



ARTIFICIAL INTELLIGENCE APPLIED TO CEREBRAL SIGNALS: TRANSLATING NEUROSCIENCE TO CLINICAL PRACTICE

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MAIN GOALS

New solutions for
neuroimaging analysis using
AI techniques

New solutions for medical
image and signal processing
for helping diagnosis of
mental disorders, breast
cancer, thyroid problems
and cardiovascular diseases

New solutions for automatic
classification of genes
related to aging

New solutions for clinical
decision support systems
applied to elderly diseases
and new multi-sensory
multimedia systems applied
to healthcare therapies

FOREIGN PARTNERS

United Kingdom:

- University College London - UCL
- University of Kent - UKENT
- Brunel University London



Spain:

- Universidad Rey Juan Carlos - URJC



Netherlands:

- Centrum Wiskunde & Informatica - CWI



POSDOC SCHOLARSHIPS



Pos-doc: Prof. Isabel David – PPCB/UFF – visited University College London to work with Prof. Janaina Mourão-Miranda in 2019 for 12 months



Another 3-month posdoc planned for 2023

PHD SANDWICHES

Douglas Mattos – PGC/UFF –
worked with Prof. George Ghinea
in Brunel Univ London in 2019 for 6
months

- Defended his thesis in September 2021
- co-supervised by Prof. Ghinea

2019

Adriel Araújo – PGC/UFF –
worked with Prof. Ángel Sanchez
in URJC in 2021 for 6 months

- Thesis defense in March 2023

2021

2020

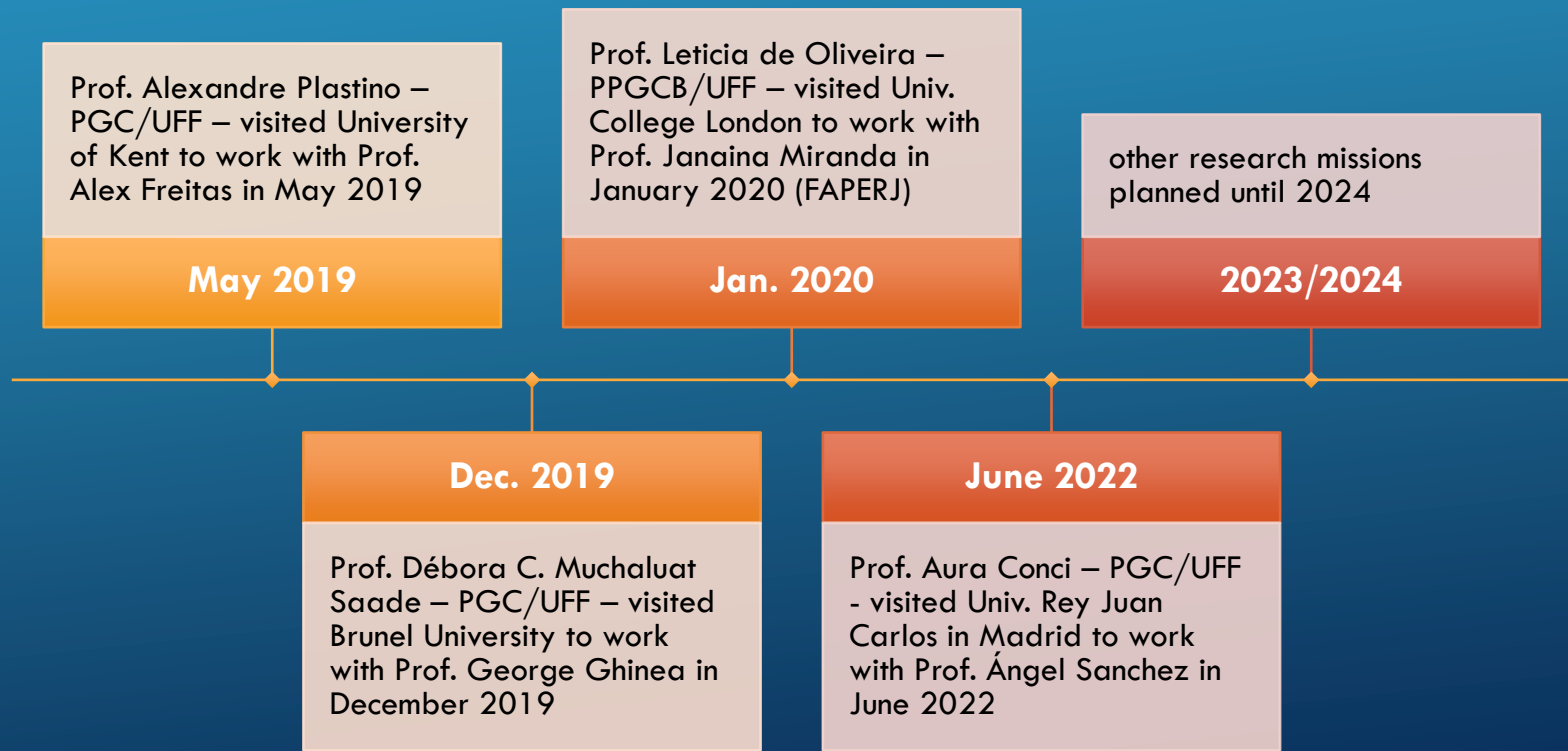
Marcelo Maia – PGC/UFF –
worked with Prof. Alex Freitas in
Univ. of Kent in 2020 for 10
months

- Defended his thesis in April 2022

2023 and 2024

2 more PDSEs scholarships for
2023 and 2024

RESEARCH MISSIONS



FOREIGN PROFESSOR VISITS AT UFF



Prof. George Ghinea from Brunel University visited UFF to work with Prof. Débora C. Muchaluat Saade PGC/UFF

October 2019
January 2022



1 PVE scholarship for 2024

SCIENTIFIC HIGHLIGHTS

28 scientific papers co-authored with project partners:

- 13 published journal articles + 1 accepted + 1 submitted
- 12 published conference full papers + 1 submitted

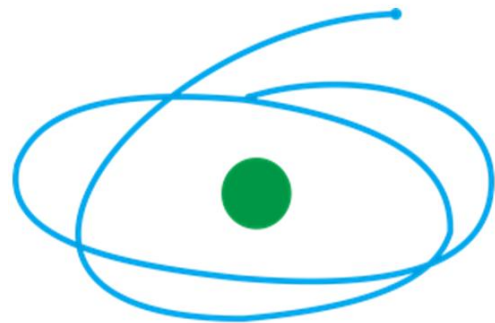
International Workshop on Artificial Intelligence and Innovative Solutions for Digital Healthcare online event in March 2021

- available at <http://print-ia.midiacom.uff.br/>

Course about PRONTO (Pattern Recognition for Neuroimaging Toolbox) given by UCL in 2021:

- http://www.mnl.cs.ucl.ac.uk/pronto/PRoNTo_program_UCL_2021_final_kt.pdf

New Research Network - e-Health Rio Research and Innovation Network - supported by FAPERJ - 2020/2023



C A P E S
P r i n t

THANK YOU!

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