

Dear Colleagues:

Greetings from the Mid-Atlantic Twin Registry! We would like to invite you and your organization to learn more about the Mid-Atlantic Twin Registry (MATR) and the services we provide for the research community.

The Mid-Atlantic Twin Registry is a population-based registry comprised of over 50,000 twins of all ages. MATR twins and their registered family members are willing to consider taking part in health and behavior research. Though many of our twins are living in Virginia, North Carolina and South Carolina, we have members living all over the world.

For over 30 years our twins have contributed to research that has led to significant findings in the national and international scientific and medical communities.



**Why study twins?**  
Twins and higher order multiples provide scientists with the unique opportunity to better determine the relationship between a trait, its heritability and the effect an individual's environment has on the expression of that trait. Scientists are able to do so because of the unique development of twins (i.e., shared uterine and typically shared childhood environments) and the genetic relationships of identical twins, fraternal twins and other multiples. Equipped with a better understanding of how certain traits are influenced by our genes and environment, scientists can gain insight that may improve disease treatment and prevention as well as our understanding of what drives certain human behaviors.



**What services can the MATR provide?**

- DNA collection
- Access to DNA in MATR repository
- Database matching
- Mailed questionnaires
- Phone surveys/interviews
- In-home interviews
- Web surveys
- Newsletter and website advertising



**How are twins studied?**

- Cross sectional: Resolve genetic and environmental influences on outcome
- Longitudinal: Genetic and environmental influence on developmental change
- Discordant Monozygotic Twins: specific environmental influences
- Epigenetic or Gene Expression: Characterizing mechanisms of environmental influence
- Children of Twins: Social and genetic transmission of risk from parents to children
- Spouses of Twins: Analyzing the role of mate selection in populations



**Where is MATR?**  
The MATR is located in the Virginia Biotechnology Research Park in Richmond, Virginia and is part of Virginia Commonwealth University's (VCU) Office of Research. In addition to collaborations with VCU researchers we have recruited twins for other institutions, including Duke University, the University of Pennsylvania, the National Institute of Child Health and Human Development, the National Institute of Environmental Health Sciences, the University of Cambridge, Emory University, the University of Washington, and the University of North Carolina at Chapel Hill.

**What are some conditions, attitudes, and behaviors that have been studied with MATR twins?**

- Epilepsy
- Cardiovascular diseases
- Diabetes
- Cancer
- Obesity
- Periodontal diseases
- Stress and coping
- Religiosity and spirituality
- Social support
- Inflammatory bowel disease
- Attention-deficit hyperactivity disorder
- Clinical depression
- Anxiety
- Pregnancy complications
- Parenting styles
- Polycystic ovary syndrome
- Factors in human aging
- Substance use disorders



**We invite you to contact us to discuss how the MATR can help you reach your research goals**

**Mid-Atlantic Twin Registry**  
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