AARHUS UNIVERSITY

Press release

Please fill in this form and return it to graduateschoolhealth@au.dk in Word format along with a portrait photo in JPEG format, if you would like it to accompany your press release, no later than three weeks prior to your defence.

Basic information

Name: Peter Parbo Email: parbo@au.dk Phone: 78461610

Department of: Clinical Medicine

Main supervisor: Professor David Brooks

Title of dissertation: A PET study of the relationship between microglial activation, amyloid-β plaques and tau tangles in early Alzheimer's disease

Date for defence: 05-02-2018 at (time of day): 14:00 Place: Patologisk Auditorium, Aarhus University Hospital, Nørrebrogade 44, bldg.18

Press release (Danish)

Undersøgelse af sammenhængen mellem inflammation og protein aflejringer i hjernebarken ved tidlig Alzheimers sygdom.

Et nyt ph.d.-projekt fra Aarhus Universitet, Health benytter hjerneskanninger til at undersøge sammenhængen mellem inflammation og proteinaflejringer i hjernebarken ved tidlig Alzheimers sygdom. Projektet er gennemført af Peter Parbo, der forsvarer det d. 5/2-2018.

Alzheimers sygdom er den hyppigste årsag til demens, og det anslås at over 50.000 danskere har sygdommen. Alzheimers sygdom er en neurodegenerativ sygdom, som medfører både kognitive og adfærdsmæssige forstyrrelser. Formålet med denne afhandling var at bruge hjerneskanninger til at undersøge niveauer og fordeling af amyloide plaques, neurofibrillære tau sammenfiltringer og mikroglia-aktivering i hjernebarken ved hjælp af 11C-PiB, 18F- flortaucipir and 11C-PK11195 positron emissions tomografi (PET) i en gruppe af personer med prodromal og tidlig klinisk Alzheimers sygdom. Vores fund fremlægger evidens for at inflammation i hjernebarken er en tidlig aktør i forbindelse med Alzheimers sygdom, hvorfor en intervention rettet mod mikroglia-aktivering vil kunne vise sig at have en neuroprotektiv effekt.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 5/2 kl. 14.00 i Patologisk auditorium, Aarhus Universitetshospital, Nørrerbrogade 44, bygning 18, Aarhus C.
Titlen på projektet er "A PET study of the relationship between microglial activation, amyloid-β plaques and tau tangles in early Alzheimer's disease" .

Yderligere oplysninger: Ph.d.-studerende Peter Parbo, Nuklearmedicinsk Afdeling & PET-Center, e-mail: parbo@clin.au.dk, tlf. 78461610, eller hovedvejleder Professor David Brooks, e-mail: dbrooks@clin.au.dk.

Bedømmelsesudvalg:
Formand: Professor Henning Andersen, Neurologisk Afdeling, Aarhus Universitet
Bedømmere: Professor Oskar Hansson, Clinical Memory Research Unit, Lund Universitet, Sverige
Professor Ian Law, Klinik for Klinisk Fysiologi, Nuklearmedicin og PET, Københavns Universitet

Press release (English)

Neuroinflammation in early Alzheimer's disease.

A new project from Aarhus University uses brain imaging to investigate the relationship between neuroinflammation, amyloid and tau in early Alzheimer's disease. The project was carried out by Peter Parbo who is defending his dissertation on 5th Feb 2018.

Alzheimer's disease is the most common cause for dementia affecting more than 50,000 people in Denmark. Alzheimer's disease is a neurodegenerative disease leading to cognitive and behavioural dysfunctions. The aim of this thesis was to examine the inter-relationships between levels and distributions of amyloid plaques, tau tangles and microglial activation, using 11C-PiB, 18F-flortaucipir and 11C-PK11195 positron emission tomography (PET) in prodromal and early clinical Alzheimer's disease. The cohort is being followed and assessed again after a 2 year interval. Our baseline findings provide in vivo evidence that brain inflammation is an early event in Alzheimer's disease. Hence, an intervention targeting microglial activation could play a neuroprotective role against Alzheimer's disease.

The defence is public and takes place on 5th Feb 2018 at14:00 in Patologisk Auditorium, Aarhus University Hospital, Nørrebrogade 44, bldg. 18, Aarhus.
The title of the project is "A PET study of the relationship between microglial activation, amyloid-β plaques and tau tangles in early Alzheimer's disease".

For more information, please contact PhD student Peter Parbo, Dept. of Nuclear Medicine & PET Centre, email: parbo@clin.au.dk, Phone +45 78461610 or main supervisor Professor David Brooks, e-mail: dbrooks@clin.au.dk

Assessment committee:
Chairman: Professor Henning Andersen, Dept. of Neurology, Aarhus University
Examiners: Professor Oskar Hansson, Clinical Memory Research Unit, Lund University, Sweden
Professor Ian Law, Dept. of Clinical Physiology, Nuclear Medicine & PET, University of Copenhagen

Permission

By sending in this form:

- I hereby grant permission to publish the above Danish and English press releases as well as any submitted photo.
- I confirm that I have been informed that any applicable inventions shall be treated confidentially and shall under no circumstances whatsoever be published, presented or mentioned prior to submission of a patent application, and that I have an obligation to inform my head of department and the university's Patents Committee if I believe I have made an invention in connection with my work. I also confirm that I am not aware that publication violates any other possible holders of a copyright.