

SHORT CURRICULUM VITAE

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Degrees and Diplomas:

- 2000 – Aggregation in Medicine (Physiological and Technological Sciences – Biophysics). University of Coimbra
- 1992 – PhD in Medicine (Physiological Sciences - Biophysics). University of Coimbra. Portugal
- 1981 – MD, University of Coimbra, Portugal

Current Positions and Responsibilities:

- 2007 – Full Professor
- 2004 – Director of the Biophysics/Biomathematics Institute, IBILI, Faculty of Medicine
- 1995 to 2007 – Associate Professor
- 1992 to 1995 – Auxiliary Professor
- 1988 to 1992 – Assistant
- 1984 to 1988 – Teaching Assistant
- 2011 – Responsible by Bioterium of IBILI-Sub-Unidade 1, Faculty of Medicine
- 2011 – Member of ORBEA
- 2016 – President of Ethics Committee of Coimbra Nursing School

Main research topics (up to 5): Biophysics; Development of animal models for human diseases (cancer, cardiac ischemia); Nuclear Oncology (from molecular biology to molecular imaging); Photodynamic therapy in models in vitro and in vivo; Radiopharmacy.

Global Scientific activities

- 177 full papers published in international and national journals.
- 5 book chapters
- 720 articles published in the form of abstracts in international and national journals.
- 887 presentations in conferences, scientific meetings, in the form of lectures, oral presentations and posters.

Awards: 47 awards since 1988, 24 of which in the last five.

Publications (full text in the last three years)

2016

1. Impact of splenic artery ligation after major hepatectomy on liver function, regeneration and viability. Carrapita J, Abrantes AM, Campelos S, Gonçalves AC, Cardoso D, Sarmiento-Ribeiro AB, Rocha C, Santos JN, **Botelho MF**, Tralhão JG, Farges O, Barbosa JM. *Scientific Reports*. 2016 Oct 11;6:34731. doi:

10.1038/srep34731. IF: 5.228; Q1. Area: Multidisciplinary

2. The protective effect of regucalcin against radiation-induced damage in testicular cells. Silva AM, Correia S, Casalta-Lopes JE, Mamede AC, Cavaco JE, **Botelho MF**, Socorro S, Maia CJ. *Life Sciences*. 2016 Sep 9. doi: 10.1016/j.lfs.2016.09.003. IF: 2.685. Q1. Area: Biochemistry, Genetics and Molecular Biology, Biochemistry, Genetics and Molecular Biology (miscellaneous).
3. Liver diseases: what is known so far about the therapy with human amniotic membrane? Guerra S, Mamede AC, Carvalho MJ, Laranjo M, Tralhão JG, Abrantes AM, Maia CJ, **Botelho MF**. *Cell Tissue Bank*. 2016 Aug 22. doi:10.1007/s10561-016-9579-0. IF: 1.248. Q2. Area: Biochemistry, Genetics and Molecular Biology, Cell Biology.
4. Combined dual effect of modulation of human neutrophils' oxidative burst and inhibition of colon cancer cells proliferation by hydroxycinnamic acid derivatives. Tavares-da-Silva EJ, Varela CL, Pires AS, Encarnação JC, Abrantes AM, **Botelho MF**, Carvalho RA, Proença C, Freitas M, Fernandes E, Roleira FM. *Bioorganic and Medicinal Chemistry*. 2016 Aug 15;24(16):3556-64. doi: 10.1016/j.bmc.2016.05.065. IF: 2.923. Q1 (Drug Discovery, Organic Chemistry, Pharmaceutical Science). Q2 (Biochemistry, Clinical Biochemistry, Molecular Medicine). Area: Biochemistry, Genetics and Molecular Biology.
5. Ascorbic acid and colon cancer: an oxidative stimulus to cell death depending on cell profile. Pires AS, Marques CR, Encarnação JC, Abrantes AM, Mamede AC, Laranjo M, Gonçalves AC, Sarmiento-Ribeiro AB, **Botelho MF**. *European Journal of Cell Biology*. 2016 Jun-Jul;95(6-7):208-18. doi: 10.1016/j.ejcb.2016.04.001. IF: 4.011. Q1 (Histology, Pathology and Forensic Medicine). Q2 (Cell Biology). Area: Biochemistry, Genetics and Molecular Biology and Medicine.
6. Oxidative Stress, DNA, Cell Cycle/Cell Cycle Associated Proteins and Multidrug Resistance Proteins: Targets of Human Amniotic Membrane in Hepatocellular Carcinoma. Mamede AC, Guerra S, Laranjo M, Santos K, Carvalho MJ, Carvalheiro T, Moura P, Paiva A, Abrantes AM, Maia CJ, **Botelho MF**. *Pathology & Oncology Research*. 2016 Oct;22(4):689-97. doi: 10.1007/s12253-016-0053-x. IF: 1.940. Q2 (Pathology and Forensic Medicine). Q3 (Cancer Research, Oncology). Area: Biochemistry, Genetics and Molecular Biology, and Medicine.
7. New Approach for Treatment of Primary Liver Tumors: The Role of Quercetin. Brito AF, Ribeiro M, Abrantes AM, Mamede AC, Laranjo M, Casalta-Lopes JE, Gonçalves AC, Sarmiento-Ribeiro AB, Tralhão JG, **Botelho MF**. *Nutrition and Cancer*. 2016;68(2):250-66. doi: 10.1080/01635581.2016.1145245. IF: 2.241. Q1 (Medicine). Q2 (Nutrition and Dietetics, Oncology). Q3 (Cancer Research). Area: Biochemistry, Genetics and Molecular Biology, Medicine and Nursing.
8. MIA PaCa-2 and PANC-1 - pancreas ductal adenocarcinoma cell lines with neuroendocrine differentiation and somatostatin receptors. R Gradiz, HC Silva, L Carvalho, **MF Botelho**, A Mota-Pinto A. *Scientific Reports*. 2016 Feb 17;6:21648. doi: 10.1038/srep21648. IF: 5.228; Q1. Area: Multidisciplinary.
9. The role of immune system exhaustion on cancer cell escape and anti-tumor immune induction after irradiation". F Mendes, C Domingues, P Rodrigues-Santos, AM Abrantes, AC Gonçalves, J Estrela, J Encarnação, AS Pires, M Laranjo, V Alves, R Teixeira, AB Sarmiento, **MF Botelho**, MS Rosa. *Biochimica et Biophysica Acta (BBA) - Reviews on Cancer*. 2016 Feb 9;1865(2):168-175. doi: 10.1016/j.bbcan.2016.02.002. IF: 7.841; Q1. Area: Biochemistry, Genetics and Molecular Biology and Medicine.

2015

10. Fluorine-18 Fluorodeoxyglucose Uptake in Hepatocellular Carcinoma: Correlation with Glucose Transporters and p53 Expression". AF Brito, AM Abrantes, M Ribeiro, R Oliveira, J Casalta-Lopes, AC Gonçalves, AB Sarmiento-Ribeiro, JG Tralhão, **MF Botelho**. *Journal of Clinical and Experimental Hepatology*. 2015 Sep;5(3):183-9. doi: 10.1016/j.jceh.2015.05.003. IF: 0.38; Q3. Area: Medicine.
11. Effects of X-radiation on lung cancer cells: the interplay between oxidative stress and P53 levels. F Mendes, T Sales, C Domingues, S Schugk, AM Abrantes, AC Gonçalves, R Teixeira, R Silva, J Casalta-Lopes, C Rocha, M Laranjo, PC Simões, AB Ribeiro, **MF Botelho**, MS Rosa. *Medical Oncology*. 2015 Dec;32(12):266. doi: 10.1007/s12032-015-0712-x. IF: 2.486; Q2 (Hematology, Oncology). Q3 (Cancer Research). Area: Biochemistry, Genetics and Molecular Biology and Medicine.

12. Influence of P53 on the radiotherapy response of hepatocellular carcinoma. AR Gomes, AM Abrantes, AF Brito, M Laranjo, JE, Casalta-Lopes, AC Gonçalves, AB Sarmento-Ribeiro, **MF Botelho**, JG Tralhão. *Clinical and Molecular Hepatology*. 2015 Sep;21(3):257-67. doi: 10.3350/cmh.2015.21.3.257. IF: 1.05; Q3. Área: [Medicine](#).
13. Selective cytotoxicity and cell death induced by human amniotic membrane in hepatocellular carcinoma. AC Mamede, S Guerra, M Laranjo, MJ Carvalho, RC Oliveira, AC Gonçalves, R Alves, L Prado Castro, AB Sarmento-Ribeiro, P Moura, AM Abrantes, CJ Maia, **MF Botelho**. *Medical Oncology*. 2015 Dec;32(12):257. doi: 10.1007/s12032-015-0702-z. IF: 2.486; Q2 (Hematology, Oncology). Q3 (Cancer Research). Área: [Biochemistry, Genetics and Molecular Biology and Medicine](#).
14. Cholangiocarcinoma: from molecular biology to treatment. AF Brito, AM Abrantes, JC Encarnação, JG Tralhão, **MF Botelho**. *Medical Oncology*. 2015 Nov;32(11):245. doi: 10.1007/s12032-015-0692-x. IF: 2.486; Q2 (Hematology, Oncology). Q3 (Cancer Research). Área: [Biochemistry, Genetics and Molecular Biology and Medicine](#).
15. Novel 4,5,6,7-tetrahydropyrazolo[1,5-a]pyridine fused chlorins as very active photodynamic agents for melanoma cells. NA Pereira, M Laranjo, M Pineiro, AC Serra, K Santos, R Teixo, AM Abrantes, AC Gonçalves, AB Sarmento Ribeiro, J Casalta-Lopes, **MF Botelho**, TM Pinho e Melo. *European Journal Medicinal Chemistry*. 2015 Oct 20;103:374-80. doi: 10.1016/j.ejmech.2015.08.059. IF: 3.902; Q1. Área: [Chemistry, Pharmacology, Toxicology and Pharmaceutics](#).
16. Retinoblastoma: might photodynamic therapy be an option? Teixo R, Laranjo M, Abrantes AM, Brites G, Serra A, Proença R, **Botelho MF**. *Cancer Metastasis and Reviews*. 2015 Dec;34(4):563-73. doi: 10.1007/s10555-014-9544-y. IF: 5.316; Q1. Área: [Biochemistry, Genetics and Molecular Biology and Medicine](#).
17. The importance of radiotherapy on diffuse large B cell lymphoma treatment: a current review. Mendes F, Domingues C, Teixo R, Abrantes AM, Gonçalves AC, Nobre-Gois I, Jacobetty M, Sarmento AB, **Botelho MF**, Rosa MS. *Cancer Metastasis and Reviews*. 2015 Sep;34(3):511-25. doi: 10.1007/s10555-015-9581-1. IF: 5.316; Q1. Área: [Biochemistry, Genetics and Molecular Biology and Medicine](#).
18. Revisit dietary fiber on colorectal cancer: butyrate and its role on prevention and treatment. Encarnação JC, Abrantes AM, Pires AS, **Botelho MF**. *Cancer Metastasis and Reviews*. 2015 Sep;34(3):465-78. doi: 10.1007/s10555-015-9578-9. IF: 5.316; Q1. Área: [Biochemistry, Genetics and Molecular Biology and Medicine](#).
19. Clinical translation for endometrial cancer stem cells hypothesis. Carvalho MJ, Laranjo M, Abrantes AM, Torgal I, **Botelho MF**, Oliveira CF. *Cancer Metastasis and Reviews*. 2015 Sep;34(3):401-16. doi: 10.1007/s10555-015-9574-0. IF: 5.316; Q1. Área: [Biochemistry, Genetics and Molecular Biology and Medicine](#).
20. Synthesis, characterization and assessment of the cytotoxic activity of Cu (II), Fe (III) and Mn (III) complexes of camphoric acid-derived salen ligands. D Murtinho, ZN da Rocha, AS Pires, RP Jimenez, AM Abrantes, M Laranjo, AC Mamede, JE Casalta-Lopes, **MF Botelho**, ACC Pais, SCC Nunes, HD Burrows, T Costa, ME Serra. *Applied Organometallic Chemistry* 29 (7), 425-432. IF: 2.452; Q2. Área: [Chemistry](#).
21. Quercetin in cancer treatment, alone or in combination with conventional therapeutics? AF Brito, R Ribeiro, AM Abrantes, AS Pires, RJ Teixo, JG Tralhão, **MF Botelho**. *Current Medicinal Chemistry*. 2015 Aug 12. PMID:26264923. IF: 3.455; Q2 (Pharmacology). Q3 (Molecular Medicine). Área: [Biochemistry, Genetics and Molecular Biology, Pharmacology, Toxicology and Pharmaceutics](#).
22. Hematogenic Dissemination of Triple-negative Versus Hormonal Receptor-positive Breast Cancer Cells. MJ Carvalho, AM Abrantes, M Laranjo, B Paiva, I Torgal, AS Cabrita, **MF Botelho**, CF Oliveira. *In Vivo*. 2015;29:435-444. IF: 0.832; Q2 (Medicine). Q3 (Biochemistry, Genetics and Molecular Biology, Pharmacology). Área: [Biochemistry, Genetics and Molecular Biology, Medicine, Pharmacology, Toxicology and Pharmaceutics](#).
23. Lung cancer: the immune system and radiation. F Mendes, C Antunes, AM Abrantes, AC Gonçalves, I Nobre-Gois, AB Sarmento, **MF Botelho**, MS Rosa. *British Journal of Biomedical Science* 2015;72:78-84. IF: 1.245; Q3. Área: [Biochemistry, Genetics and Molecular Biology, Immunology and Microbiology and Medicine](#).
24. Functional hepatocellular regeneration in elderly patients undergoing hepatectomy. AI Fernandes, JG

Tralhão, A Abrantes, E Hoti, H Alexandrino, B Oliveiros, M Ferreira, **MF Botelho**, F Castro e Sousa. *Liver International*, 2015;35:1116-1123. IF: 4.47; Q1. Area: Medicine.

25. Drug transporters play a key role in the complex process of Imatinib resistance in vitro. Alves R, Fonseca AR, Gonçalves AC, Ferreira-Teixeira M, Lima J, Abrantes AM, Alves V, Rodrigues-Santos P, Jorge L, Matoso E, Carreira IM, **Botelho MF**, Sarmiento-Ribeiro AB. *Leukemia Research*. 2015 Mar;39(3):355-60. doi: 10.1016/j.leukres.2014.12.008. IF: 5.316; Q2 (Hematology, Oncology). Q3 (Cancer Research). Area: Biochemistry, Genetics and Molecular Biology and Medicine.

2014

26. Bisphosphonate-related osteonecrosis of the jaw: specificities. S Paulo, AM Abrantes, M Laranjo, L Carvalho, A Serra, **MF Botelho**, MM Ferreira. *Oncology Reviews*. 2014 Sep 23;8(2):254. doi: 10.4081/oncol.2014.254. eCollection 2014 Sep 23. IF: ; Q3 (Oncology). Q4 (Cancer Research). Area: Biochemistry, Genetics and Molecular Biology and Medicine.
27. Positron Emission Tomography Diagnostic Imaging in Multidrug-Resistant Hepatocellular Carcinoma: Focus on 2-Deoxy-2-(18F) Fluoro-d-Glucose. AF Brito, M Mendes, AM Abrantes, JG Tralhão, **MF Botelho**. *Molecular Diagnosis & Therapy*, 2014;18:495-504. Doi: 10.1007/s40291-014-0106-3. IF: 2.602; Q1 (Medicine). Q2 (Molecular Medicine and Oncology). Area: Biochemistry, Genetics and Molecular Biology and Medicine, Pharmacology, Toxicology and Pharmaceutics.
28. Targeting triple-negative breast cancer cells with 6,7-bis(hydroxymethyl)-1H,3H-pyrrolo[1,2-c]thiazoles. K Santos, M Laranjo, AM Abrantes, AF Brito, C Gonçalves, AB Sarmiento Ribeiro, **MF Botelho**, MI Soares MI AS Oliveira, TM Pinho e Melo. *European Journal of Medicinal Chemistry*, 2014;79:273-81. IF: 3.902; Q1. Area: Chemistry, Pharmacology, Toxicology and Pharmaceutics.
29. Effect of Amniotic Membrane Proteins in Human Cancer Cell Lines: An Exploratory Study. AC Mamede, M Laranjo, MJ Carvalho, AM Abrantes, AS Pires, AF Brito, P Moura, CJ Maia, **MF Botelho**. *Journal of Membrane Biology*, 2014;247:357-360. IF: 1.991; Q2 (Biophysics). Q3 (Cellular Biology and Physiology). Área: Bioquímica, Genética e Biologia Molecular.
30. Evaluation of a 99mTc-labelled meso-bisphenylporphyrin as a tumour image agent. PM Santos, M Laranjo, AC Serra, AM Abrantes, M Piñeiro, J Casalta-Lopes, D Trindade, J Maia, A Rocha-Gonsalves, **MF Botelho**. *Journal of Labelled Compounds and Radiopharmaceuticals* 2014;57: 141-147. IF: 1.532; Q2 (Analytical Chemistry and Drug discovery). Q3 (Biochemistry, Organic Chemistry, Radiology, Nuclear Medicine and Imaging and Spectroscopy). Area: Biochemistry, Genetics and Molecular Biology, Chemistry, Organic Chemistry, Medicine, Pharmacology, Toxicology and Pharmaceutics.
31. Metabolic effects of hypoxia in colorectal cancer by 13C NMR isotopomer analysis. AM Abrantes, LC Tavares, S Pires, J Casalta-Lopes, C Mendes, M Simões, MM Grazina, RA Carvalho, **MF Botelho**. *BioMed Research International*, 2014:759791. doi: 10.1155/2014/7597910. IF: 2.134; Q2. Area: Biochemistry, Genetics and Molecular Biology, Immunology and Microbiology.
32. Microenvironment influence on human colon adenocarcinoma phenotypes and matrix metalloproteinase-2, p53 and β -catenin tumor expressions from identical monoclonal cell tumor in the orthotopic model in athymic nude rats. DG Priolli, AM Abrantes, S Neves, AC Gonçalves, CO Lopes, NP Martinez, IA Cardinali, AB Sarmiento Ribeiro, **MF Botelho**. *Scandinavian Journal of Gastroenterology* 2014, 49: 309-316. IF: 2.199; Q2. Area: Medicine.
33. Hepatectomy and liver regeneration: from experimental research to clinical application. Tralhão JG, Abrantes AM, Hoti E, Oliveiros B, Cardoso D, Faitot F, Carvalho C, **Botelho MF**, Castro-Sousa F. *ANZ Journal of Surgery*. 2014 Sep;84(9):665-71. doi: 10.1111/ans.12201. IF: 1.158; Q2. Area: Medicine.