# SHARE-CZ NIA Biomarker Network

# Radim Boháček and Vojtěch Illner CERGE-EI

April 2025



Multidisciplinary
Panel: 10 waves

#### SHARE-CZ

- Czech Republic
- ► Since 2006
- ► 10 waves
- ▶ 5,000 sample

#### Agenda

- ► Link
- Harmonize
- Measure
- Innovate

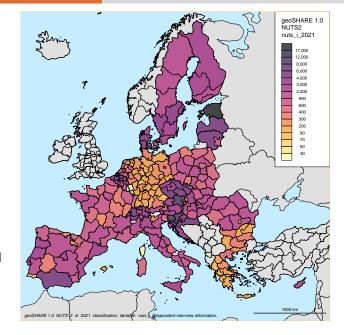


#### linkSHARE to Administrative Data

- Pensions
- Earnings
- Social benefits (health care, housing, children)
- Health (all individual treatments, DG, medication)
- Death certificates
- Birth information
- Respondent consent in wave 11

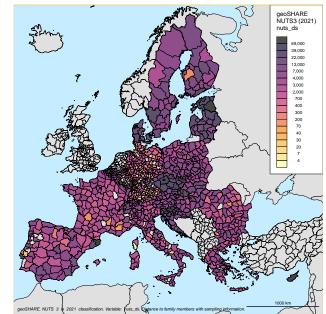
## geoSHARE

- Wave 1-9 geographic location
- ► NUTS 1-3
- Municipality Postal codes
- Data access
- Legal & technical solution



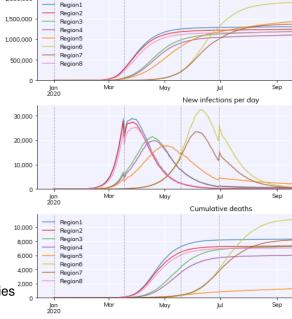
### geoSHARE HEP

- Life history
- Wave information
- Improved: moving, distance to children and parents
- Respondent& HouseholdEpisode Panel
- ► NUTS 1-3
- Parent birthplace



#### abmSHARE

- Agent based model
- Epidemiology
- Layers
  - Household
  - Workplace
  - School
- Covid-19
- variants
- vaccination
- Covasim in space
- Country and regional policies



#### bioSHARE Biomarkers

- Objective measurements
- Venous blood samples
- Harmonize with HRS
- RECETOX Laboratories in wave 11

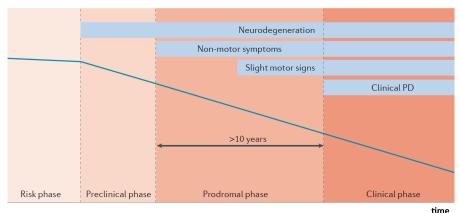
### expoSHARE Exposomes

- Internal and External
- ► Short- and long-term cumulative environmental exposure
- Relate outcome measures to heterogeneous environment
- RECETOX Laboratories as EIRENE-ERIC

#### SHARE HCAP

- Human Cognition Assessment Protocol
- ► HCAP1 in wave 9 (CZ, DE, DK, FR, IT)
- Dementia prevalence and imputations
- Harmonized with HRS
- ► HCAP2

#### neuroSHARE



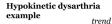
- Early markers for neurodegenerative diseases: Prodromal phase
- Parkinson's and Alzheimer's disease
- Dementia with Lewy bodies
- CZ in wave 10, CH in wave 11

RB SHARE-CZ April 2024

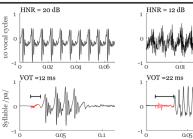
#### neuroSHARE

- Clinics to Survey
- Three tests
  - Speech test
  - Standardized olfactory test
  - Sleep test (REM behavior disorder)
- Clinical examination (5%)
- Combination of tests
- Plan: Self-administered New measures

# Healthy speech example



0.1





#### SHARE-CZ

- Leverage international comparability of SHARE data
- Harmonization with HRS, ELSA, other surveys
- Gateway to Global Aging Data
- Gateway Exposome Coordinating Center (GECC)
- ▶ Build better health and socio-economic measures
- Pilot new projects