Colorado Adoption Project News University of Colorado Institute for Behavioral Genetics Summer 2007 Issue #34

Integrating with other studies

A unique study design combines four distinct groups of participants.



Over the course of the Colorado Family Studies we have interviewed nearly 9,000 individuals! Participants are members of several separate and unique studies that are ongoing at the Institute for Behavioral Genetics (IBG). By working with a diverse groups of participants, we are able to combine data and models of data analysis. This leads to a more global approach to our investigations of behavioral and health issues. A main focus of our current research is to understand the genetic and environmental influences on problem behaviors such as Conduct Disorder, Attention Deficit Hyperactivity Disorder and Substance Use and Abuse.

Four separate groups participate in the Colorado Fomily Studies. Colorado Adoption Project (CAP) Individuals in the Colorado Adoption Project have been participating with us since birth. The oldest individuals are now 32 years old. This study consists of families with adopted children as well as matched control families with a same age child who was not adopted.

Longitudinal Twin Study (LTS) These are twins and siblings of twins who have been in the research project at the IBG since birth. Twins in this project are currently aged 17 to 23. Approximately 400 families with twins are currently enrolled and actively participating.

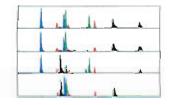
Community Twin Study (CTS) These are twins and siblings of twins who were living throughout Colorado at the time of initial enrollment in the project. Participants have been interviewed by researchers at IBG in the past. Twins in this project are aged 20 to 27. Approximately 1,000 families with twins have participated.

Family Study (FS) This group is composed of families who were living in Colorado at the time of their enrollment. We contacted families who had an adolescent in drug treatment, as well as matched 'control' families who lived in the same area and had a similar family structure. To date, over 3700 participants have been interviewed from this group. We are currently conducting follow-up interviews with these individuals and their families.

Thank you to all of you who continue to participate in our research studies!

Recent Highlights: Funding, Publications & Results

Due to promising initial findings and the ability to re-contact willing participants, funding was recently extended through 2008 for the integrated family studies projects.



Over 100 papers and chapters in books are in press or have been published using data from these studies. If you would like a copy of one of these papers, please contact us. You can find a complete list at http://ibgwww.colorado.edu/cadd. For CAP specific publications, please visit ibgwww.colorado.edu/cap.

We have conducted the first complete DNA scan for areas influencing substance dependence. Using data from this project, researchers at IBG were able to find several areas of interest on chromosomes 3 and 9. Further studies are underway on the relationship between these areas of DNA and substance abuse problems. The results may lead to new treatment strategies for alcoholism and drug addiction.

The CAP Plan: Past, Present, Future

The CAP's original goals were to use the adoption design, for which non-adoptees are essential, to study environmental and genetic influences on a broad range of human behaviors. When the CAP participants were children the focus was on intelligence, academic performance, personality and emotional behaviors. Except perhaps for the latter, these tend to stabilize as we get older so we have not reassessed them every year as we did at younger ages. Past

Future

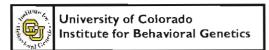
Present

Because problems arising from psychopathology and substance use are major issues in society we were asked by federal funding agencies to include those topics in our study to help understand how genes and environment influence these behaviors. We have heard and appreciated that this topic has become tiresome to some participants, especially those whose families do not experience these problems. Those participants will be pleased to know that we are now phasing out these guestions as study members reach the late twenties because now these are the behaviors that have probably stabilized.

All along, however, we have asked questions about transitions to adulthood--choosing post-secondary schooling or not, developing careers, forming families, and maintaining relationships with members of ones rearing family. Understanding genetic and environmental influences on those transitions is quite important and because this is a longitudinal study we can also assess how expenences in your childhood may have influenced adult development.

Beginning in the participants' thirties, we will continue to assess adult development, including some of the aspects we assessed in childhood (e.g. intelligence and personality among others) to track age-related changes and development across the life course. However, because these changes usually occur more slowly in adulthood, we will conduct the interviews at much longer intervals, perhaps once or twice a decade.

The "original" CAP participants now range in age from 20 to 32. The upper age range was expanded several years ago when we added all available full- or half-siblings to the study, so what's in store for the future varies somewhat depending where each person falls in the age range. However, for everyone, direct contacts—that is interviews—will soon become less frequent. We hope to stay in contact via newsletters such as this one, and more importantly that all of the participants will decide to stick with us. Truly, this is a world-renown and unique study which has the potential to contribute greatly to our understanding of human development across the lifespan.



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Several research divisions at the University of Colorado are involved with the CAP and Family Studies. These include the Institute for Behavioral Genetics, the Department of Molecular, Cellular and Developmental Biology, and the Division of Substance Dependence at the University of Colorado Health Sciences Center. Each department plays a unique and important role in the collection, analysis, and security of the data.

http://ibgwww.colorado.edu/cap





Division of Substance Dependence If you have any questions or comments about your participation, or about the general nature of our work, please call or email us at the addresses to the left. Also, you can visit our website for more in-depth information or to request a copy of any of our publications. Thank you again for your contribution to our understanding of genetics and behavior.