

Overview ASD Summit

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and Translation

Current Center Strengths

- UCLA- brain imaging, genetics, cohorts, fast-fail clinical trial
- UCSD-genomics, stem cell, systems biology, \$160M
- UCSF-QB3, \$ Premature births, brain devel, Emr, future devel- M State
- UCD-environment, Immune, animal models, clinical trials, state \$
- UCI- cell/synaptic, drug discovery w UC patents, outcomes measures

Insel topics

- Illness, Injury, Insight, Identity
- Need: surrogate markers, brain tissue
- Obama--Brain Initiative, Autism CARES
- Challenges:
 - Heterogeneity
 - tools to study function
 - trials more like Pharma
 - Define Dose, Quality

Working Groups

(all need sustainable funding)

- Genetics..more WGS samples, merge WGS
 - UC Birth Cohort..no bias, possible w NBS, trios
 - POC project—100/center, merge data
 - UC Genomic center....NY model, buy in of all
 - Share....database, sequence, cores
- Environment...how to find
 - G x E
 - quantitate exposures, zip codes
 - biomarkers, biobanks, blood spots

- Neurobiology
 - Stem cells...consistent differentiation, database
 - Animal models..best practices, training, SOP, trans-species analogs..molecular
 - Brain imaging..standardize and share
 - EEG...best marker across species
- Diagnosis / Symptoms...like Insel
 - Clinical trials outcomes measures RFA from NIH
- Treatment..how to assess efficacy
 - Outcomes measures & animal correlates
 - Biomarkers
 - Disparities in services

- Infrastructure

- Informatics core

- Database management

- Emr/red cap implementation

- Scientific meetings