Virginia Commonwealth University



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Study • Twin Spectrum Study



# Twin Matters

## Dr. Elizabeth Prom-Wormley is the MATR's New Scientific Director!



\*Photo Credit: VCU DAR

Dr. Prom-Wormley first arrived at VCU in 1997 as a graduate student and discovered early on that twin studies are a powerful tool to learn more about human health and behaviors. Under the guidance of the renowned Dr. Lindon Eaves (as many of you may recall played a large role in shaping the MATR), she advanced her knowledge and skills in twin research. She further honed her skills in twin methodology and genetic epidemiology through collaborations with Drs. Hermine Maes, Lenn Murrell and Michael Neale. Today, she is an Associate Professor in VCU's School of Population Health, Department of Epidemiology where she continues to conduct studies with twins (including the SUR study- see info in this edition), genetic epidemiology studies of substance use and mental health outcomes, as well as carrying out communityengaged research in Richmond. Her formative education with top tier twin researchers and genetic epidemiologists along with her career achievements, placed Dr. Prom-Wormley as an ideal candidate to help advance the MATR in our latest research and endeavors. Not only is she a top-notch scientist, she also has an immense passion for conducting research with twins (see her greeting below)!

#### Dear MATR Community,

I am very honored to serve as the Scientific Director for the MATR. I see my involvement to be my personal way of saying "thank you" for your continued support of MATR research projects over the years. You have offered me the opportunity to learn and contribute substantial knowledge regarding how genetic and environmental factors work together to lead to mental health outcomes and substance use.

Your involvement has also allowed countless researchers to disentangle the factors that impact human health, disease, and behaviors. Over the years, twin studies have contributed to valuable knowledge about the role of genetic and environmental factors on the trajectories of risk for alcohol use over the lifespan (1), and the transmission of smoking initiation as well as alcohol use between parents and their twins (2,3). These findings were only possible because of your participation! Our goal is to apply the knowledge gained from twin studies to help improve the health of all. This means that each and every single MATR participant makes an impact.

I look forward to continuing our important work together so that we may advance scientific and medical knowledge as well as the health and wellness of the public.

With deepest gratitude,

Slizabeth Prom-Wormley

Elizabeth Prom-Wormley, MPH, PhD

1. Long EC, Verhulst B, Aggen SH, Kendler KS, Gillespie NA. Contributions of Genes and Environment to Developmental Change in Alcohol Use. Behav Genet. 2017 Sep;47(5):498-506. doi: 10.1007/s10519-017-9858-y. Epub 2017 Jul 17. PMID: 28714051.

2. Maes HH, Morley K, Neale MC, Kendler KS, Heath AC, Eaves LJ, Martin NG. Cross-Cultural Comparison of Genetic and Cultural Transmission of Smoking Initiation Using an Extended Twin Kinship Model. Twin Res Hum Genet. 2018 Jun;21(3):179-190. doi: 10.1017/thg.2018.22. Epub 2018 May 14. PMID: 29757125; PMCID: PMC6340705.

3. Verhulst B, Neale MC, Eaves LJ, Medland SE, Heath AC, Martin NG, Maes HH. Extended Twin Study of Alcohol Use in Virginia and Australia. Twin Res Hum Genet. 2018 Jun;21(3):163-178. doi: 10.1017/thg.2018.21. Epub 2018 Apr 25. PMID: 29692273; PMCID: PMC6318803.

## Study Underway - Substance Use Resistance (SUR) Twin Study



The MATR is excited to announce a study being conducted with Dr. Elizabeth Prom-Wormley, which investigates "resistance factors" that help people decide NOT to use substances like alcohol and other drugs. Twins in the study share their ideas around what factors they personally believe have helped them resist using substances. To date more than 400 twins have given hundreds of examples of resistance factors in their lives by taking part in virtual brainstorming, concept mapping, and focus group sessions with the study team.

Next Up: The ideas and concepts contributed by these twins are being used by the research team to develop a formal research survey. This survey will be administered later this year to a different group of MATR twins and will allow the study team to gain even more insight into substance use resistance factors.

Thank you to all of the MATR twins who are taking part in this study!

## Happy Retirement to Judy L. Silberg – MATR Scientific Director!

Dr. Silberg has started her next chapter in life...a well-earned retirement!

Dr. Silberg began her tenure as MATR Scientific Director in 2006, but her work with MATR twins began well before that. Dr. Silberg was conducting research with MATR twins as far back as 1989, when she and Dr. Lindon Eaves began their groundbreaking Virginia Twin Study of Adolescent Behavioral Development (VTSABD). Throughout the early 1990's, she continued following up with the VTSABD twins in her Young Adult Follow Up (YAFU) Study, and in 2002, Dr. Silberg launched her ambitious Children of Twins (COT) Study. In 2007, she and Dr. Eaves followed up with these twins again in their Genes, Environment, & Development Initiative (GEDI) Study. The data from these many studies have provided powerful information for twin researchers and helped promote the MATR's already strong reputation in research. In her role as MATR Scientific Director, Dr. Silberg continued



focusing on twin research studies, such as continuing the GEDI study, COT follow up efforts, MATR COVID Survey, and Twin360 (in collaboration with Dr. Gerry Moeller). While providing scientific leadership for the MATR, she also served as Associate Professor in VCU's Department of Human & Molecular Genetics and as part of the Virginia Institute for Psychiatric & Behavioral Genetics (VIPBG).

The MATR would like to thank Dr. Silberg for all of her support and guidance over the years! Her contributions to the MATR, and to twin research in general, cannot be overstated and we wish her all the best on life's next adventure!

## We Need Your Email Address



More and more of our surveys are moving online and require that we send email invitations to our twins. Want to make sure you don't get left out? Take a minute to send us your current email address so we can include you!

Simply scan the QR code and click on the link that pops up. (*TO SCAN: open your mobile device camera, point it at the QR code, and click the link*) or visit: go.vcu.edu/matrupdate

Everyone who submits their email address will be entered into a raffle for a (\$25) gift card as a token of our appreciation for taking a minute to update us. We value you!





# **Twin Spectrum Study**

*New Study Announcement! Twin Spectrum Study – Exploring Cognition through Twins!* 

Did you know that **each and every one of us displays attributes that span across a range**, from 'typical' development to serious forms of delayed cognitive development? There is still so much that remains unknown about cognitive development and experts at the National Institutes of Mental Health (NIMH) want to better understand the factors that impact this, particularly autism spectrum disorder (ASD) and related conditions (like Asperger syndrome).

*This is where twins come in!* We are inviting twin families to take part in a survey that will help explore the cognitive spectrum. The **study depends on a variety of insights from parents of twins** (those with potential conditions, like autism spectrum disorders as well as those with more 'typical' development) to truly understand all the factors that might influence cognitive development.

### Who is needed?

- Parent(s) with **juvenile twin pairs** those with autism spectrum disorder and related conditions **AND** those without
- Ages 6 through 17 years old
- Identical AND Non-identical twin pairs

## What's Involved? \*

- At least one parent/legal guardian completing a survey (online or by phone)
- Survey items will ask about: family demographic info and structure; twins' gestation & birth; zygosity; mental & physical health; development; education; social responsiveness; sleep; mood & anxiety; behaviors; conduct; etc.

#### Compensation? Yes!

• A \$50 e-gift card (your choice of MasterCard, Amazon, Lowe's, or Walmart) for completing the survey

#### Interested? Scan the QR code above to let us know you'd like to take part

\*Note: Only the parent/legal guardian completes the survey. The twins are not asked to complete any survey items.



# On the Cover...MATR Twins Then and Now

We love seeing pictures of twins - and a number of you have been involved in the MATR since you were children! We thought it would be fun to share some pictures of our twins from different points in their life - thank you all for sending in your photos and for being part of the MATR community!

