



## PERSONAL STATEMENT

**João P.B. Viola, M.D., Ph.D.**

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João P.B. Viola is a Senior Scientist at the National Cancer Institute (INCA), Rio de Janeiro, Brazil. The long-term interest of Dr. Viola's laboratory is to study the cellular and molecular mechanisms of inducible gene transcription in cell activation, differentiation and transformation. The main area of investigation focuses on studying transcription factors in cell cycle progression, cell differentiation and apoptosis, as well as their relationship to malignant disorders and immune response. Dr. Viola received his M.D. degree in 1989 from the School of Medical Sciences, State University of Rio de Janeiro (UERJ); and a Ph.D. degree in Biophysics in 1998 from the Federal University of Rio de Janeiro (UFRJ), Brazil. During the pursue of his Ph.D. degree, Dr. Viola moved to Boston (USA) and performed his research under the supervision of Dr. Anjana Rao. He was appointed Research Associate at the Division of Cellular and Molecular Biology at the Dana-Farber Cancer Institute (1994-1996) and at the Center for Blood Research (1996-1997), Harvard Medical School, where he conducted studies on molecular mechanisms of T cell activation. João Viola returned to Brazil to join the National Cancer Institute as Junior Investigator at the Division of Experimental Medicine in 1998, where he started his independent research group. In 2000, Dr. Viola was appointed Associate Investigator and moved his laboratory within the National Cancer Institute, to the Division of Cellular Biology. In 2009 he was appointed Senior Investigator and in 2012 as Head of the Division of Basic and Experimental Research and Head of the Program of Immunology and Tumor Biology at INCA, where he is currently conducting his studies. In 2023 he was appointed as Director of Research and Innovation and Deputy General-Director of the INCA.

Dr. Viola and colleagues demonstrated for the first time that the NFAT1 (NFATp or NFATc2) transcription factor might have a negative role in regulating T cell proliferation and cytokine gene expression during the immune response. These studies were very well received, resulting in publications in *Science*, *Immunity* and *Blood*. Furthermore, he also mapped the *in vivo* phosphorylation sites of the NFAT1 transcription factor in resting and activated T cells. This work still stands as the best example of how to identify all the functionally relevant phosphorylation sites of a heavily phosphorylated protein. It was incorporated into two papers, published in *Journal of Biological Chemistry* and *Molecular Cell*. As an independent investigator at the Brazilian National Cancer Institute (INCA), Dr. Viola focused his studies on better understanding the molecular mechanisms of lymphocyte proliferation and differentiation. His group demonstrated for the first time that NFAT target genes encoding cell cycle-associated proteins such as cyclins, and NFAT proteins may function as tumor suppressor or oncogene. These findings support the idea that NFAT proteins may act as a central regulator of the cell homeostasis, thereby determining the overall outcome of tumor development. Another line of research, Dr. Viola's group have addressed the involvement of transcription factor in CD8 T differentiation and its influence on immune responses. More recently his group also demonstrated that differentiation of memory CD8 T cells unravel gene expression pattern common to effector and memory precursors, allowing to better define lineage-specific expression patterns. Dr. Viola is also carrying studies on tumor microenvironment and inflammation in cancer development. Dr.

Viola's group and colleagues demonstrated that lipid droplets modulate the cross-talk between tumors and other cell types in tumor microenvironment.

The impact of Dr. Viola's research studies and contributions to the field along his scientific career have been recognized both by Brazilian and international institutions. Dr. Viola was First-Secretary (2002-2003) and President (2014-2015) of the Brazilian Society in Immunology (SBI). Currently, he is Secretary-General (2022-present) of the International Union of Immunological Societies (IUIS). Dr. Viola was member of the Advisory Scientific Board of the 2007 IUIS Congress (Rio de Janeiro). He also acted as SBI delegate at 2015 (Medellin) and 2022 (Cuba) ALACI Congresses, and 2016 (Melbourne) IUIS Congress. He was member (2018-2021) and vice-Chair (2020) of the Scientific Council of the International Agency for Research on Cancer (IARC, WHO, France). Currently, he is member (2023-present) of the Governing Council of the IARC. Dr. Viola was member (2014-2024) and vice-President (2022-2024) of the Governing Council of the Rio de Janeiro State Foundation for Research (FAPERJ). Dr. Viola has received scholarship awards from the Brazilian National Council for Research (CNPq) as Junior Investigator in Immunology (1999-2004) and as Senior Investigator in Immunology (2004-present). He was also honored as Distinguish Scientist of the State of Rio de Janeiro (2007-present) by the Rio de Janeiro State Foundation for Research (FAPERJ). Currently, he is Scientific Coordinator of the National Institute of Science and Technology (INCT) for Cancer Genomics and Precision Medicine for the Brazilian Public Health System (SUS). He was member of the Board of the Ph.D. Program in Oncology (2007-2018) and Chair of the Program of Research Fellowship in Oncology of the Brazilian National Cancer Institute (2009-present). Dr. Viola is a member of the Editorial Board of *Cancer Immunology Immunotherapy* (2006-2010), *International Journal of Oncology* (2008-present), Academic Editor of the *PLoS ONE* (2012-present) and Associate Editor of the *Frontiers in Immunology* (2015-present). He also acts as consultant for several research funding agencies and scientific Journals. Dr. Viola has mentored several graduate students (M.Sc. and Ph.D.) and post-doctoral fellows.

As described above, Dr. Viola has extensive experience in different areas of immunology as a scientist, but also demonstrates extensive experience in academic and administrative positions. During his current term as Secretary-General of the IUIS, Dr. Viola has strengthened relations between the IUIS and institutions such as the World Health Organization (WHO), The International Science Council (ICS) and The International Council for Laboratory Animal Science (ICLAS). His experience and relationship with different academic and scientific institutions, as well as with other institutions worldwide, demonstrate that Dr. Viola presents all the conditions to continue for a new term as Secretary-General of IUIS. It is important to emphasize the importance for Latin American and Caribbean immunology societies to have a representative position within the board of the IUIS. Finally, Dr. Viola will act supporting further interactions between IUIS and worldwide academic institutions and scientific societies. As Secretary-General Dr. Viola will share all his experience to contribute to further disseminate the immunology worldwide. The legacy of recent years is a recognition of the importance of investing in science; without such investment, we cannot solve our pressing problems. The key message is that access to scientific advancements must be broad and equitable, ensuring that we all benefit from a more humane and understanding world.

## ***CURRICULUM VITAE AND BIBLIOGRAPHY***

April, 2025

### **PERSONAL IDENTIFICATION:**

NAME: João P.B. Viola

DATE OF BIRTH: September 14<sup>th</sup>, 1964

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### **PROFESSIONAL ADDRESS:**

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### **EDUCATION AND DEGREES:**

1989 M.D. School of Medicine, State University of Rio de Janeiro (UERJ), Brazil.

1994 M.Sc. Parasite Biology, Oswaldo Cruz Institute, Oswaldo Cruz Foundation (FIOCRUZ), Brazil.

1998 Ph.D. Biophysics, Carlos Chagas Filho Biophysics Institute, Federal University of Rio de Janeiro (UFRJ), Brazil.

### **POSITIONS AND EMPLOYMENT:**

1994 Visiting Fellow in Tropical Public Health, Department of Tropical Public Health, Harvard School of Public Health, USA.

1994-1997 Research Associate in Pathology, Division of Cellular and Molecular Biology, Dana-Farber Cancer Institute and The Center for Blood Research, Department of Pathology, Harvard Medical School, USA.

1998-2000 Junior Investigator, Division of Experimental Medicine, National Cancer Institute (INCA), Brazil.

2000-2006 Investigator, Division of Cellular Biology, National Cancer Institute (INCA), Brazil.

2000-2008 Head, Division of Cellular Biology, National Cancer Institute (INCA), Brazil.

2006-2009 Associate Investigator, Division of Cellular Biology, National Cancer Institute (INCA), Brazil.

- 2012-2023 Head, Division of Basic and Experimental Research, National Cancer Institute (INCA), Brazil.
- 2009-present Senior Investigator, Division of Basic and Experimental Research, National Cancer Institute (INCA), Brazil.
- 2012-present Head, Program of Immunology and Tumor Biology, National Cancer Institute (INCA), Brazil.
- 2023-present Director of Research and Innovation, National Cancer Institute (INCA), Brazil.
- 2023-present Deputy General-Director, National Cancer Institute (INCA), Brazil.

#### **MAJOR RESEARCH INTEREST:**

- 1- Signal transduction mechanisms in cell activation and transformation.
- 2- Gene expression during the immune response and cell transformation.
- 3- Regulation of the immune system by tumor cells.

Research Interest: The long-term interest of our group is to define the molecular mechanisms of the control of gene expression during cell activation and differentiation; and its relation to cell transformation and immune response. Our main objective is to analyze the involvement of different transcription factors in the coordinated regulation of gene expression involved in the control of cell cycle, differentiation and cell death. Given the importance of cell growth deregulation in the development of cancers, it is of great interest to elucidate the molecular mechanisms that regulate the differential expression of genes related with malignant cell transformation and the immune response.

#### **FELLOWSHIPS AND AWARDS:**

- 1999-2004 Junior Scholar in Immunology, National Council for Research (CNPq), Brazil.
- 2001 Travel Award, International Union Against Cancer (UICC), UICC Cancer Research Training Course. Toronto, Canada.
- 2004-present Senior Scholar in Immunology, National Council for Research (CNPq), Brazil.
- 2007-present Distinguished Scientist of the State of Rio de Janeiro, State Foundation for Research (FAPERJ), Rio de Janeiro, Brazil.
- 2009 Award for an outstanding achievement. *14<sup>th</sup> World Congress on Advances in Oncology and 12<sup>th</sup> International Symposium on Molecular Medicine*. Leutraki, Greece.

#### **PROFESSIONAL SOCIETIES AND ACTIVITIES:**

- Member of the Brazilian Society of Immunology (SBI), The American Association of Immunologists (AAI), Brazilian Society of Cell Biology (SBBC), Brazilian Society of Biochemistry and Molecular Biology (SBBq), The American Society for Microbiology (ASM) and Society of Leukocyte Biology (SLB).

- First Secretary of the Brazilian Society of Immunology (SBI). 2002-2004.
- President of the Brazilian Society of Immunology (SBI). 2014-2015.
- Secretary-General of the International Union of Immunological Societies (IUIS). 2022-present.

#### **MAJOR COMMITTEE ASSIGNMENTS:**

- Member of the Editorial Board of the *Cancer Immunology Immunotherapy* (2006-2010), *International Journal of Oncology* (2008-present), Academic Editor of the *PLoS ONE* (2012-present) and Associate Editor of the *Frontiers in Immunology* (2015-present).
- *Ad-hoc* consultant (reviewer) for the scientific journals *Blood*, *British Journal of Pharmacology*, *Cancer Immunology Immunotherapy*, *International Journal of Cancer*, *Oncogene*, *The FASEB Journal*, *The Journal of Immunology*, *Journal of Leukocyte Biology*, *The Journal of Pathology*, *Molecular Biology of the Cell*, *Nature Review in Cancer*, *Nature Communications*, and *PLoS ONE*.
- *Ad-hoc* consultant (reviewer) for the Brazilian research financial agencies CNPq, FAPERJ and FAPESP.
- Member of the Advisory Scientific Board of the *XIII International Congress of Immunology*. Rio de Janeiro, RJ, Brazil. 2007.
- Member of the Board of the Ph.D. Program in Oncology, Brazilian National Cancer Institute (INCA), Brazil (2007-2017).
- Chair of the Program of Research Fellowship in Oncology, Brazilian National Cancer Institute (INCA), Brazil (2009-present).
- Member (2014-present) and vice-president (2022-present) of the Governing Council of the Rio de Janeiro State Foundation for Research (FAPERJ), Brazil (2014-present).
- Scientific Expert for Research & Innovation, Non-communicable diseases and the challenge of healthy ageing, European Commission (2018).
- Member (2018-2021) and vice-Chair (2020) of the Scientific Council of the International Agency for Research on Cancer (IARC), World Health Organization (WHO), France.
- Member (2023-present) of the Governing Council of the International Agency for Research on Cancer (IARC), World Health Organization (WHO), France.

#### **ACADEMIC ACTIVITIES:**

- Coordinator of the Graduate Course at Ph.D. Program in Science, entitle: *Molecular Mechanisms of Activation of Cells of the Immune System*. Biophysics Institute, Federal University of Rio de Janeiro (UFRJ), Brazil. 1999, 2005.

- Coordinator of the Graduate Course at Ph.D. Program in Oncology, entitle: *Cellular Biology*. National Cancer Institute (INCA), Brazil. 2008-2011.
- Coordinator of the Graduate Course at Ph.D. Program in Oncology, entitle: *Basic and Tumor Immunology*. National Cancer Institute (INCA), Brazil. 2012-present.
- Supervised 15 M.Sc. dissertations, 14 Ph.D. theses and 14 Post-Doctorates.

## **BIBLIOGRAPHY:**

### Dissertation:

1- Viola, J.P.B. 1994. Study of multidrug resistance phenotype (MDR) in *Leishmania amazonensis*: Evidence of an active extrusion pump. M.Sc. thesis. Oswaldo Cruz Institute, FIOCRUZ, Rio de Janeiro, Brazil. pp1-78.

2- Viola, J.P.B. 1998. Study of activate mechanism of the transcription factor NFAT1 (Nuclear Factor of Activated T cell) and its involvement with the immune response. Ph.D. thesis. Carlos Chagas Filho Biophysics Institute, UFRJ, Rio de Janeiro, Brazil. pp1-160.

### Original Articles:

1- Moura, H., Fernandes, O., Viola, J.P.B., Silva, S.P., Passos, R.H., Lima, D.B. Enteric parasites and HIV infection: Occurrence in AIDS patients in Rio de Janeiro, Brazil. *Mem. Inst. Oswaldo Cruz* **84**:527-533. 1989.

2- Gueiros-Filho, F., Viola, J.P.B., Gomes, F.C.A., Farina, M., Lins, U., Bertho, A., Wirth, D.F., Lopes, U.G. *Leishmania amazonensis*: Multidrug resistance in vinblastine resistant promastigotes is associated with rhodamine 123 efflux, DNA amplification and RNA overexpression of *Leishmania mdrl* gene. *Exp. Parasitol.* **81**:480-490. 1995.

3- Loh, C., Shaw, K.T.-Y., Carew, J., Viola, J.P.B., Luo, C., Perrino, B.A., Rao, A. Calcineurin binds the transcription factor NFAT1 and reversibly regulates its activity. *J. Biol. Chem.* **271**:10884-10891. 1996.

4- Xanthoudakis, S., Viola, J.P.B., Shaw, K.T.Y., Luo, C., Wallace, J.D., Bozza, P.T., Luk, D.C., Curran, T., Rao, A. An enhanced immune response in mice lacking the transcription factor NFAT1. *Science* **272**:892-895. 1996.

5- Kiani, A., Viola, J.P.B., Lichtman, A.H., Rao, A. Downregulation of IL-4 gene transcription and control of Th2 cell differentiation by a mechanism involving the transcription factor NFAT1. *Immunity* **7**:849-860. 1997.

6- Viola, J.P.B., Kiani, A., Bozza, P.T., Rao, A. Regulation of allergic inflammation and eosinophil recruitment in mice lacking the transcription factor NFAT1: Role of interleukin-4 (IL-4) and IL-5. *Blood* **91**:2223-2230. 1998.

- 7- Bellio, M., Oliveira, A.C.S.C, Mermelstein, C.S., Capella, M.A.M, Viola, J.P.B., Levraud, J.P., Dosreis, G.A., Previato, J.O., Mendonca-Previato, L. Costimulatory action of glycoinositolphospholipids from *Trypanosoma cruzi*: Increased interleukin 2 secretion and induction of nuclear translocation of the nuclear factor of activated T cells 1. *FASEB J.* **13**:1627-1636. 1999.
- 8- Okamura, H., Aramburu, J., Garcia-Rodriguez, C., Viola, J.P.B, Raghavan, A., Zhang, X., Qin, J., Hogan, P.G., Rao, A. Concerted dephosphorylation of the transcription factor NFAT1 induces a conformational switch that regulates transcriptional activity. *Mol. Cell* **6**:539-550. 2000.
- 9- Caetano, M.S., Vieira-de-Abreu, A., Teixeira, L.K., Werneck, M.B.F., Barcinski, M.A., Viola, J.P.B. NFATC2 transcription factor regulates cell cycle progression during lymphocyte activation: Evidence of its involvement in the control of cyclin gene expression. *FASEB J.* **16**:1940-1942. 2002.
- 10- Aliberti, J., Viola, J.P.B., Vieira-de-Abreu, A., Bozza, P.T., Sher, A., Scharfstein, J. Cutting Edge: Bradykinin induces IL-12 production by dendritic cells: A danger signal that drives Th1 polarization. *J. Immunol.* **170**:5349-5353. 2003.
- 11- Teixeira, L.K., Fonseca, B.P.F., Vieira-de-Abreu, A., Barboza, B.A., Robbs, B.K., Bozza, P.T., Viola, J.P.B. IFN- $\gamma$  production by CD8<sup>+</sup> T cells depends on NFAT1 transcription factor and regulates Th differentiation. *J. Immunol.* **175**:5931-5939. 2005.
- 12- Magalhães, E.S., Mourão-Sá, D., Vieira-de-Abreu, A., Figueiredo, R.T., Pires, A.L., Farias-Filho, F.A., Fonseca, B.P.F., Viola, J.P.B., Metz, C., Martins, M.A., Castro-Faria-Neto, H.C., Bozza, P.T., Bozza, M.T. Macrophage migration inhibitory factor (MIF) is essential for allergic asthma but not for Th2 differentiation. *Eur. J. Immunol.* **37**:1097-1106. 2007.
- 13- Carvalho, L.D.S., Teixeira, L.K., Carrossini, N., Caldeira, A.T.N., Ansel, K.M., Rao, A., Viola, J.P.B. The NFAT1 transcription factor is a repressor of cyclin A2 gene expression. *Cell Cycle* **6**:1789-1795. 2007.
- 14- Accioly, M.T., Pacheco, P., Maya-Monteiro, C.M., Carrossini, N., Robbs, B.K., Kaufmann, C., Oliveira, S.S., Morgado-Diaz, J.A., Bozza, P.T., Viola, J.P.B. Lipid bodies are reservoirs of cyclooxygenase-2 and sites of prostaglandin-E<sub>2</sub> synthesis in colon cancer cells. *Cancer Res.* **15**:1732-1740. 2008.
- 15- Robbs, B.K., Cruz, A.L.S., Werneck, M.B.F., Mognol, G.P., Viola, J.P.B. Dual roles for NFAT transcription factors as oncogenes and tumor suppressors. *Mol. Cell. Biol.* **28**:7168-7181. 2008.
- 16- Fonseca, B.P.F., Olsen, P., Coelho, L.P., Ferreira, T.P.T., Souza, H.S., Martins, M.A., Viola, J.P.B. Regulation of pulmonary allergic inflammation and airway responsiveness by NFAT1 transcription factor. *Am. J. Respir. Cell Mol. Biol.* **40**:66-75. 2009.
- 17- Pedrosa, A.M.C., Weinlich, R., Mognol, G.P., Robbs, B.K., Viola, J.P.B., Campa, A., Amarante-Mendes, G.P. Melatonin protects CD4<sup>+</sup> T cells from activation-induced cell death by blocking NFAT-mediated CD95L upregulation. *J. Immunol.* **184**:3487-3494. 2010.

- 18- Olsen, P., Ferreira, T., Serra, M., Farias-Filho, F., Fonseca, B., Viola, J.P.B., Cordeiro, R., Silva, P., Costa, J., Martins, M.A. The lidocaine derivative JMF2-1 prevents ovalbumin-induced airway inflammation by regulating the function and survival of T cells. *Clin. Exp. Allergy* **41**:250-259. 2011.
- 19- Tilli, T.M., Franco, V., Robbs, B.K., Wanderley, J., Silva, F., Mello, K.D., Viola, J.P.B., Weber, G.F., Gimba, E.R. Osteopontin-c splicing isoform contributes to ovarian cancer progression. *Mol. Cancer Res.* **9**:280-293. 2011.
- 20- Vidal, F., de-Araujo, W.M., Cruz, A.L.S., Tanaka, M.N., Viola, J.P.B., Morgado-Díaz, J.A. Lithium reduces tumorigenic potential in response to EGF signaling in human colorectal cancer cells. *Int. J. Oncol.* **36**:1365-1373. 2011.
- 21- Werneck, M.B.F., Vieira-de-Abreu, A., Chammass R., Viola, J.P.B. NFAT1 transcription factor is central in the regulation of tissue microenvironment for tumor metastasis. *Cancer Immunol. Immunother.* **60**:537-546. 2011.
- 22- Carneiro, F.R.G., Ramalho-Oliveira, R., Mognol, G.P., Viola, J.P.B. Interferon regulatory factor-2 binding protein 2 is a new NFAT1 partner and represses its transcriptional activity. *Mol. Cell. Biol.* **31**:2889-2901. 2011.
- 23- Mognol, G.P., de-Araujo-Souza, P.S., Robbs, B.K., Teixeira, L.K., Viola, J.P.B. Transcriptional regulation of the *c-Myc* promoter by NFAT1 involves negative and positive NFAT-responsive elements. *Cell Cycle* **11**:1014-1028. 2012.
- 24- Faget, D.V., Lucena, P.I., Robbs, B.K., Viola, J.P.B. NFAT1 C-terminal domains are necessary but not sufficient for inducing cell death. *PLoS ONE* **7**:e47868. 2012.
- 25- Werneck, M.B.F., Hottz, E., Bozza, P.T., Viola, J.P.B. Cyclosporin A inhibits colon cancer cell growth independently of the calcineurin pathway. *Cell Cycle* **11**:3997-4008. 2012.
- 26- Robbs, B.K., Lucena, P.I., Viola, J.P.B. The transcription factor NFAT1 induces apoptosis through cooperation with Ras/Raf/MEK/ERK pathway and upregulation of TNF- $\alpha$  expression. *Biochim. Biophys. Acta.* **1833**: 2016-2028. 2013.
- 27- de-Souza, W.F., Fortunato-Miranda, N., Robbs, B.K., de-Araujo, W.M., de-Freitas-Junior, J.C., Bastos, L.G., Viola, J.P.B., Morgado-Díaz, J.A. Claudin-3 overexpression increases the malignant potential of colorectal cancer cells: Roles of ERK1/2 and PI3K-Akt as modulators of EGFR signaling. *PLoS ONE* **8**:e74994. 2013.
- 28- Nestal-de-Moraes, G., Vasconcelos, F.C., Delbue, D., Mognol, G.P., Sternberg, C., Viola, J.P.B., Maia, R.C. Doxorubicin induces cell death in breast cancer cells regardless of survivin and XIAP expression levels. *Eur. J. Cell Biol.* **92**:247-256. 2013.
- 29- Barboza, B.A., Fonseca, B.P.F., Viola, J.P.B. NFAT1 transcription factor in dendritic cells is required to modulate T helper cell differentiation. *Immunobiol.* **219**:704-712. 2014.



- 30- de-Souza, P.S., Cruz, A.L., Viola, J.P., Maia, R.C. Microparticles induce multifactorial resistance through oncogenic pathways independently of cancer cell type. *Cancer Sci.* **106**:60-68. 2015.
- 31- Fazolini, N.P., Cruz, A.L., Werneck, M.B., Viola, J.P.B., Maya-Monteiro, C.M., Bozza, P.T. Leptin activation of mTOR pathway in intestinal epithelial cell triggers lipid droplet formation, cytokine production and increased cell proliferation. *Cell Cycle* **14**:2667-2676. 2015.
- 32- de-Araujo, W.M., Robbs, B.K., Bastos, L., de-Souza, W.F., Vidal-Cabral, F., Viola, J.P.B., Morgado-Diaz, J.A. PTEN overexpression cooperates with lithium to reduce the malignancy and to increase cell death by apoptosis via PI3K/AKT suppression in colorectal cancer cells. *J. Cell Biochem.*, **117**:458-469. 2016.
- 33- Lucena, P.I., Faget, D.V., Pachulec, E., Robaina, M.C., Klumb, C.E., Robbs, B.K., Viola, J.P.B. NFAT2 isoforms differentially regulate gene expression and cell transformation through alternative N-terminal domains. *Mol. Cell. Biol.*, **36**:119-131. 2016.
- 34- Teixeira, L.K., Carrossini, N., Secca, C., Kroll, J.E., DaCunha, D.C., Faget, D.V., Carvalho, L.D.S., de-Souza, S.J., Viola, J.P.B. NFAT1 transcription factor regulates cell cycle progression and cyclin E expression in B lymphocytes. *Cell Cycle*, **15**:2346-2359. 2016.
- 35- Secca, C., Faget, D.V., Hanschke, S.C., Carneiro, M.S., Bonamino, M.H., de-Araujo-Souza, P.S., Viola, J.P.B. IRF2BP2 transcriptional repressor restrains naive CD4 T cells activation and clonal expansion induced by TCR triggering. *J. Leukoc. Biol.*, **100**:in press. 2016.
- 36- Rodrigues, V.D., Pinho, N.B., Abdelhay, E., Viola, J.P.B., Correia, M.I.T.D., Martucci, R.B. Nutritional and immune modulatory intervention in surgical gastric cancer patients: results from hospital routine. *Nutr. Clin. Prac.*, in press. 2016.
- 37- Pachulec, E., Neitzke-Montinelli, V., Viola, J.P.B. NFAT2 regulates generation of innate-like CD8<sup>+</sup> T lymphocytes and CD8<sup>+</sup> T lymphocytes responses. *Front. Immunol.*, **7**:411. 2016.
- 38- Secca, C., Faget, D.V., Hanschke, S.C., Carneiro, M.S., Bonamino, M.H., de-Araujo-Souza, P.S., Viola, J.P.B. IRF2BP2 transcriptional repressor restrains naive CD4 T cells activation and clonal expansion induced by TCR triggering. *J. Leukoc. Biol.*, **100**:1081-1091. 2016.
- 39- Penha, R.C.C., Lima, S.C.S., Boroni, M., Ramalho-Oliveira, R., Viola, J.P.B., de Carvalho, D.P., Fusco, A., Pinto, L.F.R. Intrinsic LINE-1 Hypomethylation and Decreased Brca1 Expression are Associated with DNA Repair Delay in Irradiated Thyroid Cells. *Radiat Res.*, **188**:144-155. 2017.
- 40- Carvalho, E., Hugo-de-Almeida, V., Rondon, A.M.R., Possik, P.A., Viola, J.P.B., Monteiro, R.Q. Protease-activated receptor 2 (PAR2) upregulates granulocyte colony stimulating factor (G-CSF) expression in breast cancer cells. *Biochem. Biophys. Res. Commun.*, **504**:270-276. 2018.

- 41- Feijó, P.M., Rodrigues, V.D., Viana, M.S., Dos-Santos, M.P., Abdelhay, E., Viola, J.P.B., de-Pinho, N.B., Martucci, R.B. Effects of  $\omega$ -3 supplementation on the nutritional status, immune, and inflammatory profiles of gastric cancer patients: A randomized controlled trial. *Nutrition*, **61**:125-131. 2019.
- 42- Cruz, A.L.S., Carrossini, N., Teixeira, L.K., Ribeiro-Pinto, L.F., Bozza, P.T., Viola, J.P.B. Cell cycle progression regulates biogenesis and cellular localization of lipid droplets. *Mol Cell Biol.*, **39**:e00374-18. 2019.
- 43- Benevides, L., Saltarelli, V.M., Pioto, F., Sacramento, L.A., Dias, M.S., Rodríguez, G.R., Viola, J.P.B., Carregaro, V., Silva, J.S. NFAT1 Regulates Ly6C<sup>hi</sup> Monocyte Recruitment to the CNS and Plays an Essential Role in Resistance to *Toxoplasma gondii* Infection. *Front. Immunol.*, **10**:2105. 2019
- 44- de Melo, A.C., Thuler, L.C.S., da Silva, J.L., de Albuquerque, L.Z., Pecego, A.C., Rodrigues, L.O.R., da Conceição, M.S., Garrido, M.M., Quintella-Mendes, G.L., Mendes-Pereira, A.C.P., Soares, M.A., Viola, J.P.B. Cancer inpatients with COVID-19: A report from the Brazilian National Cancer Institute. *PLoS One*, **15**:e0241261. 2020.
- 45- de Araújo-Souza, P.S., Hanschke, S.C.H., Nardy, A.F.F.R., Sécca, C., Oliveira-Vieira, B., Silva, K.L., Soares-Lima, S.C., Viola, J.P.B. Differential interferon- $\gamma$  production by naive and memory-like CD8 T cells. *J. Leukoc. Biol.*, **108**:1329-1337. 2020.
- 46- Delbue, D., Mendonça, B.S., Robaina, M.C., Lemos, L.G.T., Lucena, P.I., Viola, J.P.B., Magalhães, L.M., Crocamo, S., Oliveira, C.A.B., Teixeira, F.R., Maia, R.C., Nestal-de-Moraes, G. Expression of nuclear XIAP associates with cell growth and drug resistance and confers poor prognosis in breast cancer. *Biochim. Biophys. Acta. Mol. Cell. Res.*, **1867**:118761. 2020.
- 47- Carrossini, N., Meireles, Da-Costa, N., Andrade-Barreto, E., Sousa, V.P.L., Nicolau-Neto, P., Souza-Santos, P.T., Mansur, G.R., Wernersbach, L., Bozza, P.T., Viola, J.P.B., Ribeiro-Pinto, L.F. Lipid droplet biogenesis and COX-2 pathway activation are triggered by Barrett's esophagus and adenocarcinoma, but not esophageal squamous cell carcinoma risk factors. *Sci Rep.*, **11**:981. 2021.
- 48- Siqueira, J.D., Goes, L.R., Alves, B.M., de-Carvalho, P.S., Cicala, C., Arthos, J., Viola, J.P.B., de-Melo, A.C., Soares, M.A. SARS-CoV-2 genomic analyses in cancer patients reveal elevated intrahost genetic diversity. *Virus Evol.*, **7**:veab013. 2021.
- 49- de-Araújo, W.M., Tanaka, M.N., Lima, P.H.S., de-Moraes, C.F., Leve, F., Bastos, L.G., Rocha, M.R., Robbs, B.K., Viola, J.P.B., Morgado-Diaz, J.A. TGF- $\beta$  acts as a dual regulator of COX-2/PGE<sub>2</sub> tumor promotion depending of its cross-interaction with H-Ras and Wnt/ $\beta$ -catenin pathways in colorectal cancer cells. *Cell Biol. Int.*, **45**:662-673. 2021.
- 50- Siqueira, J.D., Goes, L.R., Alves, B.M., da-Silva, A.C.P., de-Carvalho, P.S., Cicala, C., Arthos, J., Viola, J.P.B., Soares, M.A. Distinguishing SARS-CoV-2 bonafide re-infection from pre-existing minor variant reactivation. *Infect. Genet. Evol.*, **90**:104772. 2021.

- 51- Goes, L.R., Siqueira, J.D., Garrido, M.M., Alves, B.M., Pereira, A.C.P.M., Cicala, C., Arthos, J., Viola, J.P.B., Soares, M.A. New infections by SARS-CoV-2 variants of concern after natural infections and post-vaccination in Rio de Janeiro, Brazil. *Infect. Genet. Evol.*, **94**:104998. 2021.
- 52- Chaves, O.A., Sacramento, C.Q., Ferreira, A.C., Mattos, M., Fintelman-Rodrigues, N., Temerozo, J.R., Vazquez, L., Pinto, D.P., da-Silveira, G.P.E., da-Fonseca, L.B., Pereira, H.M., Carlos, A.S., d'Avila, J.C., Viola, J.P.B., Monteiro, R.Q., Bozza, P.T., Castro-Faria-Neto, H.C., Souza, T.M.L. Atazanavir Is a Competitive Inhibitor of SARS-CoV-2 M<sup>pro</sup>, Impairing Variants Replication In Vitro and In Vivo. *Pharmaceuticals*, **15**:21. 2021.
- 53- Teixeira, L., Temerozo, J.R., Pereira-Dutra, F.S., Ferreira, A.C., Mattos, M., Gonçalves, B.S., Sacramento, C.Q., Palhinha, L., Cunha-Fernandes, T., Dias, S.S.G., Soares, V.C., Barreto, E.A., Cesar-Silva, D., Fintelman-Rodrigues, N., Pão, C.R.R., de-Freitas, C.S., Reis, P.A., Hottz, E.D., Bozza, F.A., Bou-Habib, D.C., Saraiva, E.M., de-Almeida, C.J.G., Viola, J.P.B., Souza, T.M.L., Bozza, P.T. Simvastatin Downregulates the SARS-CoV-2-Induced Inflammatory Response and Impairs Viral Infection Through Disruption of Lipid Rafts *Front. Immunol.*, **13**:820131. 2022.
- 54- Neitzke-Montinelli, V., Caloba, C., Melo, G., Frade, B.B., Caraméz, E., Mazzocchi, L., Gonçalves, A.N.A., Nakaya, H.I., Pereira, R.M., Werneck, M.B.F., Viola, J.P.B. Differentiation of memory CD8 T cells unravel gene expression pattern common to effector and memory precursors. *Front. Immunol.*, **13**:840203. 2022.
- 55- Goes, L.R., Siqueira, J.D., Garrido, M.M., Alves, B.M., Cicala, C., Arthos, J., Viola, J.P.B., Soares, M.A. Evidence of recurrent selection of mutations commonly found in SARS-CoV-2 variants of concern in viruses infecting immunocompromised patients. *Front. Immunol.* **13**:840203. 2022.
- 56- Borges, V.F., Galant, L.S., Kanashiro, A., Castanheira, F.V.E.S., Monteiro, V.V.S., Duarte, D.A., Rodrigues, F.C., Silva, C.M.S., Schneider, A.H., Cebinelli, G.C.M., de Lima, M.H.F., Viola J.P.B., Cunha, T.M., da Costa Neto, C.M., Alves-Filho, J.C.F., Pupo, A.S., Cunha, F.Q. FK506 impairs neutrophil migration that results in increased polymicrobial sepsis susceptibility. *Inflamm. Res.* **72**:203-215. 2023.
- 57- Souza, T.M.L., Pinho, V.D., Setim, C.F., Sacramento, C.Q., Marcon, R., Fintelman-Rodrigues, N., Chaves, O.A., Heller, M., Temerozo, J.R., Ferreira, A.C., Mattos, M., Momo, P.B., Dias, S.S.G., Gesto, J.S.M., Pereira-Dutra, F., Viola, J.P.B., Queiroz-Junior, C.M., Guimarães, L.C., Chaves, I.M., Guimarães, P.P.G., Costa, V.V., Teixeira, M.M., Bou-Habib, D.C., Bozza, P.T., Aguilón, A.R., Siqueira-Junior, J., Macedo-Junior, S., Andrade, E.L., Fadanni, G.P., Tolouei, S.E.L., Potrich, F.B., Santos, A.A., Marques, N.F., Calixto, J.B., Rabi, J.A. Preclinical development of kinetin as a safe error-prone SARS-CoV-2 antiviral able to attenuate virus-induced inflammation. *Nat. Commun.* **14**:199. 2023.
- 58- Viana, M.C., Curty, G., Furtado, C., Singh, B., Bendall, M.L., Viola, J.P.B., de Melo, A.C., Soares, M.A., Moreira, M.A.M. Naso-oro-pharyngeal microbiome from breast cancer patients diagnosed with COVID-19. *Front. Microbiol.* **13**:1074382. 2023.

59- Melo, G.A., Xu, T., Calôba, C., Schutte, A., Passos, T.O., Neto, M.A.N., Brum, G., Oliveira-Vieira, B., Higa, L., Monteiro, F.L.L., Berbert, L., Gonçalves, A.N.A., Tanuri, A., Viola, J.P.B., Werneck, M.B.F., Nakaya, H.I., Pipkin, M.E., Martinez, G.J., Pereira, R.M. Polycomb Repressive Complex 1 Subunit Cbx4 Positively Regulates Effector Responses in CD8 T Cells. *J. Immunol.* **211**:721-726. 2023.

60- de Melo, A.C., Lucena, E., de Oliveira, D.C.M., Viola, J.P.B. Frequency of HLA-A\*02:01 in the Brazilian population and its impact on uveal melanoma systemic treatment. *Oncologist* **29**:e1098-e1099. 2024.

61- Mattos, M., Sacramento, C.Q., Ferreira, A.C., Fintelman-Rodrigues, N., Pereira-Dutra, F.S., de Freitas, C.S., Gestó, J.S.M., Temerozo, J.R., Silva, A.P.D.D., Moreira, M.T.G., Silva, R.S.C., Silveira, G.P.E., Pinto, D.P., Pereira, H.M., Fonseca, L.B., Alves Ferreira, M., Blanco, C., Viola, J.P.B., Bou-Habib, D.C., Bozza, P.T., Souza, T.M.L. Newly Proposed Dose of Daclatasvir to Prevent Lethal SARS-CoV-2 Infection in Human Transgenic ACE-2 Mice. *Viruses* **16**:1856. 2024.

#### Review Articles:

1- Viola, J.P.B., Rao, A. Role of the cyclosporin-sensitive transcription factor NFAT1 in the allergic response. In *New Perspectives in Eosinophils: Role in Inflammation Associated with Allergy, Asthma and Parasitic Disease*. Edited by R. Cordeiro, R. Moqbel and P.F. Weller. *Mem. Inst. Oswaldo Cruz* **92(Suppl. II)**:147-155. 1997.

2- Viola, J.P.B., Rao, A. Molecular regulation of cytokine gene expression during the immune response. *J. Clin. Immunol.* **19**:98-108. 1999.

3- Agarwal, S., Viola, J.P.B., Rao, A. Chromatin-based regulatory mechanisms governing cytokine gene transcription. *J. Allergy Clin. Immunol.* **103**:990-999. 1999.

4- Viola, J.P.B., Carvalho, L.D.S., Fonseca, B.P.F., Teixeira, L.K. NFAT transcription factors: from cell cycle to tumor development. *Braz. J. Med. Biol. Res.* **38**:335-344. 2005.

5- Teixeira, L.K., Fonseca, B.P.F., Barboza, B.A., Viola, J.P.B. The role of interferon- $\gamma$  on immune and allergic responses. In *Nitric Oxide, Cytokines and Inflammation*. Edited by R. Cordeiro and J.L. Wallace. *Mem. Inst. Oswaldo Cruz* **100(Suppl. I)**:137-144. 2005.

6- Bozza, P.T. and Viola, J.P.B. Lipid droplets in inflammation and cancer. *Prostaglandins Leukot. Essent. Fatty Acids* **82**:243-250. 2010.

7- Amarante-Mendes, G.P., Bortoluci, K.R., Bozza, P.T., Chammas, R. and Viola, J.P.B. Paradise revealed: first class science rocked by the sound of the waves. *Cell Death Differ.* **17**:1368-1372. 2010.

8- de-Araujo-Souza, P.S., Hanschke, S.C.H., Viola, J.P.B. Epigenetic Control of interferon-gamma expression in CD8 T cells. *J. Immunol. Res.* **2015**:849573. 2015.

- 9- Mognol, G.P., Carneiro, F.R.G., Robbs, B.K., Faget, D.V., Viola, J.P.B. Cell cycle and apoptosis regulation by NFAT transcription factors: New roles for an old player. *Cell Death Dis.* **7**:e2199. 2016.
- 10- Ramalho-Oliveira, R., Oliveira-Vieira, B., Viola, J.P.B. IRF2BP2: A new player in the regulation of cell homeostasis. *J. Leukoc. Biol.*, **106**:717-723. 2019.
- 11- Cruz, A.L.S., Barreto, E.A., Fazolini, N.P.B., Viola, J.P.B., Bozza, P.T. Lipid droplets: platforms with multiple functions in cancer hallmarks. *Cell Death Dis.*, **11**:105. 2020.
- 12- Pastor, T.P., Peixoto, B.C., Viola, J.P.B. The transcriptional co-factor IRF2BP2: A new player in tumor development and microenvironment. *Front. Cell Dev. Biol.*, **9**:655307. 2021.

#### Book Chapters:

- 1- Rao, A., Viola, J.P.B., Garcia-Cozar, F., Kiani, A., Aramburu, J., Okamura, H., Macian, F., Garcia-Rodriguez, C., Raghavan, A., Hogan, P.G. Regulation of gene expression by calcineurin and NFAT proteins. In: *Kinases and Phosphatases in Lymphocyte and Neuronal Signaling*. Edited by H. Yakura. Tokyo, Springer-Verlag, 183-190. 1997.
- 2- Viola, J.P.B., Teixeira, L.K., Werneck, M.B.F. Imunologia tumoral. In: *Oncologia Molecular*. Editado por C.G. Ferreira e J.C.C. Rocha. São Paulo, Editora Atheneu, 105-112. 2004.
- 3- Bonomo, A., Werneck, M.B.F, Viola, J.P.B. Imunologia tumoral. In: *Oncologia Molecular*, 2ª Edição. Editado por C.G. Ferreira e J.C.C. Rocha. São Paulo, Editora Atheneu, 151-166. 2010.
- 4- Lucena, P.I., Robbs, B.K., Viola, J.P.B. Sinalização de cálcio na transcrição gênica. In: *Sinalização de Cálcio: Bioquímica e Fisiologia Celulares*. Editado por R.R. Resende, S. Guatimosim e M.F. Leite. São Paulo, Editora Sarvier, 513-539. 2012.
- 5- Viola, J.P.B., Mognol, G.P. Fatores de transcrição e regulação da expressão gênica. In: *Tratado de Oncologia*. Editado por P.M.G. Hoff. São Paulo, Editora Atheneu, 217-229. 2012.
- 6- Viola, J.P.B., Cruz, A.L.S., Werneck, M.B.F., Bozza, P.T. Formation and function of lipid droplets in inflammation and cancer. In: *Trends in Stem Cell Proliferation and Cancer Research*. Edited by R. Resende and H. Ulrich, Springer, 139-165. 2013.
- 7- Amarante-Mendes, G.P., Jacysyn, J.F., Faget, D.V., Pereira, W.O., Weinlich, R., Viola, J.P.B. Eventos significativos na vida das células: Ciclo celular, proliferação e quantificação de morte. In: *Citometria de Fluxo Aplicações no Laboratório Clínico e de Pesquisa*. Editado por M.M. Sales e D. Vasconcelos. São Paulo, Editora Atheneu, 91-103. 2013



**Belo Horizonte, April 12, 2025**

**Dr. Joao Viola,  
IUIS Secretary General**

Dear Dr Viola,

I hope this message finds you well.

As President of the Latin American and Caribbean Immunology Association (ALACI), I am pleased to submit our nominations and endorsements for the upcoming IUIS elections, scheduled for August 2025.

These nominations were thoroughly discussed and unanimously approved by all National Societies of Latin America and the Caribbean during the ALACI General Assembly at the XIV ALACI Congress, held in Buenos Aires, Argentina, in November 2024.

We formally nominate and endorse the following candidates for IUIS leadership positions:

- **Prof. Emilio L. Malchiodi** – Candidate for the position of **IUIS Vice-President (2025–2028)**
- **Dr. Joao P. B. Viola** – Candidate for the position of **IUIS General Secretary (2025–2028)**

Additionally, we nominate and endorse the following immunologists as candidates for IUIS Council Members (2025–2028):

- **Dr. Mariana Maccioni** (for a second term).
- **Dr. Sergio Costa Oliveira** (for a second term).
- **Dr. Constantino III Roberto López-Macías** (replacing Dr. Leopoldo Santos-Argumedo, who has completed two terms).

The CVs and personal statements for all nominees are attached for your review.

Please confirm receipt of the documents, and do not hesitate to reach out if any additional information is required.

My very best,

**Walderez Dutra  
President, ALACI**

**From:** [Maria Bellio](#)  
**Sent:** Monday, 19 May 2025 00:26  
**To:** [IUIS](#)  
**Cc:** [SBI - Sociedade Brasileira de Imunologia](#)  
**Subject:** [INFO-MAIL] Re: Last Call for Nominations: IUIS Executive Committee and Council (2025–2028 )

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**Categories:** Clara

Dear Emily Blitz,

Please find below our nomination for the following leadership positions:

2025-2028 Executive Committee

Vice-President: Dr. Emilio Malchiodi (Argentina)

Secretary General: Dr. João Paulo de Biaso Viola (Brazil)

2025-2028 Council : Dr. Sergio Costa (Brazil)

Dr. Mariana Maccione (Argentina)

Best regards,

**Maria Bellio, Ph.D**

*President*

*Brazilian Society of Immunology (SBI)*

Em qua., 14 de mai. de 2025 às 10:00, IUIS Office <[info@iuis.org](mailto:info@iuis.org)> escreveu:

[View this email in your browser](#)



International Union of Immunological Societies

**Last Call for Nominations:**  
**IUIS Executive Committee and Council (2025-2028)**

Dear IUIS Constituents,

**This is a final reminder that the deadline for candidate nominations is**