



Gillberg Neuropsychiatry Centre  
Sahlgrenska Academy



UNIVERSITY OF GOTHENBURG

# Gothenburg ongoing research

SF-BUP May 2023





## Ongoing research in Gothenburg/GNC

- **Longitudinal follow-up studies 15-40 years later (age 20-60 years)**
  - Autism (population-based studies, n about 500)
  - Asperger syndrome (representative, n about 100)
  - IDD (n about 300, mild, moderate and severe included)
  - ADHD/DAMP (n about 200)
  - Anorexia nervosa (n 51)
  - 22q11del syndrome (n 100)



## Ongoing research in Gothenburg/GNC

- **PANS (n about 100 to date)**
  - clinical symptoms, background, immunology, genetics, interventions including IVIG RCT, outcomes



## Ongoing research in Gothenburg/GNC

- **Regressive autism (n about 100)**
  - clinical symptoms, background, immunology, genetics, relationship to epilepsy, interventions including IVIG RCT, outcomes



## Ongoing research in Gothenburg/GNC

- **MAPP (Maltreatment Associated Psychiatric Problems)**
  - Presentation, comorbidity and genetics – collaboration across Scotland and Sweden



## Ongoing research in Gothenburg/GNC

- **ARFID (n ?)**
  - Japanese and Swedish studies on clinical presentation, comorbidity, prevalence and interventions



## Ongoing research in Gothenburg/GNC

- **Language disorders (n about 150)**
  - Screening, diagnostics, interventions, background, comorbidities, prospective longitudinal, outcomes



## Ongoing research in Gothenburg/GNC

- **ESSENCE-Q (10-12 item versions)**

- Japanese (JECS), Spanish, Slovenian, Indian, Mongolian, Serbian, South African, Scottish, and Swedish studies





## Ongoing research in Gothenburg/GNC

- **ESSENCE-D (150 item version) – diagnostic aid, online platform**  
– RCTs ongoing in Sweden, Scotland, and South Africa



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## Ongoing research in Gothenburg/GNC

- **ESSENCE genetics (n about 1000)**
  - Ongoing projects with Pasteur Institute and Biobank Torshavn



## Ongoing research in Gothenburg/GNC

- **ESSENCE neuroradiology and neurophysiology (n about 300)**
  - **MRI**
  - **fMRI**
  - **EEG**
  - **ERPs**
  - **Eye movements**
  - **Pupillary dilation/pupillary contagion**
  - **AI motor behaviours/behavioural phenotype characterization**



## Ongoing research in Gothenburg/GNC

- **ESSENCE overlap (general population study in NPR and CATSS)**
  - Prevalence, comorbidity patterns and genetics



## **Ongoing research in Gothenburg/GNC**

- **New motor and social interaction assessment tools**
  - **Ongoing projects in collaboration with Strathclyde, Harvard, and Glasgow universities**



## Ongoing research in Gothenburg/GNC

- **PR-ESSENCE (Problem Resolution in ESSENCE)**  
– RCT with long-term follow-up



## Ongoing research in Gothenburg/GNC

- **Bumetanide**

- **Controlled trials in children and young people including fMRI-studies**



## Ongoing research in Gothenburg/GNC

- **Studies in the pipeline**

- Ehlers Danlos genetics and molecular biology
- Gender dysphoria and ESSENCE and vice versa
- Motor programmes RCTs in DCD



