### **Clinical Neuropsychology**

#### Welcome!

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## What is Clinical Neuropsychology?

#### **Neuropsychology**

Studies the relation between the brain, cognition, emotion and behaviour

#### **Clinical Neuropsychology**

Studies impairments in these brain functions

because of:

neurological/neuropsychiatric conditions across the lifetime (babies, children, adolescents, adults, old adults)

## Which conditions?

For instance

- ADHD
- Autism
- Alzheimer's disease
- Brain tumours
- Dementia
- Depression
- Epilepsy

- Learning disabilities
- Multiple sclerosis
- Parkinson's disease
- Schizophrenia
- Stroke
- Substance abuse
- Traumatic Brain Injury
- etc.

# **Clinical Neuropsychology**

- Clinic different tasks, e.g.,
  - Assessment
  - Treatment
  - Team coaching
- Research different research questions, e.g.,
  - Determinants of neurological/neuropsychiatric conditions
  - Measuring deficits in cognition, emotion and behaviour
  - Effectivity of treatments for these deficits
  - Etc.
- Some neuropsychologists combine research and clinical practice, e.g., in academic hospitals

# **Scientist practitioner**

#### In clinical neuropsychology:

• Scientific knowledge is applied in clinical practice

AND

Questions and experiences in clinical practice are of influence on scientific research

For example:

- N=1 study neuropsychological assessment
- Applying treatment that has proven to be effective in a randomized controlled trial

### **Clinical neuropsychology is interdisciplinary**

- Medical sciences, e.g., neurology, psychiatry
- Electrophysiology: EEG, heart rate, etc.
- Neuroimaging
- Human movement science
- Ergonomics, traffic psychology
- Physiotherapy, occupational therapy, health care, social work
- Etc.

In clinical neuropsychology advanced techniques in measurement are used. Clinical neuropsychology is theoretical as well as applied

# **Clinic: Example questions**

#### Assessment

- Does a 77-yr-old male with memory deficits have early dementia and can this be Alzheimer's disease?
- Does an 8-yr-old child with learning- and behavioural problems suffer from ADHD?
- What are the cognitive, emotional and behavioural consequences of a severe traumatic brain injury with frontal contusions in a 44-yr-old male; will the patient be able to return to work in the long term?

# **Clinic: Example questions**

**Treatment and team coaching** 

- Is it possible to teach a 45-yr-old female with traumatic brain injury to plan and organize her tasks and activities?
- Team counselling in how to approach a 71-yr-old female patient with dementia who gets extremely anxious when she has to take a shower.

### **Research: Example questions**

- Do children with brain tumours suffer from impairments of (social) cognition?
- Are people with early dementia still able to drive a car?
- Do adults with ADHD suffer from memory impairments?
- Can clinicians trust the information given by patients themselves?
- What is the influence of psychosis on making financial decisions?

### Job perspectives after the master clinical neuropsychology

- Patient related research in the field of Clinical Neuropsychology
  PhD
  - Post-doc, researcher at university, industry, insurances, etc.
- Clinical work in the applied field
  - Neurological and psychiatric hospitals
  - Other clinical centres (e.g. Epilepsy centres)
  - Rehabilitation centres
  - Nursing homes
  - Schools
- Other
  - Teaching
  - Management and policy making (Ministry of Education)

## .... from Bachelor to Master

# **Relevant topics in the Bachelor**

- Biopsychology
- Introduction into clinical neuropsychology
- Research methods
- Psychopathology
- Clinical psychology
- Communication and diagnostic skills
- Deception in Clinical Settings
- Neuropsychology of ageing and dementia
- Clinical Neuropsychology
- School Neuropsychology
- Developmental Neuropsychology

### Master thesis of 20 EC Neuropsychology 60 EC Two Foundation courses of 5 EC each **Master Clinical** One Skills course of 5 EC One Method course of 5 EC Two Elective courses of 5 EC each Internship of 10 EC



#### Visual perception



#### Neurodevelopmental disorders



**Financial capability** 

Department of Clinical Neuropsychology



#### Neurofeedback



Psychosis



Traffic psychology



Acquired brain injury



## **Master Clinical Neuropsychology**

- Foundation courses\* choose 2 of the following 3 courses (total 10 EC):
  - Neuropsychology & Psychiatric Disorders
  - Advanced Clinical Neuropsychology
  - Neuropsychological Treatment & Rehabilitation
- Skills course\* choose the following course (5 EC)
  - Neuropsychological Assessment

For detailed descriptions of the different courses, please see: <u>https://www.rug.nl/ocasys/</u>

## **Master Clinical Neuropsychology**

- Method courses\* choose 1 of the following 3 courses (total 5 EC)
  - Research Methods in Clinical Neuropsychology
  - Repeated Measures
  - Test Construction
- Elective courses\* choose 2 courses (total 10EC)
  - Capita Selecta Clinical Neuropsychology
    - Medical Neuropsychology
    - Child Neuropsychology
  - One of the remaining foundation or method courses
  - A course within another master track of psychology (e.g., social psychology)

For detailed descriptions of the different courses, please see: <u>https://www.rug.nl/ocasys/</u>

\*Subject to change

## Master thesis (20 EC)

At the beginning of each semester different master thesis projects are offered

During your master thesis project you will collaborate with a staff member, and, in some projects, also with your fellow students

Based on the research you are doing you have to

- Write a master thesis
- Give a presentation about your research

## Internship (10 EC)

- Internship is mandatory
- A clinical internship is difficult in the Netherlands requires speaking Dutch on a high level
- A research internship or a 'product internship' is possible in Groningen
- If you consider completing the GZ-opleiding (Dutch postdoctoral training to become a health care psychologist), please be aware that a 10EC clinical internship does not fulfil the admission criteria of the GZ-opleiding which requires a clinical internship of at least 19EC.
- The Dutch Klinische Neuropsychologie track includes a 20EC clinical internship requires speaking Dutch on a high level!
- Questions about internships: please send an email to stagecoordinatorpsy@rug.nl

## Internship (10 EC)

- Plan ahead!
- Objective: get to know a professional work setting and get some practical experience as a professional
- Activities should match with the content of your master track
- It's your responsibility to find an internship, UG facilitates (database with internships, job interview training/training in networking by RUG, Careerservices, check website)
- Please start your orientation on this topic early: what would you like to do in what kind of organization, what would you like to learn, who in my network can you approach at that time for an internship?

### **Admission and selection criteria**

- Admission to the master clinical neuropsychology is organized by the admission committee of psychology
- More information about admission and selection? <a href="https://www.rug.nl/gmw/psychology/education/master/application-admission-admis-ad
- Questions? toelatingscommissie.masterpsy@rug.nl

### **Interesting alternative?**

**Research Master Behavioral and Social Sciences** 

- Specialization: Mental health: Perspectives from Neuro- and Clinical Psychology
- Allows you to gain clinical and research experience
- More information: <u>https://www.rug.nl/masters/behavioural-and-social-sciences-research/?lang=en</u>

To get an impression of the programme: <u>https://www.youtube.com/watch?v=-</u> <u>JjfJ9Y69QY</u>

### **Questions?**

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