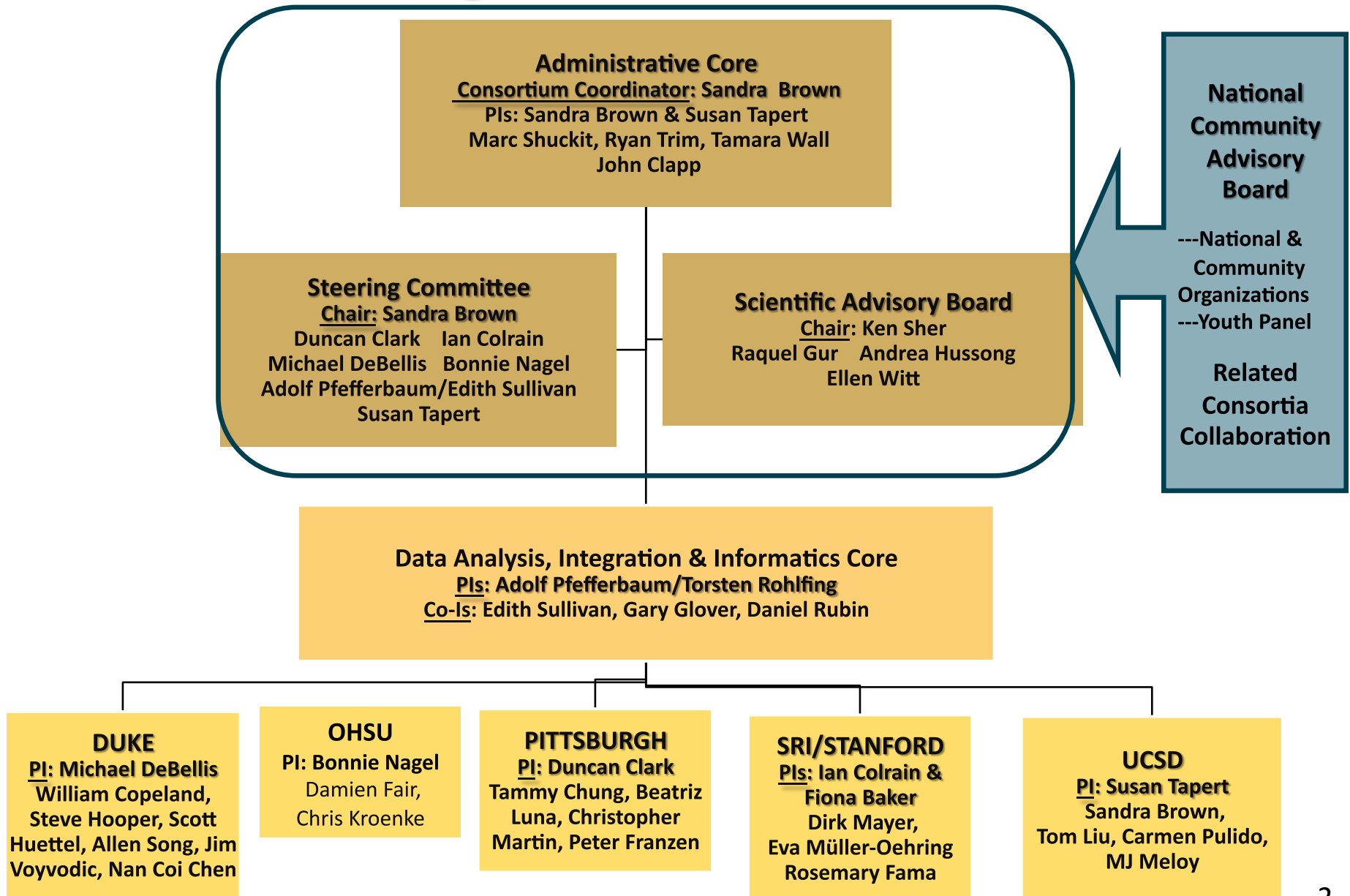


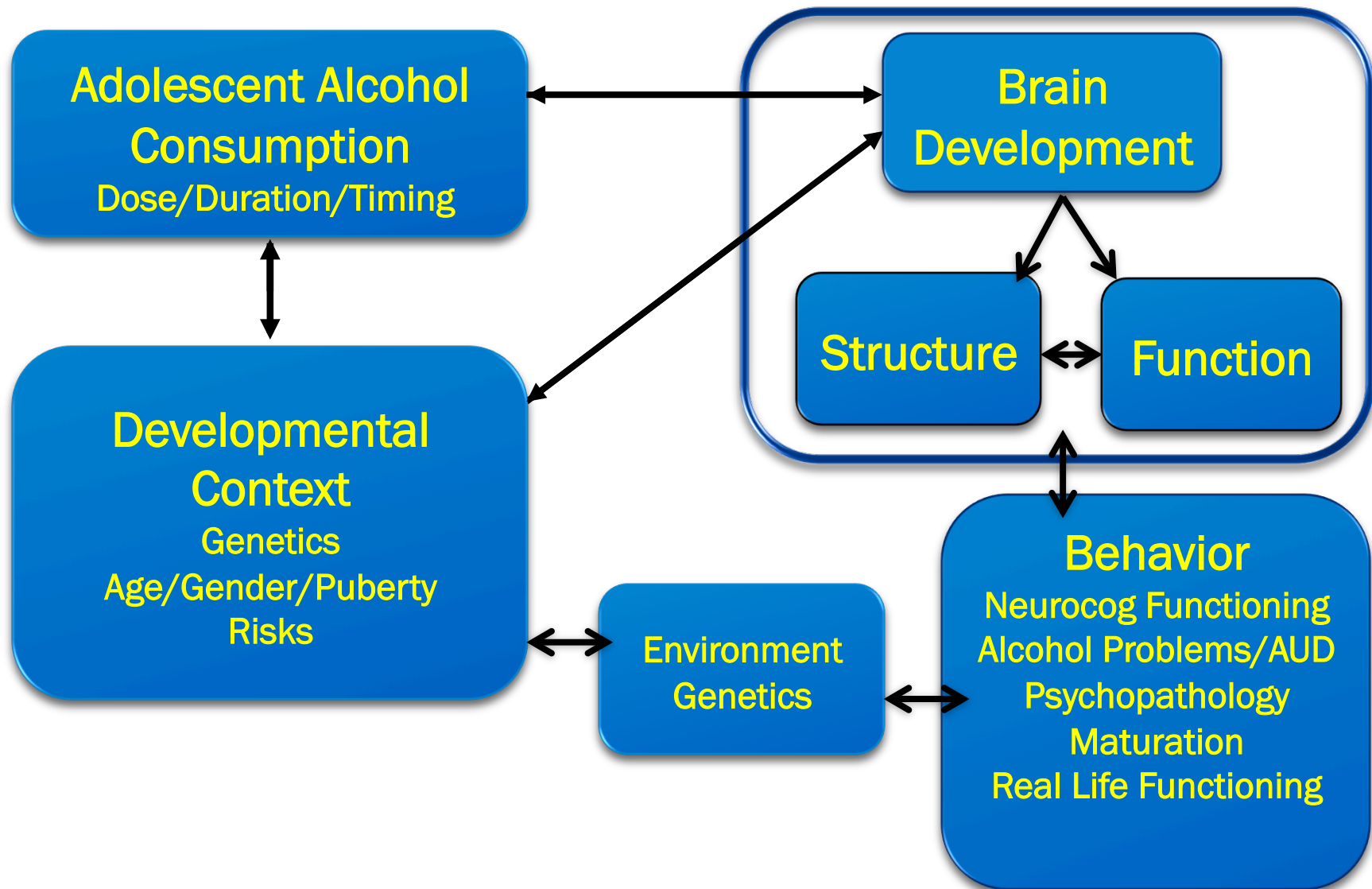
N-CANDA Organizational Framework



NCANDA Primary Objectives

- **Cohort of 800+ 12-21 yr olds** across 5 sites, baseline and 3 annual assessments (to age 24)
- **Effects of alcohol exposure** on trajectory of adolescent brain development and in the broader context of development
- **Dose, duration, and timing** effects of alcohol exposure
- **Persistence/Resolution of effects with abstinence**
- **Developmental factors** (puberty, sleep) & **covariates** (sex, psychopathology, FH of alcoholism) modulate alcohol's effects on brain
- **Brain markers** (structural, functional, cognitive, and affective) predict onset of AUDs and other psychopathology

N-CANDA CONCEPTUAL MODEL



NCANDA Specialty Studies:

Multiple Site Studies of Risks and Consequences

- **Inhibitory Response Dysregulation**
 - **(Pittsburgh, Duke)**
- **Sleep Disruption**
 - **(SRI, Pittsburgh)**
- **Default Mode Network Abnormalities**
 - **(SRI, UC San Diego, OHSU)**
- **Recoverability of Deficits**
 - **(UC San Diego, Duke)**

N-CANDA: Innovative Features

- 1. Modified accelerated longitudinal design**
- 2. Antecedent conditions**
- 3. Synergistic dependent-variable domains**
- 4. Trajectory relations within & among domains**
- 5. New computerized NP and clinical battery**
- 6. Innovative image processing & analysis**
- 7. Creative administrative & dissemination structures**