



Adolescent Brain Cognitive Development®  
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Re: German Center for Child and Youth Health (CHILDhealth)

Feb 16<sup>th</sup>, 2021

Dear Tobias,

As Professor of Psychiatry at the Department of Psychiatry at the University of Vermont I am writing to give my support and my intention to collaborate with you in your proposed German Center for Child and Youth Health, *CHILDhealth*.

I am very excited about the proposed *CHILDhealth* research platform. This provides an excellent opportunity to follow on our existing collaborations and to work with you and your colleagues on extensions of the research platform to relevant datasets in large international consortia and large population neuroscience studies like the Adolescent Brain Cognitive Development<sup>SM</sup> (ABCD) study (<https://abcdstudy.org>). I am a Principal Investigator at the University of Vermont site and also an Associate Director for the study's Coordinating Center.

A number of large population neuroscience studies have been undertaken over the past two decades, both in the U.S. and internationally, ushering in an exciting new era in understanding the development of risk for negative physical and mental health outcomes. The ABCD study is the largest in the U.S. assessing brain development. The study is examining 11,880 youth from 21 sites who were recruited at age 9 to 10 and who will be followed for ten years into young adulthood. The ABCD Study has completed recruitment for the baseline sample using a multi-stage probability sampling approach that included a stratified random sample of schools. The dataset has a wealth of measured attributes of youths and their environment, including neuroimaging, cognitive, biospecimen, behavioral, youth self-report and parent self-report metrics, and environmental measures. The initial goal of the ABCD Study was to examine risk and resiliency factors associated with the development of substance use, but the project has expanded far beyond this initial set of questions and will also greatly inform our understanding of the contributions of biospecimens (e.g., pubertal hormones), neural alterations, and environmental factors to the development of both healthy behavior and brain function as well as risk for poor mental and physical outcomes.

This said, framing questions within the framework of the proposed *National Cohort Integration Platform of CHILDhealth* on genetic and/or early (pre-, peri- and postnatal) risk in relation to brain development allows us to address major obstacles to the development of novel effective interventions in child and youth health care at the soma-psyche interface. For this, the use of large cohorts, deep phenotyping and bioinformatics in a multilevel, dimensional, RDoC-domain oriented and transnosologic approach is very promising and necessary.

It also includes initial validation of new instruments, important new information about the prevalence and correlates of mental health challenges, and promising data regarding developmental trajectories and prediction frameworks of neural correlates of both healthy and disordered behavior, where an integration of and exchange with ABCD is well located.



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It will be crucial for researchers to replicate findings using independent samples and to cross-validate the predictive value of clinically relevant biomarkers and developmentally sensitive risk signatures for prevention, psychopathology and treatment response, for which such a *Platform* provides the ideal grounding. This also includes the goal to harmonize datasets, open dialogue between large studies, and have trainings and advance dissemination.

I am very excited about working with you based on our experience with the ABCD study, helping with replications and facilitate integration of relevant datasets in large international consortia. The ABCD Coordinating Center and I offer you our full support in these endeavors. We wish you and your colleagues the best of luck with the application!

Sincerely,

Hugh Garavan, PhD

ABCD Associate Director writing on behalf of the ABCD Coordinating Center