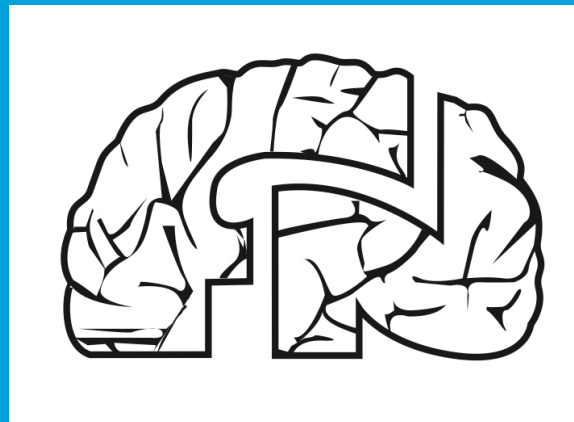


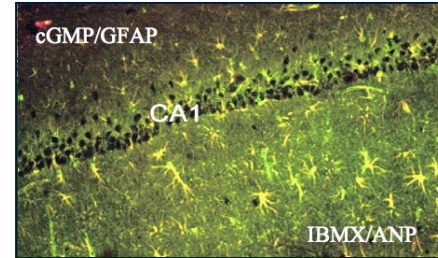
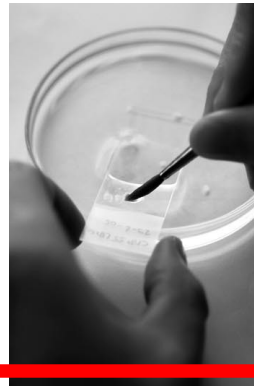
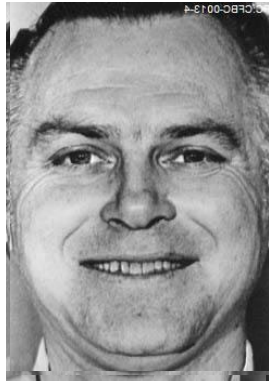
# Research Master Fundamental Neuroscience

Prof. Dr. Jos Prickaerts  
Coördinator  
30 November 2019



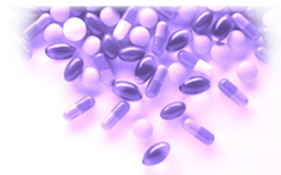
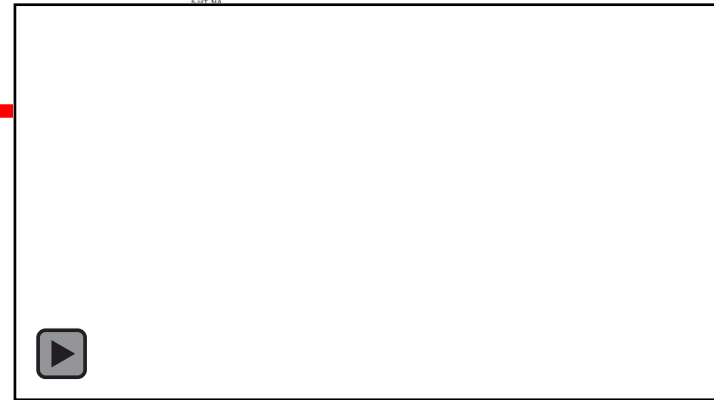
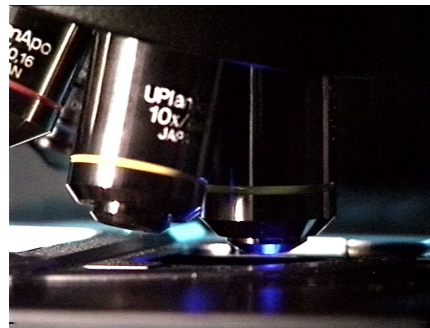
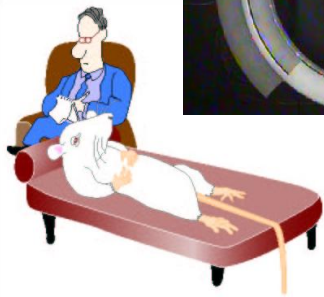
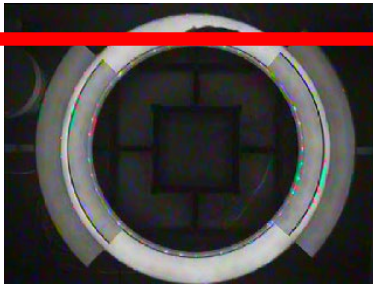
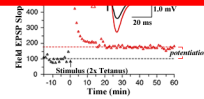
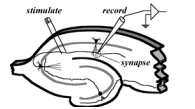
# Why study FN?...

## ... What do you study?



Cell Proliferation and Survival in the Dentate Gyrus

Recording LTP in Hippocampal Slices



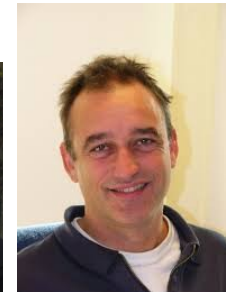
# FN specialisation - general

- Focus on underlying molecular/biological mechanisms of psychological, psychiatric and neurological disorders
- Topics include cell signalling, brain plasticity, neurodegeneration, regeneration, pain, neuroinflammation and (epi)genetics
- Translational setting: both animal and human research
- Scientific career as a researcher in both academia and industrial setting
- 21 students started in 2019



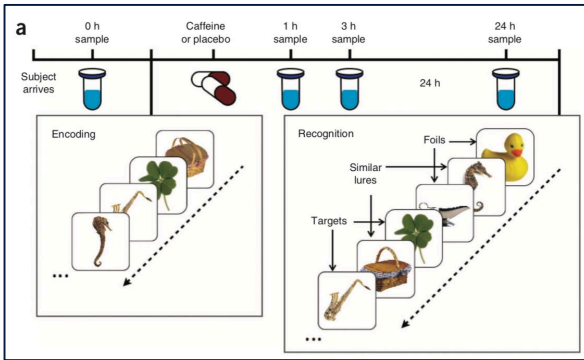
# FN Staff

- Specialisation embedded in both
  - Faculty of Psychology and Neuroscience (FPN)
  - Faculty of Health, Medicine and Life Sciences (FHML)
- Professionals
  - Biologists
  - Molecular Biologists
  - Biological Psychologists
  - Neuropsychologists
  - Neurobiologists
  - Neuroanatomists
  - Psychopharmacologists
  - Immunologists
  - Psychiatrists





# Core Courses



- Individualized Electives (2x)  
(e.g. Animal Laboratory Sciences)

- Introduction to (parallel program)
  - Psychology (~biology students)
  - Molecular and Biochemical Techniques (~psychology students)
- Neuroanatomy
- Biopsychological Neuroscience
- Neurodegeneration
- Neuroplasticity and Pain
- Neuroimmunology and Inflammation
- Neurological Neuroscience
- Psychiatric Neuroscience
- Electrophysiology



# Internship (32 weeks)

- More than 80% students outside Maastricht at prestigious universities/institutes (e.g. Oxford, Karolinska, Columbia, Salk, MIT, Harvard, Max-Planck, King's College etc.)
- Via international network of FN staff

## Career path

- Almost exclusively PhD student
- Industry, foundations, TTO, etc.

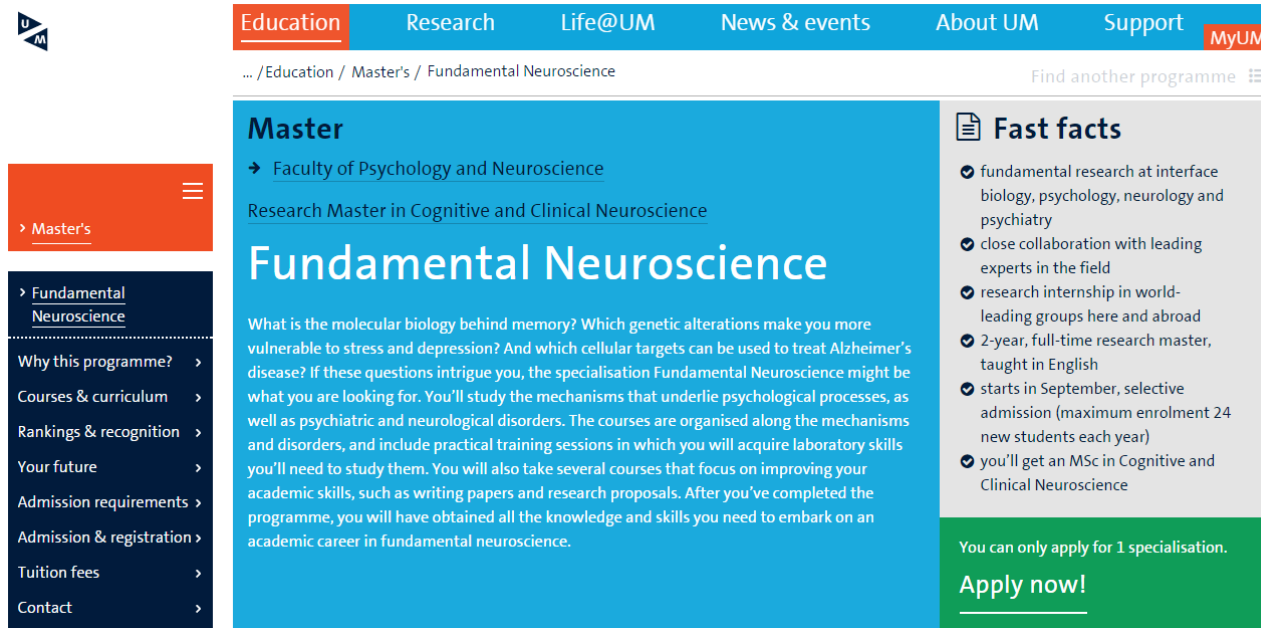


# Who can apply

- Students with a BA in:
  - Biological Psychology
  - (Molecular) Biology
  - Life Sciences
  - Medicine
  - Bioengineering
  - Chemistry
  - Pharmacy
- ...



# For more information:



The screenshot displays the Maastricht University website. At the top, a navigation bar includes links for Education, Research, Life@UM, News & events, About UM, and Support, with a MyUM button on the right. Below the navigation bar, the breadcrumb trail reads: ... / Education / Master's / Fundamental Neuroscience. A search bar on the right says "Find another programme". On the left, a sidebar menu lists: > Master's, > Fundamental Neuroscience, Why this programme? >, Courses & curriculum >, Rankings & recognition >, Your future >, Admission requirements >, Admission & registration >, Tuition fees >, and Contact >. The main content area has a blue header with "Master" and "→ Faculty of Psychology and Neuroscience". Below this is the link "Research Master in Cognitive and Clinical Neuroscience" and the title "Fundamental Neuroscience". A paragraph describes the program: "What is the molecular biology behind memory? Which genetic alterations make you more vulnerable to stress and depression? And which cellular targets can be used to treat Alzheimer's disease? If these questions intrigue you, the specialisation Fundamental Neuroscience might be what you are looking for. You'll study the mechanisms that underlie psychological processes, as well as psychiatric and neurological disorders. The courses are organised along the mechanisms and disorders, and include practical training sessions in which you will acquire laboratory skills you'll need to study them. You will also take several courses that focus on improving your academic skills, such as writing papers and research proposals. After you've completed the programme, you will have obtained all the knowledge and skills you need to embark on an academic career in fundamental neuroscience." To the right, a "Fast facts" section lists: fundamental research at interface biology, psychology, neurology and psychiatry; close collaboration with leading experts in the field; research internship in world-leading groups here and abroad; 2-year, full-time research master, taught in English; starts in September, selective admission (maximum enrolment 24 new students each year); and you'll get an MSc in Cognitive and Clinical Neuroscience. At the bottom right, a green box states: "You can only apply for 1 specialisation. Apply now!"

<https://www.maastrichtuniversity.nl/education/master/research-master-cognitive-and-clinical-neuroscience-specialisation-fundamental>

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