

BRACCO FELLOWSHIPS - EDUCATION IN RESEARCH

Project 19:

Functional and metabolic assessment of breast cancer risk using multiparametric PET-MRI of the breast

NAME OF INSTITUTION: Medical University of Vienna, Department of Biomedical Imaging and Image-guided Therapy, Vienna/AUSTRIA

RESEARCH GROUP AND ITS MISSION:

Gender Imaging research group

The gender imaging research strives to improve value and evidence-based patient care regarding gender specific diseases. A special focus is on neoplastic entities, specifically multiparametric MRI and PET of breast and prostate cancer.

OBJECTIVES:

- To assess multiparametric PET-MRI properties of breast parenchyma
- To associate the measured PET-MRI features with risk factors of breast cancer and breast cancer status
- To propose an exploratory cancer risk model using non-invasive PET-MRI data

APPLICANT'S DUTIES:

- Supporting data acquisition in clinical PET-MRI examinations which are supervised by team Consultants doctors and PhD students
- Analyse multiparametric PET-MRI data with a special focus on highly temporal resolved Dynamic contrast enhanced MRI data including pharmacokinetic modelling and volumetric semiautomated analysis
- Analyse and prepare research data for publication; if found satisfactory write articles as a lead author

APPLICANT'S BENEFITS:

- Participation on scientific outcomes of the project i.e. presentations to congresses or publications of papers
- Learning research techniques essential to push her/his personal academic career

- Being part of an internationally recognized research group network

Project Leader: Pascal A.T. Baltzer

Members: Thomas Helbich, Paola Clauser, Panagiotis Kapetas, Claudia Sodano