We will present our work on integrating several biological scales and data modalities (from multilevel molecular omics to multimodal neuroimaging and clinical data) via empirical and mechanistic brain models. These models, based on dynamic system analysis and machine learning, allow to track neurodegenerative progression and heterogeneity while clarifying the underlying multilevel biological mechanisms. They also focus on providing individually-tailored predictions of therapeutic needs. Available neuroinformatic tools will also be presented.