



M I D - A T L A N T I C
M A T R
T W I N R E G I S T R Y



VCU

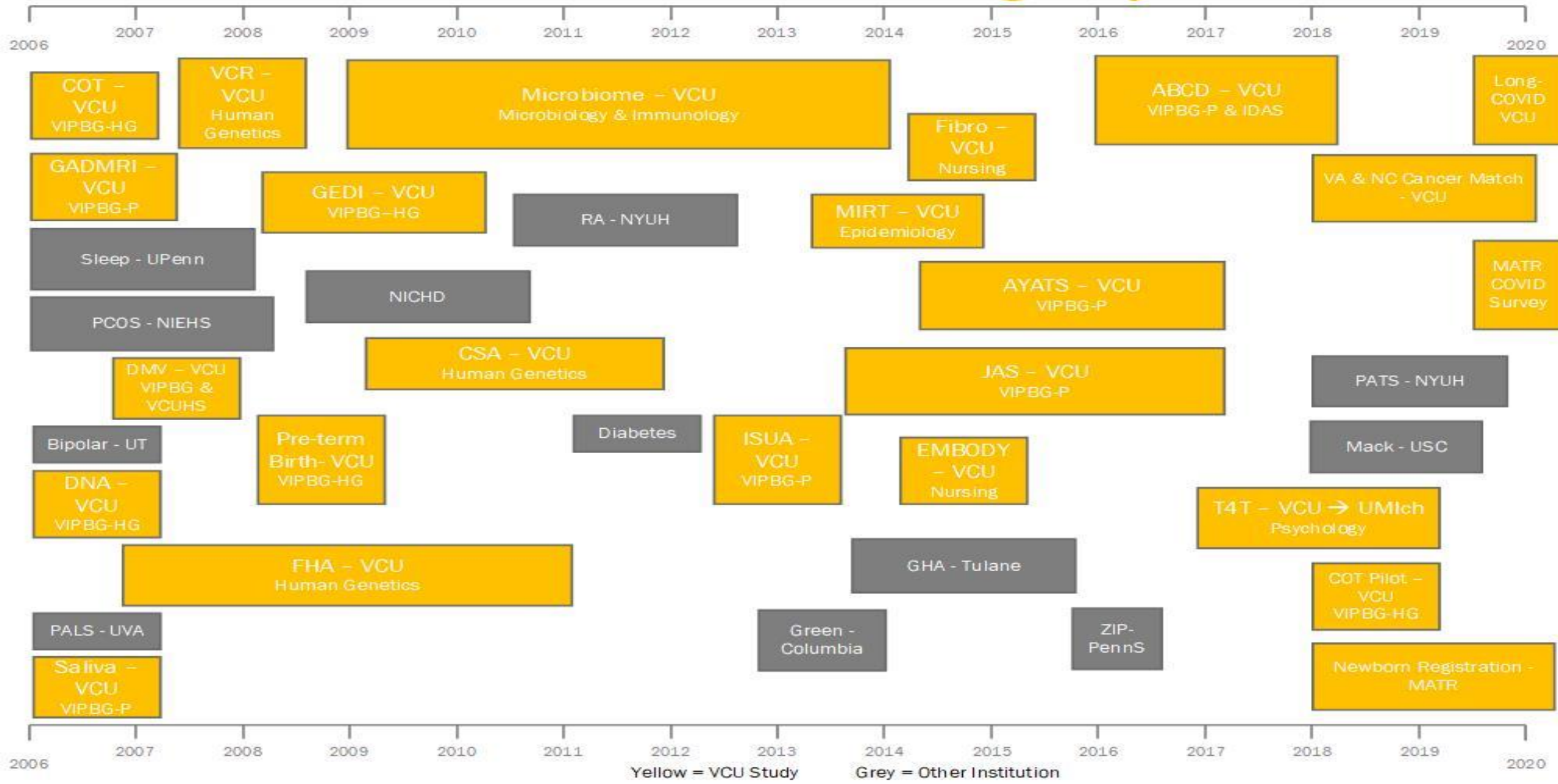
Overview

- 1) History of the MATR
- 2) Twin studies both internal and external to VCU
- 3) Characteristics of the registry
- 4) Why study twins?
- 5) Contribution of genes and environment to health outcomes
- 6) More complex mechanisms

MATR research services: Emily Lilley



Mid-Atlantic Twin Registry



Target Population

Largest twin registry in the U.S.

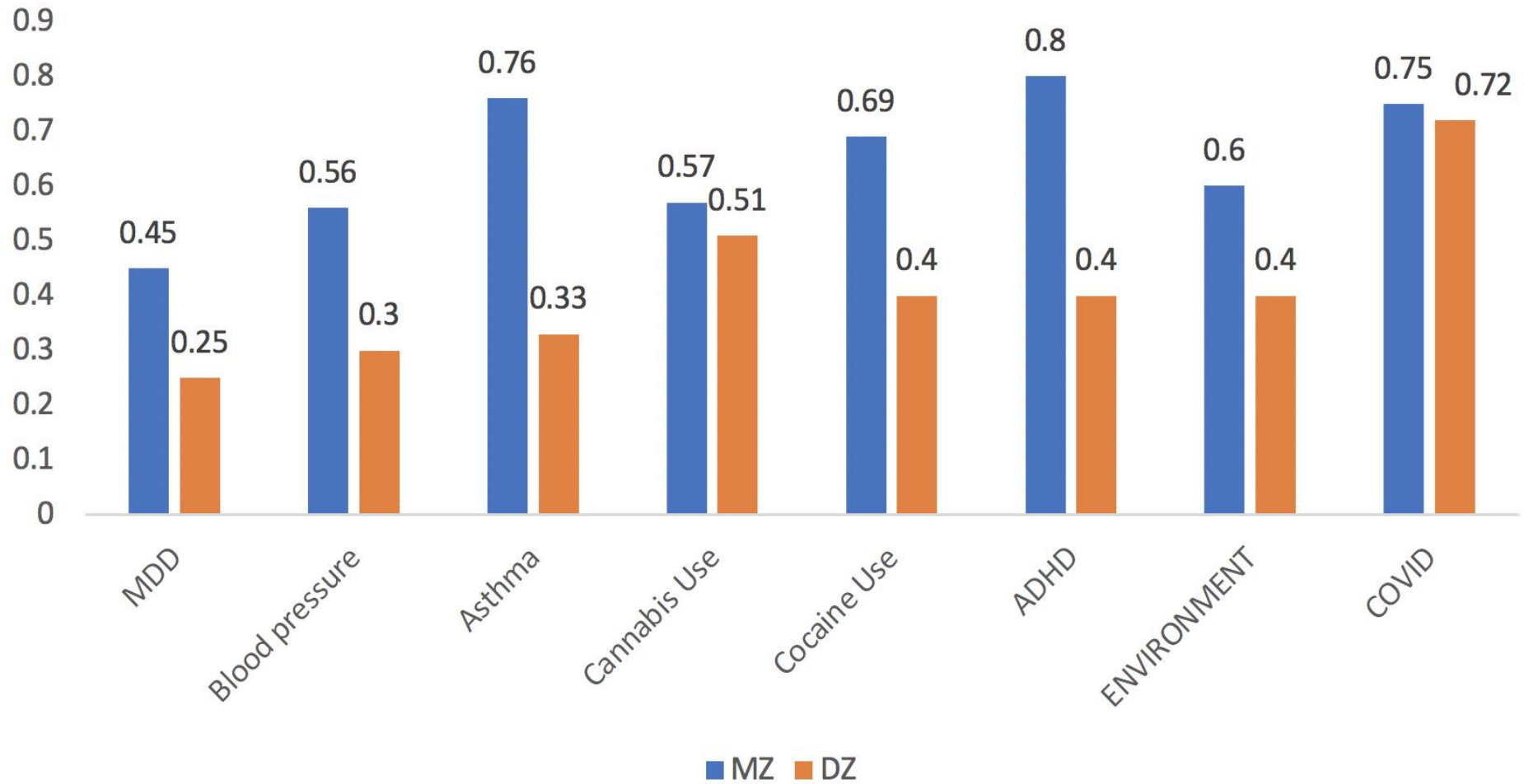
110,000 twins ascertained from birth records from North and South Carolina and Virginia's Department of vital statistics.

~38,000 registered twins.

~70,000 unregistered twins identified from birth records.

Chart Area

Twin Correlations for Common Health Conditions



More complex genetic mechanisms

- 1) Causes of covariation: Genes influencing more than one trait.
- 2) Innovation and attenuation of genetic effect: 'turning on' (and off) of genetic and environmental effect through development.
- 3) Cotwin Control Twin Design: Discordant MZ twins
- 4) Gene-environment interplay.

Future Directions

Use of multimodal approaches for recruiting twins into MATR studies (e-mail, phone, text).

Continued enrollment of unregistered twins on minority and rural populations.

Integration of twins with hospital related data into the MATR.

Sharing of knowledge about MATR resources to the scientific community.

MATR Research Services

- Data Collection: Online, Mail, Phone (CATI)– or Multimodal
- DNA Sampling for Genetic Studies
 - MATR Repository Access
 - Collection: blood, saliva, buccal (cheek swabs)
- Turnover Efforts: Permission to Release to Study Staff
 - *Implemented for specialized protocols (MRI, site visits, involved sample collection)*
- Archival Data Studies
 - *Match MATR database against another database or pull from MATR health surveys*
 - *Create de-identified or anonymized dataset*

Contact Us

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