Scientific Hypotheses

Genetics:

Work out the cellular pathways controlled by the top 10 genes from CurePSP's 2011 whole genome marker analysis and its 2014 whole exome sequencing project.

Prions:

Work out steps in tau misfolding, templating and cell-to-cell transmission

Proteins:

Identify defects in production, handling and disposal of tau and other proteins in PSP/CBD

New Experimental Tools

Models:

Create new cellular and animal lab models more faithful to human PSP/CBD

Markers:

Devise better tests for diagnosis and measurement of PSP/CBD and its treatment response in humans

CurePSP Research Roadmap

Procedures

Identify top 30-50 drug targets Perform high-throughput screens in molecular or cellular models Test drugs in vertebrate preclinical models Early-phase clinical trials by industry or academia

Late-phase clinical trials by industry