

Montfort provides a digital motor and cognitive laboratory you can carry in your own pocket

Need & Solution

- Accurate measurements are currently provided only by designated laboratories which are often inaccessible or too expensive to afford. We bring the lab to your office.
- Clinical visits are infrequent, some patients cannot reach the clinic. Our tests can be performed remotely.
- A single test may not be sufficient in order to optimize the treatment. We can provide a continuous evaluation.
- A manual evaluation is subjective and time consuming. Our biomarkers are objective and easy to obtain.
- We group standardized results from multiple sites and various disorders into one comparable database.

Team

- **Ziv Yekutieli, PhD, CEO** - 20 years of experience in brain science, linking between neurology & technology
- **Alit Stark-Inbar, PhD, CSO** - 20 years of experience in brain science, cognitive evaluation and training
- **Dima Gershman, CTO** - 15 years of experience in SW Architecture, Databases and Product Management

Advisory Board

- **Prof. Peter LeWitt** - Professor of Neurology at Wayne State University School of Medicine and director of the Parkinson's Disease and Movement Disorders Program at Henry Ford Hospital, West Bloomfield, Michigan, USA.
- **Prof. Hagai Bergman** - Chair of Brain Research, Faculty of Medicine, Hebrew University. Senior Researcher, Department of Neurosurgery at Hadassah Medical Center, Jerusalem, Israel.
- **Prof. Paul Friedmann** - Professor of Clinical Neuroimmunology, Senior Physician, Cecilie Vogt Clinic for Neurology, Charité, Berlin, Germany

Technology: EncephaLog app

- Together with our advisors we pick standard neurological tests, commonly used and well validated.
- We use smartphones' integral sensors for conducting these tests in an automatic and digital manner.
- Our proprietary algorithms extract the needed medical biomarkers from the raw sensory data.
- The biomarkers obtained in the clinic or remotely, are synced and presented through the physician's portal.

Available Modules

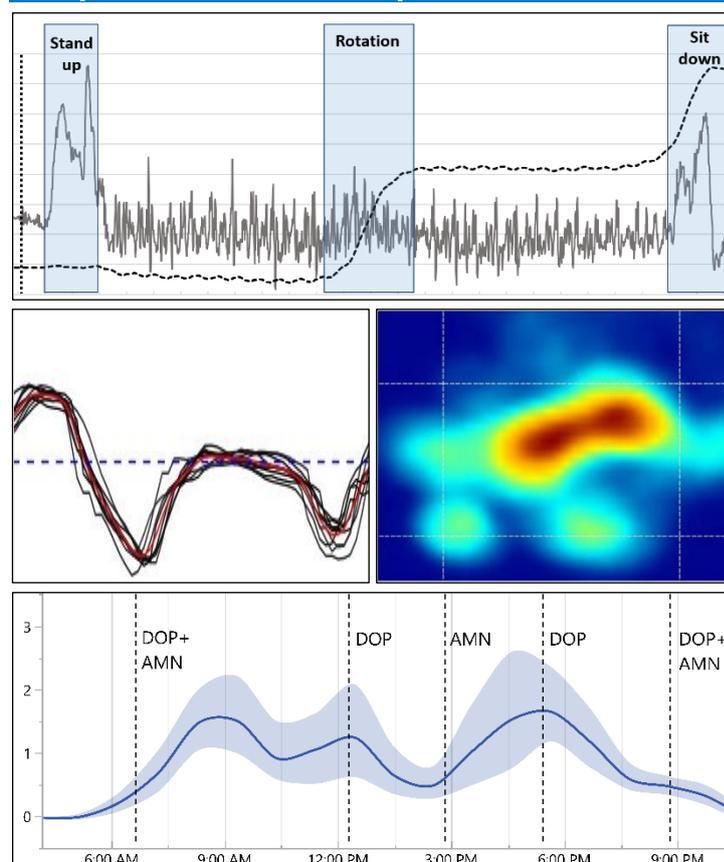
Motor: Timed-up-and-go • Tremor analyzer • Static posturography • Tapping test • Knee-jerk reflex • Goniometer (measuring limb flexibility) • AppTUG To-Go offers a 72-hour continuous gait monitoring. **Cognitive:** Stroop • Flankers • Memory tests • Reaction time

"For the last two years, physicians in our institute are using Montfort's app. It is easy to use and informative. The app provides indicators that are unrecognized and unquantified by standard neurological tests, thus helping us in diagnosis and monitoring neurological conditions"
Professor Sharon Hassin-Baer, Director, Movement Disorders Institute, Sheba Medical Center

EncephaLog Has Been Used For

- Normal pressure hydrocephalus • Parkinson's disease • Multiple Sclerosis • Gaucher's disease • Essential tremor • Huntington disease • Familial dysautonomia • Fragile X associated tremor ataxia syndrome • Bi-polar disorder (Drug induced parkinsonism) • Neurodegeneration with brain iron accumulation • Progressive Supranuclear Palsy • Costeff syndrome • Cerebrovascular Accident • Ataxia Telangiectasia • Orthopedics (total knee implant, total hip implant) • Rehabilitation (thigh and arm motion range recovery) • Over 400 healthy control subjects, males and females, from the age of 10 to 90-year-old subjects

Output Biomarkers Examples



- **Top** – Timed-up-and-go profile. Acceleration and direction (dashed line) vs. time
- **Middle left** – multiple steps overlay for step-to-step correlation
- **Middle-right** - Mediolateral vs. Anterior-posterior sway during walking
- **Bottom** – 24-hour average gait index for home continuous monitoring (drugs uptake is marked by dashed vertical lines)

Get Encephalog on [Google Play](#) or [App Store](#)

"...a smartphone is attached to the body with a velcro strap enables dynamic and easy continuous measurements. The interface, I find, user friendly - encountered no problems. Data-wise, I am very happy with the ability to customize the data processing along with my needs." **Dr. Orit Elion, The Department of Physiotherapy, Ariel University**