMC, Resende RR, Magno LAV, Romano-Silva MA, Mintz A, **Birbrair A**. (2019) **Neural stem cell niche heterogeneity. Seminars in Cell & Developmental Biology**. 95:42-53. PMID: 30639325.
Impact Factor: 6.691

(53) Picoli CC, Coimbra-Campos LMC, Guerra DAP, Silva WN, Prazeres PHDM, Costa AC, Magno LAV, Romano-Silva MA, Mintz A, **Birbrair A**. (2019) **Pericytes: Key Players in Spinal Cord Injury. American Journal of Pathology**. 189(7):1327-1337. PMID: 31014955.
Impact Factor: 3.491

(54) Leonel C, Sena IFG, Silva WN, Prazeres PHDM, Fernandes GR, Mancha Agresti P, Martins Drumond M, Mintz A, Azevedo VAC, **Birbrair A**. (2019) ***Staphylococcus epidermidis* role in the skin microenvironment. Journal of Cellular and Molecular Medicine**.
23(9):5949-5955. PMID: 31278859.
Impact Factor: 4.486

(55) Viana Magno LA, Tenza-Ferrer H, Collodetti M, Felipe Guimarães Aguiar M, Paula Carneiro Rodrigues A, Souza da Silva R, do Prado Silva J, Ferreira Nicolau N, Valadão Freitas Rosa D, **Birbrair A**, Marques Miranda D, Aurélio Romano-Silva M. (2019) **Optogenetic stimulation of the M2 cortex reverts motor dysfunction in a mouse model of Parkinson's Disease. Journal of Neuroscience**. 39(17):3234-3248. PMID: 30782975.
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(56) Flamini MA, Barreto RSN, Matias GSS, **Birbrair A**, Harumi de Castro Sasahara T, Barbeito CG, Miglino MA. (2020) **Key characteristics of the ovary and uterus for reproduction with particular reference to poly ovulation in the plains viscacha (Lagostomus maximus, chinchillidae). Theriogenology**. 142:184-195. PMID: 31604179.
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12(5):e446-e451. PMID: 32509226.
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Impact Factor: 5.893

(60) Miranda VHS, Gomes TR, Eller DE, Ferraz LCN, Chaves AT, Bicalho KA, Silva CEC, **Birbrair A**, Xavier MAP, Goes AM, Corrêa-Oliveira R, Alves EAR, Bozzi A. (2020) **Liver damage in schistosomiasis is reduced by adipose tissue-derived stem cell therapy after praziquantel treatment. PLoS Neglected Tropical Diseases**. *In press*. PMID: 32853206.
Impact Factor: 3.885

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Impact Factor: 5.085

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Impact Factor: 2.895

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Impact Factor: 3.998

(64) Bernardes SS, Pinto MCX, Amorim JH, Azevedo VAC, Resende RR, Mintz A, **Birbrair A**. (2020) **Glioma pericytes promote angiogenesis by producing periostin. Cellular and Molecular Neurobiology**. *In press*. PMID: 33010018.
Impact Factor: 3.606

(65) Picoli CC, Costa AC, Rocha BGS, Silva WN, Santos GSP, Prazeres PHDM, Costa PAC, Oropeza A, Silva RA, Azevedo VAC, Resende RR, Cunha TM, Mintz A, **Birbrair A**. (2020) **Sensory Nerves in the Spotlight of the Stem Cell Niche. Stem Cells Translational Medicine**. *In press*. PMID: 33112056.
Impact Factor: 6.429

(66) Andrade BS, Rangel FS, Santos NO, Freitas ADS, Soares WRA, Siqueira S, Barh D, Góes-Neto A, **Birbrair A**, Azevedo VAC. (2020) **Repurposing Approved Drugs for Guiding COVID-19 Prophylaxis: A Systematic Review. Frontiers in Pharmacology**. 11:590598. PMID: 33390967.
Impact Factor: 4.225

(67) Prazeres PHDM, Leonel C, Silva WN, Rocha BGS, Santos GSP, Costa AC, Picoli CC, Sena I, Gonçalves WA, Vieira MS, Costa PAC, Campos LMCC, Paz MT, Costa MR, Resende RR, Cunha TM, Mintz A, **Birbrair A**. (2020) **Ablation of sensory nerves favours melanoma progression. Journal of Cellular and Molecular Medicine**. 24(17):9574-9589. PMID: 32691511.
Impact Factor: 4.486

(68) Lopes TCM, Almeida GG, Souza IA, Borges DC, de Lima WG, Prazeres PHDM, **Birbrair A**, Arantes RME, Mosser DM, Goncalves R. (2021) **High-Density-Immune-Complex Regulatory Macrophages Promote Recovery of Experimental Colitis in Mice. Inflammation**. *In press*. PMID: 33394188.
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(69) Nobre AR, Risson E, Singh DK, Martino JD, Cheung JF, Wang J, Johnson J, Russnes HG, Bravo-Cordero JJ, **Birbrair A**, Naume B, Azhar M, Frenette PS, Aguirre-Ghiso JA. (2021) **NG2+/Nestin+ mesenchymal stem cells dictate DTC dormancy in the bone marrow through TGFβ2. Nature Cancer**. 2:327–339.

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Campos LMCC, Silva WN, Baltazar LM, Costa PAC, Picoli CC, Costa AC, Rocha BGS, Prazeres PHDM, Oliveira FMS, Souza DG, Russo RC, Resende RR, Mintz A, **Birbrair A [PI]**. (2021) **Circulating Nestin+ cells are recruited during lung infection by Paracoccidioides brasiliensis in mice.**

Books edited

Birbrair A. (2017). **Stem Cell Microenvironments and Beyond.** 1. ed. Springer Nature. Switzerland. Print ISBN: 978-3-319-69193-0. DOI: https://doi.org/10.1007/978-3-319-69194-7

Birbrair A. (2018). **Pericyte Biology – Novel Concepts.** 1. ed. Springer Nature. Switzerland. 978-3-030-02600-4. DOI: https://doi.org/10.1007/978-3-030-02601-1

Birbrair A. (2019). **Pericyte Biology in Different Organs.** 1. ed. Springer Nature. Switzerland. 978-3-030-11092-5. DOI: https://doi.org/10.1007/978-3-030-11093-2

Birbrair A. (2019). **Pericyte Biology in Disease.** 1. ed. Springer Nature. Switzerland. 978-3-030-16907-7. DOI: https://doi.org/10.1007/978-3-030-16908-4

Birbrair A. (2019). **Stem Cells Heterogeneity - Novel Concepts.** 1. ed. Springer Nature. Switzerland. 978-3-030-11095-6. DOI: https://doi.org/10.1007/978-3-030-11096-3

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Birbrair A. (2019). **Stem Cells Heterogeneity in Different Organs.** 1. ed. Springer Nature. Switzerland. 978-3-030-14365-7. DOI: https://doi.org/10.1007/978-3-030-24108-7

Birbrair A. (2020). **Tumor Microenvironment: Recent Advances.** 1. ed. Springer Nature. Switzerland. 978-3-030-35726-9. DOI: https://doi.org/10.1007/978-3-030-35727-6

Birbrair A. (2020). **Tumor Microenvironment: State of the Science.** 1. ed. Springer Nature. Switzerland. 978-3-030-44517-1. DOI: https://doi.org/10.1007/978-3-030-44518-8

Birbrair A. (2020). **Tumor Microenvironment: Hematopoietic Cells – Part A.** 1. ed. Springer Nature. Switzerland. 978-3-030-35722-1. DOI: https://doi.org/10.1007/978-3-030-35723-8

Birbrair A. (2020). **Tumor Microenvironment: Hematopoietic Cells – Part B.** 1. ed. Springer Nature. Switzerland. 978-3-030-49269-4. DOI: https://doi.org/10.1007/978-3-030-49270-0

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Birbrair A. (2020). **Tumor Microenvironment: Extracellular Matrix Components – Part B.** 1. ed. Springer Nature. Switzerland. 978-3-030-48456-9. DOI: https://doi.org/10.1007/978-3-030-48457-6

Birbrair A. (2020). **Tumor Microenvironment: Molecular Players – Part A.** 1. ed. Springer Nature. Switzerland. 978-3-030-43092-4. DOI: https://doi.org/10.1007/978-3-030-43093-1

Birbrair A. (2020). **Tumor Microenvironment: Molecular Players – Part B.** 1. ed. Springer Nature. Switzerland. 978-3-030-50223-2. DOI: https://doi.org/10.1007/978-3-030-50224-9

Birbrair A. (2020). **Tumor Microenvironment: Signaling Pathways – Part A.** 1. ed. Springer Nature. Switzerland. 978-3-030-35581-4. DOI: https://doi.org/10.1007/978-3-030-35582-1

Birbrair A. (2020). **Tumor Microenvironment: Signaling Pathways – Part B.** 1. ed. Springer Nature. Switzerland. 978-3-030-47188-0. DOI: https://doi.org/10.1007/978-3-030-47189-7

Birbrair A. (2020). **Tumor Microenvironment: The Role of Interleukins – Part A.** 1. ed. Springer Nature. Switzerland. 978-3-030-38314-5. DOI: https://doi.org/10.1007/978-3-030-38315-2

Birbrair A. (2020). **Tumor Microenvironment: The Role of Interleukins – Part B.** 1. ed. Springer Nature. Switzerland. 978-3-030-55616-7. DOI: https://doi.org/10.1007/978-3-030-55617-4

Birbrair A. (2020). **Tumor Microenvironment: The Role of Chemokines – Part A.** 1. ed. Springer Nature. Switzerland. 978-3-030-36666-7. DOI: https://doi.org/10.1007/978-3-030-36667-4

Birbrair A. (2020). **Tumor Microenvironments in Organs: From the Brain to the Skin – Part A.** 1. ed. Springer Nature. Switzerland. 978-3-030-36213-3. DOI: https://doi.org/10.1007/978-3-030-36214-0

Birbrair A. (2020). **Recent Advances in iPSC Disease Modeling.** 1. ed. Elsevier. 978-0-128-22227-0. Web page: https://www.elsevier.com/books/recent-advances-in-ipsc-disease-modeling-volume-1/birbrair/978-0-12-822227-0

Birbrair A. (2020). **iPSCs from Diverse Species.** 1. ed. Elsevier. 978-0-128-22228-7. Web page: https://www.elsevier.com/books/ipscs-from-diverse-species/birbrair/978-0-12-822228-7

Chapters in Collections

Birbrair A. (2017) **Stem Cell Microenvironments and Beyond.** In: Birbrair A. (eds) Stem Cell Microenvironments and Beyond. **Advances in Experimental Medicine and Biology**. 1041:1-3. Springer Nature. Switzerland. PMID: 29204825. https://doi.org/10.1007/978-3-319-69194-7_1

Birbrair A. (2018) **Pericyte Biology: Development, Homeostasis and Disease.** In: Birbrair A. (eds) Pericyte Biology - Novel Concepts. **Advances in Experimental Medicine and Biology**. 1109:1-3. Springer Nature. Switzerland. PMID: 30523585. https://doi.org/10.1007/978-3-030-02601-1_1

Birbrair A. (2019) **Stem Cells Heterogeneity.** In: Birbrair A. (eds) Stem Cells Heterogeneity - Novel Concepts. **Advances in Experimental Medicine and Biology**. 1123:1-3. Springer Nature. Switzerland. PMID: 31016591. https://doi.org/10.1007/978-3-030-11096-3_1

Barreto RSN, Romagnolli P, Cereta AD, Coimbra-Campos LMC, **Birbrair A**, Miglino MA. (2019) **Pericytes in the Placenta: Role in Placental Development and Homeostasis.** In: Birbrair A. (eds) Pericyte Biology in Different Organs. **Advances in Experimental Medicine and Biology**. 1122:125-151. Springer Nature. Switzerland. PMID: 30937867. https://doi.org/10.1007/978-3-030-11093-2_8

Salmina AB, Komleva YK, Lopatina OL, **Birbrair A**. (2019) **Pericytes in Alzheimer's Disease: Novel Clues to Cerebral Amyloid Angiopathy Pathogenesis.** In: Birbrair A. (eds) Pericyte Biology in Disease. **Advances in Experimental Medicine and Biology**. 1147:147-166. Springer Nature. Switzerland. PMID: 31147877. https://doi.org/10.1007/978-3-030-16908-4_7

Birbrair A, Prazeres PHDM, Files DC, Delbono O. (2019) **Pericytes and T Cells in Lung Injury and Fibroproliferation. Molecular and Translational Medicine**. In: Willis M., Yates C., Schisler J. (eds) Fibrosis in Disease. p. 175-195. Humana Press. Switzerland. https://doi.org/10.1007/978-3-319-98143-7_7

Rigoglio NN, Rabelo ACS, Borghesi J, de Sá Schiavo Matias G, Fratini P, Prazeres PHDM, Pimentel CMMM, **Birbrair A**, Miglino MA. (2020) **The Tumor Microenvironment: Focus on Extracellular Matrix.** In: Birbrair A. (eds) Tumor Microenvironment. **Advances in Experimental Medicine and Biology**. 1245:1-38. Springer Nature. Switzerland. PMID: 32266651. https://doi.org/10.1007/978-3-030-40146-7_1

Participation in Scientific Conferences and External Lectures (from 2016-present) (Selected)

(02/2016) Invited Lecture at the Center for Inflammatory Diseases at USP-RP, Ribeirão Preto, SP, Brazil.
http://crid.fmrp.usp.br/site/2016/02/17/discussao-de-artigo-cientifico-220216/

(08/2016) Invited Lecture at the Graduate Program in Biomedical Sciences at Faculdades Pequeno Principe, Curitiba, PR, Brazil.
https://faculdadespequenoprincipe.edu.br/noticias/noticia/centro-academico-de-biomedicina-das-faculdades-pequeno-principe-recebe-dr-alexander-birbrair/

(11/2016) Invited Lecture at the Graduate Program in Anatomy of Domestic and Wild Animals at the Department of Surgery at FMVZ/USP, São Paulo, SP, Brazil.

(11/2016) Invited Lecture at the Fundação Oswaldo Cruz – FIOCRUZ, Belo Horizonte, MG, Brazil.

(12/2016) Invited Lecture at the Center for Research of Human Genome and Stem Cells at USP, São Paulo, SP, Brazil.

(12/2016) Invited Speaker at the Symposium "Placental transport mechanisms including vertical transmission of viruses" at USP, São Paulo, SP, Brazil.

(03/2017) Invited Lecture at the Institute of Biomedical Sciences at UFRJ, Rio de Janeiro, RJ, Brazil.

(08/2017) Invited Lecture at the Molecular Biology Graduate Program at Unifesp, São Paulo, SP, Brazil.

(10/2017) Keynote Speaker at the National Meeting of Biomedicine, Botucatu, SP, Brazil.
https://3615974d-e859-4fef-9b13-420acff64e96.filesusr.com/ugd/030954_ecd1126c98da4d42a49ac0ae5fae0ed9.pdf

(12/2017) Invited Speaker at the Third Symposium of Cellular and Molecular Biology at UFPR, Curitiba, PR, Brazil.
http://www.bio.ufpr.br/portal/wp-content/uploads/2017/12/Bionews_204.pdf
http://www.bio.ufpr.br/portal/blog/eventos/iii-simposio-de-biologia-celular-e-molecular-de-04-a-071217/

(03/2018) Invited Lecture at the Seventh Cycle of lectures at the Institute of Biology at Unicamp, Campinas, SP, Brazil.
http://www.ib.unicamp.br/sites/default/files/Programa%C3%A7%C3%A3o%2025.06.pdf
https://www.facebook.com/seminariosdoib/photos/hoje-%C3%A0s-12h30-na-sala-da-congrega%C3%A7%C3%A3o-do-ib/966392513526502/

(05/2018) Invited Lecture at the VI Animal Lab at UECE, Fortaleza, CE, Brazil.
https://eventos.uece.br/siseventos/processaEvento/evento/exibeDetalhes.jsf;jsessionid=E198FAA0102CC0E6867434FE7B2D7EAF.eventoss1?id=359&area=programacaoEvento&contexto=animalab6

(05/2018) Invited Speaker at the II Meeting of Morpho-Physiology at UFSJ, São João Del Rey, MG, Brazil.

(05/2018) Invited Lecture at D'Or Institute for Research and Education (IDOR), Rio de Janeiro, RJ, Brazil.

(06/2018) Invited Speaker at the Fourth International Symposium on Inflammatory Diseases - INFLAMMA IV, Belo Horizonte, MG, Brazil.
http://crid.fmrp.usp.br/wp-content/uploads/2019/03/Anais-de-Congresso-INFLAMMA-IV.pdf

(07/2018) Invited Lecture at the SINA Biotec at UFU, Uberlandia, MG, Brazil.
http://www.eventos.ufu.br/sites/eventos.ufu.br/files/documentos/anais_2018_sinabiotec.pdf

(07/2018) Invited Lecture at the Graduate Program in Immunology at USP, São Paulo, SP, Brazil.
http://www.icb.usp.br/~imunoicb/wp-content/uploads/2018/07/Alexander-Birbrair.pdf

(07/2018) Invited Speaker at the XIX Congress of the Brazilian Society for Cell Biology, São Paulo, SP, Brazil.
http://www.interevent.com.br/sistema/__hotsite/index.php?cod_eventos=108&cod_conteudos=1129

(09/2018) Invited Speaker at the XVI Brazilian Biomedical Conference, São Paulo, SP, Brazil.

(10/2018) Invited Speaker at the XIX Congress of the Brazilian Society for Cell Biology, São Paulo, SP, Brazil.
https://pikamu.com/t/abtcel2018

(10/2018) Invited Lecture at the Graduate Program in Health Sciences at Albert Einstein Hospital, São Paulo, SP, Brazil.
https://www.einstein.br/pesquisa/ultimas-noticias/palestra-alexander-birbrair

(09/2019) Invited Speaker at XXXIV FeSBE Annual Meeting, Campos do Jordão, SP, Brazil.
http://sbbn.org.br/xxxiv-reuniao-anual-da-fesbe/

Patents

Title: Multiple fluorescent marking vector for specific identification of different neurons
Patent deposited in Brazil.
Date of Deposit: 08/11/2020
Protocol Number: Invention Patent BR 10 2020 016360 4
Inventors: Rodrigo Ribeiro Resende 70% / Mariana Sousa Vieira Saldanha 5% / Anderson Kenedy Santos 10% / Mauro Cunha Xavier Pinto 5% / Helton da Costa Santiago 5% / **Alexander Birbrair [C] 5%**

SERVICE

Membership in editorial boards of academic journals

Current Tissue Microenvironment Reports (Founding Editor and Editor-in-Chief)
Molecular Biotechnology (Associate Editor)
Stem Cell Reviews and Reports
Stem Cell Research
Stem Cells and Development
Histology and Histopathology
Frontiers in Cell and Developmental Biology
Frontiers in Genetics
Advances in Stem Cell Biology (Elsevier Books Series, Founding Editor and Editor-in-Chief)

Ad Hoc Reviewer

Journal of Clinical Investigation
Experimental Neurology
Journal of Cell Science
Journal of Cellular and Molecular Medicine
Journal of Cellular Physiology
Plos One
Stem Cell Research
Stem Cell Reviews and Reports
The American Journal of Pathology
Pharmacology & Therapeutics
Experimental Biology and Medicine
Pathology, Research and Practice
Experimental and Toxicologic Pathology
Stem Cell Reports
International Journal of Biochemistry & Cell Biology
Journal of Neuroimmunology
The Journal of Pathology

Neural Regeneration Research
Frontiers in Materials
Molecular and Cellular Endocrinology
Current Eye Research
Biotechnology Advances
AJP: Cell Physiology
Frontiers in Cell and Developmental Biology
Biomedicine & Pharmacotherapy
Cancer Investigation
Oncotarget
Scientific Reports
Current Bioinformatics
Frontiers in Endocrinology
Oxidative Medicine and Cellular Longevity
Jove-Journal of Visualized Experiments
Colloids and Surfaces A-Physicochemical and Engineering Aspects
Journal of Neurochemistry
Cancer Microenvironment
Cancer Management and Research
Cell Biology International
Journal of Experimental Biology
Archives of Dermatological Research
Cellular and Molecular Neurobiology
Journal of Neuroscience Research
Frontiers in Pharmacology
Stem cells International
Molecular Therapy-Nucleic Acids
FASEB Journal
Cell Communication and Signaling
Bone Research
Journal of Orthopaedic Research
Experimental Eye Research
Tissue Engineering
Frontiers in Physiology
Molecular Biology Reports
International Journal of Nanomedicine
Signal Transduction and Targeted Therapy
Molecular Neurobiology
Translational Lung Cancer Research
Expert Opinion on Biological Therapy
Oxidative Medicine and Cellular Longevity
Fluids and Barriers of the CNS
Aging-US
Cancer Research
EBioMedicine
Molecular Cancer Research

International Grants Reviewer (excluding Brazilian grants)

Czech Science Foundation – 2018
French ATP-Avenir - 2019
Wings for Life International - 2019
Internal pilot project competition for The University of Rochester – 2020
Swiss National Science Foundation - 2020

INSTITUTIONAL

Administrative Positions

(2016 – 2018) Representative of the Biological Sciences Institute in the Animal Care and Use Committee (CEUA) at Federal University of Minas Gerais, Brazil.

(2016 – present) Member of the Biomedical Science undergraduate course collegiate at Federal University of Minas Gerais, Brazil.

(2016 – present) Coordinator of the discipline of Pathology for Biomedical science undergraduate course (PAG011) at Federal University of Minas Gerais, Brazil.

(2016 – present) Member of Departmental Congregation at Federal University of Minas Gerais, Brazil.

(2016 – present) Coordinator of the discipline of Pathology for Biomedical science undergraduate course (PAG011) at Federal University of Minas Gerais, Brazil.

(2017) Coordinator of the discipline "Use of transgenic animals in research" (ACT024) at Federal University of Minas Gerais, Brazil.

(2017 – present) Coordinator of the discipline of Topics in Pathology for the Pathology graduate program at Federal University of Minas Gerais, Brazil.

(2018 – present) Member of Internal Biosafety Committee (CIBIO) at Federal University of Minas Gerais, Brazil.

(2018 – present) Member of the Committee for Monitoring the animal facility experimentation at Biological Sciences Institute at Federal University of Minas Gerais, Brazil.

(2018 – present) Vice-director of the Animal Facility at the Pathology Department at Federal University of Minas Gerais, Brazil.

(2019 – present) Member of the committee of the Center for Science Outreach at Federal University of Minas Gerais, Brazil.

Evaluation of faculty promotion

(2020) **BIRBRAIR, A.** Evaluation of promotion for 3 faculties for King Abdulaziz University, Saudi Arabia.

(2020) **BIRBRAIR, A.**; Campos, P. P.; Del Puerto, H. L.. Member of the evaluation committee for tenure of Dr. Marina G. Diniz in the Department of Pathology at Federal University of Minas Gerais, Brazil.

Other activities

(2017) **BIRBRAIR, ALEXANDER**; LOBATO, Z. I. P.; FIGUEIREDO, H. C. P.. Participation in the selection committee for international fellowships of the Program PDSE/CAPES 2017/2018 in the Animal Science graduate program of the Veterinary School at Federal University of Minas Gerais, Brazil.

(2017) **BIRBRAIR, ALEXANDER**; BERNARDES, V. F.; FERREIRA, M. A. N. D.. Participation in the selection committee for a substitute professor for the Department of Pathology at Federal University of Minas Gerais, Brazil.

(2018) **BIRBRAIR, ALEXANDER**; RIBAS, V. T.; COSTA, V. V.. Participation in the selection committee for the PhD program in Cell Biology at Federal University of Minas Gerais, Brazil.

(2019) **BIRBRAIR, ALEXANDER**; OLIVEIRA, S. C.; GOES NETO, A.. Participation in the evaluating committee for the selection of a visiting professor in the Department of General Biology at Federal University of Minas Gerais, Brazil.

(2019) **BIRBRAIR, A**; MENEZES, G. B.; SILVA, G. H. C.. Participation in the evaluating committee for the selection of CAPES Award for the best PhD Thesis in 2019 of the Cell Biology PhD Program at Federal University of Minas Gerais, Brazil.

Outreach

2013 Brain Awareness Outreach Presenter, visits to local K-12 schools. Winston-Salem, NC, USA.

2014 Physiology Understanding (PhUn) Week Presenter, implemented basic physiology lab exercises and presented physiology concepts to K-12 students from Academy of Excellence, Success Institute Charter School and Statesville Christian School. Winston-Salem, NC, USA.

ACADEMIC THESIS COMMITTEES

Ph.D. thesis committees

BIRBRAIR, ALEXANDER; MIGLINO, M. A.; FRATINI, P.; XAVIER, J. G.; PEARSON, P. L.. Participation in César Vinicius Gil Braz do Prado thesis committee. "Associação de células-tronco de polpa de dente decíduo e eletroacupuntura em cães com lesão medular crônica" (Association of primary tooth pulp stem cells and electroacupuncture in dogs with chronic spinal cord injury). 2016. Thesis defense (**PhD in Anatomy of Domestic and Wild Animals**) – University of São Paulo, Brazil.

BIRBRAIR, ALEXANDER; PINHO, V.; FUJIWARA, R.. Participation in Denise Silva Nogueira thesis committee. "Avaliação dos mecanismos de proteção mediados pela resposta imune na ascaridíase larval após infecção primária e múltiplas exposições ao parasite" (Evaluation of protection mechanisms mediated by the immune response in larval ascariasis after primary infection and multiple exposures to the parasite). 2016. Qualifying examination (**PhD in Parasitology**) - Federal University of Minas Gerais, Brazil.

BIRBRAIR, ALEXANDER; GOMES, D. A.; DUTRA, W. O.. Participation in Vítor Silva Barbosa thesis committee. "ESTUDO DO PAPEL DOS MONÓCITOS INFLAMATÓRIOS NA PATOGÊNESE DAS LESÕES TECIDUAIS EM CAMUNDONGOS INFECTADOS POR Leishmania major" (Study of the role of inflammatory monocytes in the pathogenesis of tissue injuries in mice infected by Leishmania major). 2016. Qualifying examination (**PhD in Pathology**) - Federal University of Minas Gerais, Brazil.

GOMEZ, M. V.; SILVA, M. A. R.; MARCO, L. A. C.; **BIRBRAIR, A**. Participation in Helia Tenza Ferrer thesis committee. "Envolvimento de células da glia na ação antinociceptiva da toxina Phα1β e da ω-conotoxina na dor inflamatória" (Involvement of glial cells in the anti-nociceptive action of Phα1β and ω-conotoxin in inflammatory pain). 2017. Qualifying examination (**PhD in Molecular Medicine**) - Federal University of Minas Gerais, Brazil.

SA, M. A.; CORREA JUNIOR, J. D.; **BIRBRAIR, ALEXANDER**. Participation in Rebecca Vasconcellos thesis committee. "Efeitos mecânicos e biológicos de scaffolds de colágeno e matriz extracelular descelularizada enriquecidos com nanomateriais na diferenciação de células-tronco em hepatócitos" (Mechanical and biological effects of collagen scaffolds and decellularized extracellular matrix enriched with nanomaterials on the differentiation of stem cells to hepatocytes). 2018. Qualifying examination (**PhD in Cell Biology**) - Federal University of Minas Gerais, Brazil.

BIRBRAIR, ALEXANDER; LUIZ EUGENIO ARAUJO DE MORAES MELLO; CARLOS FREDERICO MARTINS MENCK; ENRIQUE MARIO BOCCARDO PIERULIVO; PATRICIA CRISTINA BALEEIRO BELTRAO BRAGA,. Participation in FERNANDA RODRIGUES CUGOLA thesis committee. "Análise fenótipo-patogênica da infecção pelo vírus Zika em células humanas neurais *in vitro*" (Phenotype-pathogenic analysis of Zika virus infection in human neural cells *in vitro*). 2018. Thesis defense (**PhD in Anatomy of Domestic and Wild Animals**) - University of São Paulo, Brazil.

RESENDE, R. R.; FERREIRA, A.; COSTA, J. L.; MIRANDA, A. S.; **BIRBRAIR, ALEXANDER**. Participation in Vania Aparecida Mendes Goulart thesis committee. "Metabolomica aplicada na pesquisa de biomarcadores para acidente vascular encefalico isquemico, infarto do miocardio e esquizofrenia" (Metabolomics applied in the search for biomarkers for ischemic stroke, myocardial infarction and schizophrenia). 2018. Thesis defense (**PhD in Cell Biology**) - Federal University of Minas Gerais, Brazil.

BIRBRAIR, A; VIEIRA, L. B.; MOTTA, T. R.. Participation in Laura Fernanda Jaimes Alvarado thesis committee. "Modulacao da Persistencia da Memoria pela Neurogenese" (Modulation of the Persistence of Memory by Neurogenesis). 2019. Qualifying examination (**PhD in Physiology and Pharmacology**) - Federal University of Minas Gerais, Brazil.

GOMEZ, M. V.; SILVA, M. A. R.; BINDA, N. S.; **BIRBRAIR, ALEXANDER**; GIUNCHETTI, D. S. L.; SILVA, J. F.. Participation in Helia Tenza Ferrer thesis committee. "Envolvimento de células da glia na ação antinociceptiva da toxina Phα1β e da ω-conotoxina MVIIA na dor inflamatória periferica" (Involvement of glial cells in the anti-nociceptive action of Phα1β and ω-conotoxin MVIIA in peripheral inflammatory pain). 2019. Thesis defense (**PhD in Molecular Medicine**) - Federal University of Minas Gerais, Brazil.

LOPES, P. P. C.; PUERTO, H. L.; **BIRBRAIR, ALEXANDER**; ALVES, F.; JUNTA, C. M.. Participation in Celso Tarso Rodrigues Viana thesis committee. "Angiogenese, inflamação e fibrogenese em tecidos maligno e não maligno são modulados diferencialmente em camundongos com deleção do receptor ST2" (Angiogenesis, inflammation and fibrogenesis in malignant and non-malignant tissues are differentially modulated in mice with ST2 receptor deletion). 2019. Thesis defense (**PhD in Pathology**) - Federal University of Minas Gerais, Brazil.

RESENDE, R. R.; CRUZ, J. S.; ULRICH, A. H.; PINTO, M. C. X.; GARCIA, M. E. L. P.; **BIRBRAIR, ALEXANDER**. Participation in Anderson Kenedy Santos thesis committee. "Celulas-Tronco Neurais Adultas: Diferenciacao, caracterizacao de classes neurais e aplicacoes biotecnologicas" (Adult Neural Stem Cells: Differentiation, characterization of neural classes and biotechnological applications). 2019. Thesis defense (**PhD in Biochemistry and Immunology**) - Federal University of Minas Gerais, Brazil.

BIRBRAIR, A; PAIXÃO, T. A.; SANTOS, R. L.; CARVALHO, A. P.. Participation in Thaynara Parente de Carvalho thesis committee. "Avaliação do papel do pericito no processo de infecção por Brucella sp. em modelo murino" (Evaluation of the role of pericytes in *Brucella sp.* pathogenesis in a murine model). 2020. Qualifying examination (**PhD in Animal Science**) - Federal University of Minas Gerais, Brazil.

Master thesis committees

SILVA, M. A. R.; MAGNO, LUIZ ALEXANDRE V.; **BIRBRAIR, A.**; PAULA, J. J.. Participation in Eduardo de Souza Nicolau thesis committee. "Um modelo experimental de

estimulação transcraniana por corrente continua em camundongos" (An experimental model of transcranial stimulation by continuous current in mice). 2018. Thesis defense (**Master in Molecular Medicine**) - Federal University of Minas Gerais, Brazil.

BIRBRAIR, A.; MAGNO, L. A. V.; ALVARENGA, E. L. F. C.. Participation in Gabryella Soares Pinheiro dos Santos thesis committee. "Análise de tumor de próstata: Estadiamento e identificação de fibras sensoriais Nav1.8+" (Analysis of prostate tumor: Staging and identification of Nav1.8+ sensory fibers). 2018. Thesis defense (**Master in Pathology**) - Federal University of Minas Gerais, Brazil.

BIRBRAIR, A.; OLIVEIRA, F. D.; SASAHARA, T. H. C.. Participation in Ana Clara Bastos Rodrigues thesis committee. "Alterações morfológicas que acometem o bulbo do olho de cães infectados naturalmente por Leishmania chagasi/infantum" (Morphological changes that affect the eye bulb of dogs infected with Leishmania chagasi/infantum). 2018. Qualifying examination (**Master in Anatomy of Domestic and Wild Animals**) - University of São Paulo, Brazil.

BIRBRAIR, A.; BERNARDES, S. S.; LOPES, M. T. P.; CAMPOS, L. M. C. C.. Participation in Caroline Leonel Vasconcelos de Campos thesis committee. "Papel dos nervos sensoriais na progressão do melanoma" (Role of sensory nerves in melanoma progression). 2020. Thesis defense (**Master in Pathology**) - Federal University of Minas Gerais, Brazil.

DINIZ, I. M. A.; ALVES, F.; CAMPOS, L. M. C. C.; PUERTO, H. L.; **BIRBRAIR, A.**. Participation in Pedro Henrique Dias Moura Prazeres thesis committee. "Avaliação da expressão gênica de pericitos de lesão neoclássica intraepitelial prostática de camundongos Hi-MYC" (Evaluation of gene expression in pericytes isolated from prostatic intraepithelial neoplasia of Hi-Myc mice). 2020. Thesis defense (**Master in Pathology**) - Federal University of Minas Gerais, Brazil.

BIRBRAIR, A.; COIMBRA-CAMPOS, L. M. C.; GODARD, A. L. B.; NUNES, C. B.. Participation in Isadora Fernandes Gilson Sena thesis committee. "Caracterização do modelo geneticamente modificado C(3)1-Tag em camundongos C57BL/6 e identificação dos nervos sensoriais no tumor mamário" (Characterization of genetically modified model C3-Tag in C57BL/6 background and identification of sensory nerves in the mammary tumor). 2020. Thesis defense (**Master in Pathology**) - Federal University of Minas Gerais, Brazil.

Organization of conferences

BIRBRAIR, A.; FONTANA, R.; Cunha, N. S.; Scartezzini, M.; Mendonça, C. R. L.; Naoum, P. C.; Mariano, A. P. M.; Lanza, H.; Malagueño, E.; Filho, A. M. L.; Andriolli, J. L.; Santana, J. V.; Carvalho, S. M. S.; Mariano, M. L. M.
2º Congresso Baiano de Análises Clínicas (Second Clinical Analyses Conference in Bahia), 2005.

BIRBRAIR, A.; FONTANA, R.; Cunha, N. S.; Scartezzini, M.; Mendonça, C. R. L.; Naoum, P. C.; Mariano, A. P. M.; Lanza, H.; Malagueño, E.; Filho, A. M. L.; Andriolli, J. L.; Santana, J. V.;

Carvalho, S. M. S.; Mariano, M. L. M.
I ENCONTRO BAIANO DE BIOMEDICINA (First Biomedical Sciences Meeting in Bahia), 2006.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

(1) American Heart Association (AHA): 2012 - 2016

(2) Western NC Chapter of the Society for Neuroscience: 2011 – 2014

(3) International Society for Stem Cell Research: 2013 – 2016

RESEARCH GRANTS

Ongoing Research Support

Grant from National Institute of Science and Technology in Theranostics and Nanobiotechnology (INCT-Teranano) – CNPq/CAPES/FAPEMIG, Process No. 465669/2014-0/CBB-APQ-03613-17) **Birbrair (co-PI)**
03/01/2017-03/01/2022 **7280000 reals**
A multicentric grant for infrastructure **(my lab received 100000 reals)**
The aim of this grant is to improve the infrastructure of several groups developing nanotechnologies. We are contributing by testing the developed molecules in animal cancer models.
Role: co-PI, [Other co-PIs: Luiz Goulart (UFU), Vasco Azevedo (UFMG), Luiz Claudio Cameron (UniRio), Ademar Benévolo Lugão (Ipen), David Nascimento Silva Teixeira (UFTM), Eliton Souto de Medeiros (UFPB), Laura Sterian (Unicamp), Silma Pereira (UFMA), Valbert Nascimento Cardoso (UFMG)]

Grant from FAPEMIG [Rede Mineira de Engenharia de Tecidos e Terapia Celular (REMETTEC, RED-00570-16)] **Birbrair (co-PI)**
11/01/2017-11/01/2022 **1328813 reals**
A multicentric grant on tissue engineering and cell therapy **(my lab received 150000 reals)**
The goal of this grant is to develop collaborations between different groups that work with cell therapy within the state of Minas Gerais. We are studying the role of pericytes in Chagas Cardiomyopathy, and their possible use as cell therapy for cardiac regeneration.
Role: co-PI, [Other co-PIs: Alfredo Miranda De Goes (UFMG), Ricardo Gonçalves (UFMG), Sidney Nicodemos da Silva (CEFET), Valdo José Dias da Silva (UFTM), Paula Peixoto Campos (UFMG)]

Grant from FAPEMIG [Rede De Pesquisa Em Doenças Infecciosas Humanas E Animais Do Estado De Minas Gerais (RED-00313-16)] **Birbrair (co-PI)**
11/01/2017-11/01/2022 **1367555 reals**
A multicentric grant on infectious diseases **(my lab received 50000 reals)**
The goal of this grant is to develop collaborations between different groups that work with infectious diseases in the state of Minas Gerais. We are studying the role of pericytes in the pathogenesis of Leishmaniasis.
Role: co-PI, [Other co-PIs: Virmondes Rodrigues Junior (UFMG), Carlo José Freire de Oliveira (UFTM), Siomar de Castro Soares (UFTM), Ricardo Gonçalves (UFMG)]

Grant from CNPQ-Universal, Process No. 405977/2018-2 **Birbrair (PI)**
12/06/2018-12/06/2021
The role of GFAP+ cells in the tumor microenvironment. **30000 reals**
The aim of this project is to evaluate the role of glial fibrillary acidic protein (GFAP)+ cells within the tumors.
Role: PI

Instituto Serrapilheira Grant / Serra-1708-15285 renewal **Birbrair (PI)**
04/01/2019-04/01/2022
Regulation of prostate cancer by the peripheral nervous system. **1000000 reals**
The main goal of this proposal is to study whether/how prostate cancer development may be affected by the peripheral nervous system.
Role: PI

Grant from FAPESP [Role of P2X7 purinergic receptor in the regulation of hematopoietic stem cell and myeloid lineage (2018/23870-4)] **Birbrair (co-PI)** 03/01/2019-02/28/2021 **231883 reals**
We are examining the role of P2X7 signaling in pericytes within the bone marrow niche.
The goal of this grant is to study the role of purinergic receptors in the modulation of HSCs and in myeloid differentiation investigating mainly the function of the P2X7 receptor using a mouse model in which we deplete P2X7 from different components of the bone marrow niche ($P2X7^{f/f}$).
Role: co-PI [Other co-PIs: Alice Teixeira Ferreira (Unifesp), Edgar Julian Paredes Gamero (UFMS)]

Grant from FAPESP [Development of brain-on-chip Micro-platforms for in vitro modeling of the central nervous system (2018/12605-8)] **Birbrair (collaborator)**

11/01/2019-10/31/2024 **2018639 reals**

We compare some of the results obtain in vitro to what we see in neurogenesis in vivo.

The goal of this grant is to develop micro-platforms to study CNS normal development, cellular and molecular mechanisms of CNS disorders, and neuronal connectivity, using 3D bioprinting, microfluidic chambers and microelectrode arrays.

Role: collaborator [Other co-PIs: Marimélia Aparecida Porcionatto (Unifesp), Luiz Eugênio Mello (Unifesp), Giselle Z. Justo (Unifesp), Jean Faber (Unifesp), Kil S. Lee (Unifesp), Isaias Glezer (Unifesp), Beatriz Monteiro (Unifesp), Paulo Schor (Unifesp), Sang W. Han (Unifesp), Su Ryon Shin (Harvard Medical School), Laura Lopez Mascaraque (Instituto Cajal - CSIC), Lucimara Gaziola de la Torre (UNICAMP), Renato Sousa Lima (CNPEM), Alexander Henning Ulrich (USP)]

CNPq Productivity Brazilian Fellowship (Level 2) **Birbrair (PI)**

03/01/2020-02/28/2023

The use of Schwann cell as cell therapy for prostate cancer. **36000 reals**

Our goal is to examine the use of Schwann cells from different sources as cell therapy again prostate cancer.

Role: PI

Grant from MCTIC/CNPq/FNDCT/MS/SCTIE/Decit Nº 07/2020 [Neuropsychiatric complications resulting from prenatal exposure to the SARS-Cov2 virus (402222/2020-2)] **Birbrair (collaborator)**

06/19/2020-06/19/2022 **1871700 reals**

We are assisting with the studies on animal models.

The goal of this grant is to assess neuropsychiatric changes of the offspring from mothers infected with the SARS-CoV2 virus in different gestational periods.

Role: collaborator [Other co-PIs: Danielle Macêdo Gaspar (UFC), Christina Alves Peixoto (Instituto Aggeu Magalhães-PE), Eurico de Arruda Neto (Faculdade de Medicina de Ribeirão Preto), Francisco Herlânio Costa Carvalho (Maternidade Escola Assis Chateaubriand-CE), Fábio Miyajima (FIOCRUZ/CE), James Peter Stewart (University of Liverpool), Jaqueline Vieira Carletti (UFC), John Quinn (University of Liverpool), Karina Lidianne Alcântara Saraiva (Instituto Aggeu Magalhães-PE), Lidiany de Souza Araújo Linhares (Instituto Maurício de Nassau-PE), Rafael Freitas de Oliveira (Instituto Aggeu Magalhães-PE), Remo de Castro Russo (UFMG), Ricardo de Freitas Lima (UFC), Silvânia Maria Mendes de Vasconcelos (UFC)]

Grant from FAPESP [Study of molecular and cellular mechanisms involved in mental disorders: clinical and animal models analysis (2019/13112-8)] **Birbrair (collaborator)**

10/01/2020-09/30/2025 **1454040 reals**

We are contributing with the studies on animal models.

The goal of this grant is to carry out molecular and cellular studies to identify pathways specifically altered in after treatment with psychostimulants and/or antipsychotics (including innovative treatments), in order to compare them with the clinical alterations described by the group.

Role: collaborator [Other co-PIs: Mirian Akemi Furuie Hayashi (Unifesp), Alexandre Keiji Tashima (Unifesp), Carsten Korth (Heinrich-Heine-Universität Düsseldorf), Claudiana Lameu Gomes (USP)]

Completed Research Support

Glenn/AFAR Scholarship for Research in the Biology of Aging **Birbrair (PI)**

05/01/13-05/01/14

The role of pericyte subtypes in skeletal muscle regeneration with aging. **5000 dollars**

The goal of this project was to determine whether the pericyte subtypes we discovered differ in their myogenic, vasculogenic, adipogenic or fibrogenic differentiation capacity by testing whether pericytes involved in vasculogenesis and tissue repair differ from those involved in scar formation after tissue injury.

Role: PI

Article resulting from the research: **Birbrair A**, T Zhang, ZM Wang, ML Messi, A Mintz and O Delbono. (2013). **Type-1 Pericytes Participate in Fibrous Tissue Deposition in Aged Skeletal Muscle. American Journal of Physiology-Cell Physiology**. 305 (11): C1098-C1113. PMID: 24067916.

Impact Factor: 3.485

ISI ranking: 104/195 (Cell Biology) (Q3); 18/81 (Physiology) (Q1).

Number of citations minus the number of own citations: 125

Grant from PRPq/UFMG (Edital 05/2016) **Birbrair (PI)** 07/01/16-07/01/17

Study of pericytes subpopulations roles in the heart. **10000 reals**

The goal of this project is to understand the role of pericytes subsets in the heart under distinct pathophysiological conditions, such as after infarct and Chagas' disease.

Role: PI

Funding from Brazilian Qiagen **Birbrair (PI)** 07/01/16-07/01/17

Study of pericytes in the prostate cancer microenvironment **35000 reals in Qiagen reagents**

The objective of this study is to compare gene expression in pericytes from healthy and malignant prostatic tissue.
Role: PI

Grant from MCTIC/FINEP/CT-INFRA 04/2018 (Implementation of *in vivo* high resolution microscopy at UFMG) **Birbrair (co-PI)**
12/01/2018 **1499915 reals**
A multidepartment grant to buy an equipment for a Core facility at UFMG
The goal of this grant was to get a Confocal Spinning Disk Microscope from 3i for a Core facility in our Institute for shared use in the University.
Role: co-PI, [Other co-PIs: Vasco Azevedo (UFMG), Ricardo Gonçalves (UFMG), Ricardo Gazinelli (UFMG), Mauro Martins Teixeira (UFMG), Robson Souza dos Santos (UFMG), Geovanni Cassali (UFMG)]

Instituto Serrapilheira Grant 2017-Call / Serra-1708-15285 **Birbrair (PI)**
01/10/18-01/10/19
Regulation of prostate cancer by the peripheral nervous system **100000 reals**
The main goal of this proposal is to study whether/how prostate cancer development may be affected by the peripheral nervous system.
Role: PI
Article resulting from the research: Prazeres PHDM, Leonel C, Silva WN, Rocha BGS, Santos GSP, Costa AC, Picoli CC, Sena I, Gonçalves WA, Vieira MS, Costa PAC, Campos LMCC, Paz MT, Costa MR, Resende RR, Cunha TM, Mintz A, **Birbrair A**. (2020) **Ablation of sensory nerves favours melanoma progression. Journal of Cellular and Molecular Medicine**. *In press*. PMID: 32691511.
Impact Factor: 4.486
ISI ranking: 69/195 (Cell Biology) (Q2); 35/138 (Medicine, Research & Experimental) (Q2).

STUDENT SUPERVISION

Undergraduate students

(2016 – 2017) Gabryella Soares Pinheiro dos Santos, #20, 21, 22, 23, 25, 26, 28, 32, 40, 46, 48, 51, 62
(2016 – 2017) Isadora Fernandes Gilson Sena, #19, 20, 21, 23, 25, 26, 28, 32, 34, 35, 36, 37, 47, 49, 51, 54, 62
(2016 – 2017) Pedro Henrique Dias Moura Prazeres, #20, 21, 22, 23, 25, 26, 28, 36, 37, 41, 42, 43, 44, 46, 48, 53, 54, 61, 62
(2016) Lucas Minto
(2016) Fernando Ospedal Batista
(2016 – 2017) Isabella da Terra Borges, #19, 20, 21, 25, 26, 28
(2016 – 2017) Ana Emília de Paiva, #20, 21, 22, 23, 25, 26, 28, 32, 34, 37, 42, 44, 45, 46, 47, 49, 51
(2016 - 2017) Hector Lutero Honorato de Brito Siman
(2016 – 2017) Jefte Perez Ancia

(2016 – 2017) Viviani Mendes de Almeida, #20, 21, 25, 26, 28, 46, 49
(2016 – 2017) Luanny Souto de Barros Silva, #20, 25, 26, 46
(2016 – 2018) Patrick Orestes de Azevedo, #20, 21, 22, 23, 25, 26, 28, 32, 34, 35, 37, 41, 46, 47, 51
(2016 – 2020) Julia Peres Andreotti, #20, 21, 22, 23, 25, 26, 28, 31, 32, 35, 42, 43, 45, 46, 51, 52
(2016 – 2018) Daniel Arthur de Paula Guerra, #20, 25, 26, 28, 34, 36, 42, 47, 51, 53.
(2017) Mariana Andrade de Abreu
(2017) Matheus Araujo Costa, #45
(2017 – 2020) Walison Nunes, #33, 34, 36, 42, 44, 52, 53, 54, 61, 62
(2017 – 2019) Luiza Lousado Mesquita, #20, 21, 22, 23, 25, 26, 31, 32, 37, 44, 46, 51
(2018 – 2020) Beatriz Rocha, #62
(2018 – 2019) Luiza Coutinho
(2018 – 2019) Brendo Roberto
(2018 - 2019) Jovino César
(2019) Luiz Paulo Souza
(2019) Brenda Brasil Oliveira
(2019) Juliana Almeida Sad
(2019) Ana Luísa Brito da Silva
(2019 – 2020) Rebeca Eller
(2019 – 2020) Luadson Sales
(2020 – present) Gabriel Dias Moreira
(2020 – present) Paulo Lauar
(2020 – present) Bruna Leticia
(2020 – present) Gabriela Lousado Mesquita

Master's degree students

(2017 – 2018) Gabryella Soares Pinheiro dos Santos, #20, 21, 22, 23, 25, 26, 28, 32, 40, 46, 48, 51, 62
(2017 – 2019) Isadora Fernandes Gilson Sena, #19, 20, 21, 23, 25, 26, 28, 32, 34, 35, 36, 37, 47, 49, 51, 54, 62
(2017 – 2019) Caroline Leonel (**"Professor Tafuri Award" for the best Master Thesis in Pathology for Caroline Leonel under the mentorship of Dr. Alexander Birbrair)**, #26, 36, 54, 62
(2017 – 2019) Pedro Henrique Dias Moura Prazeres, #20, 21, 22, 23, 25, 26, 28, 36, 37, 41, 42, 43, 44, 46, 48, 53, 54, 61, 62
(2017 – 2019) Anaelise Turquetti, #41, 44
(2020 – present) Walison Nunes, #33, 34, 36, 42, 44, 52, 53, 54, 61, 62
(2020 – present) Beatriz Rocha, #62

Doctoral degree students

(2018 – present) Gabryella Soares Pinheiro dos Santos, #20, 21, 22, 23, 25, 26, 28, 32, 40, 46, 48, 51, 62
(2018 – present) Alinne do Carmo Costa, #52, 53, 62
(2018 – present) Caroline de Carvalho Picoli, #52, 53, 62
(2020 – present) Pedro Henrique Dias Moura Prazeres, #20, 21, 22, 23, 25, 26, 28, 36, 37, 41, 42, 43, 44, 46, 48, 53, 54, 61, 62

(2020 – present) Roy Anderson Oropeza Clavo
(2020 – present) Sheu Oluwadare Sulaiman
(2020 – present) Ajibike, A. Biola
(2020 – present) Natália Jordana
(2020 – present) Parviz Azimnasab Sorkhabi
(2020 – present) Maryam Soltani asl

Postdoctoral fellows

(2018 – 2019) Flávia Carvalho Bitencourt de Oliveira, #52
(2018 – 2020) Leda Maria de Castro Coimbra Campos, #52, 53, 62
(2019 – 2020) Rodrigo Augusto da Silva
(2019 – present) Pedro Augusto Carvalho Costa, #62
(2020 – present) Luis Fabio Batista

Co-supervision of PhD students

(2014 – 2018) Anirudh Sattiraju, Supervisor: Akiva Mintz (Columbia University, NY), #30
(2016 – 2018) Luciana Xavier, Supervisor: Paula Campos (UFMG, Brazil), #27
(2016 – present) Marcela Takahashi, Supervisor: Paula Campos (UFMG, Brazil)
(2019 – present) Tâmisa Honda, Supervisor: Niels Olsen Saraiva Câmara (USP, Brazil)
(2019 – present) Lidia Paula Faustino, Supervisor: Alexandre Vieira Machado (FIOCRUZ/MG)

Co-supervision of Posdoctoral fellows

(2016 – 2018) Giuliana Castello Coatti, Supervisor: Mayana Zatz (USP, Brazil), #24
(2016 – 2020) Rodrigo Barreto, Supervisor: Angelica Miglino (USP, Brazil), #41, 44, 56

ACADEMIC TEACHING EXPERIENCE

(2006) Instructor in the **Basic Biochemistry course** for Biology, Nursing, Veterinary and Agronomy students, UESC, Brazil.

(2007) Instructor in the **Cellular Biology course** for Biology students, UESC, Brazil.

(2007) Instructor in **"Techniques for Diagnoses of Intestinal Parasites"**, UESC, Brazil. (instructor of a short-term course)

(2007) Instructor in the **Medical Bacteriology course** for Biomedicine students, UESC, Brazil.

(2019) Lecturer in a course on **Tissue Engineering and Cell Therapy course** for the Pathology graduate program, Federal University of Minas Gerais, Brazil, 2019.

(2016-present) Teaching semesterly practical and theoretical Pathology in **Pathology discipline** for Medicine, Biomedicine and Pharmacy undergraduate courses, Federal University of Minas Gerais, Brazil.

(2016-present) Teaching semesterly practical and theoretical Pathology in **Pathology discipline** for Medicine, Biomedicine and Pharmacy undergraduate courses, Federal University of Minas Gerais, Brazil.

(2016-present) Teaching semesterly class on "**How to write and publish scientific articles**" for Cell Biology and Pathology graduate programs, Federal University of Minas Gerais, Brazil.

(2016-present) Teaching semesterly class on "**The use of transgenic animals in experimental research**" for the Pathology graduate program, Federal University of Minas Gerais, Brazil.

(2016-present) Teaching a summer course on "**Advances in Stem Cell Biology**" for PhD students of the Anatomy of Domestic and Wild Animals graduate program, University of São Paulo, Brazil.

10. LANGUAGES (fluent understanding, speaking, writing, and reading)

English, Spanish, Hebrew, Portuguese, and Russian.

PROFESSIONAL REFERENCES

Osvaldo Delbono, Ph.D., MD.
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Professor
Adviser to the University Rector, Head, Center of International Programs,
Head, Research Institute of Molecular Medicine & Pathobiochemistry,
Head, Dept. of Biochemistry, Medical, Pharmaceutical & Toxicological Chemistry,
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Acting Director of the Biomedical Engineering program and the Centre for Biomedical Research
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Regina Pekelmann Markus, Ph.D.
Full Professor
The Laboratory of Chronopharmacology
DDARK Lab - Disease & Drug-Associated Receptors Knowledge
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