

Fall, 2006

Newsletter #2

# NEWSLETTER

## MICHIGAN STATE UNIVERSITY

### TWIN REGISTRY (MSUTR)

#### **Fun Facts About Twins:**

1. According to the Guinness World Records, the tallest twins in the world, Michael and James Lanier, are from Troy, MI. They are both seven feet, four inches tall!
2. A few famous twins are Aaron Carter, Vin Diesel, American Idol contestant Bucky Covington, and astronauts Mark and Scott Kelly.
3. Dave Matthews, Chuck Norris, Cleopatra, and Brendan Shanahan are all parents of twins or triplets.
4. Polish President Lech Kaczynski recently appointed his twin brother, Jaroslaw Kaczynski, as Poland's Prime Minister.
5. The scientific study of twins is known as gemmology, from the Latin word for "twin born."

## Introduction

Greetings from the Michigan State University Twin Registry (MSUTR)! Thank you again for your participation in our twin research, as it will contribute to our understanding of genetic and environmental influences on a range of behaviors.

This second edition of the Newsletter has many exciting features. We describe our first set of results from our twin studies and also honor a pioneer in twin studies of eating disorders. In addition, we provide intriguing

information about reasons for recent increases in twin birth. Finally, we end by introducing you to a new twin pair and by describing our current studies.

As always, please feel free to contact us about anything in this Newsletter, or about our studies in general. We are always eager to hear from past participants and welcome any suggestions for improving the Newsletter.

Sincerely,

Drs. Alex Burt and Kelly Klump  
Directors of the MSUTR

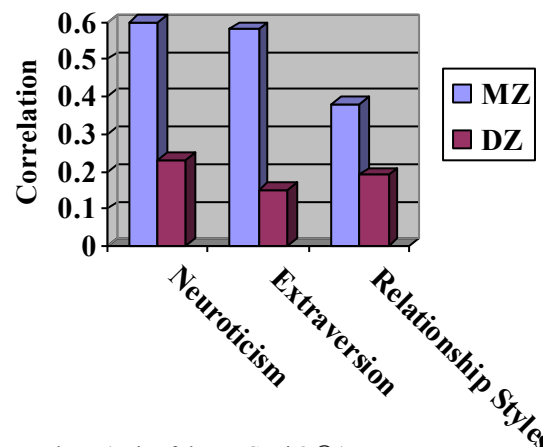
## Research Findings from Our Studies!

Drs. Klump and Burt recently completed a study using information from the adult twins who previously participated in the MSU twin studies. This study examined whether personality characteristics (such as neurotic and extraverted traits) are associated with relationship styles (e.g., close, overprotective, or distant) individuals form with loved ones. Using twins from our study, the researchers were also able to examine the extent to which personality and attachment are related because a common set of genes or environmental factors contribute to both.

Findings indicated that higher levels of neurotic personality traits were associated with more fears about losing a loved one as well as greater discomfort in close relationships. By contrast, extraverted traits were associated with more comfort in relationships. Although it may seem counterintuitive, these relationships were primarily the result of a common set of genes influencing both personality characteristics and relationship styles. We know this because, as shown in Figure 1, identical twins (monozygotic: MZ) were far more similar than the fraternal twins (dizygotic: DZ). This is the pattern one expects when there are genetic influences, as MZ twins share 100% of their genes, while DZ twins share only 50% (on average). More sophisticated statistical analyses confirmed the presence of genetic

effects, in that the heritabilities of personality and relationship styles were estimated to be between 40-56%. These findings indicate that roughly half of the reason that people vary in their personality characteristics and attachment styles is because they have different genes. These analyses also suggested that the reason that personality traits and attachment styles are associated with each other is that some of these genes contribute to both types of characteristics. Please let us know if you have any questions about this or other studies being conducted in our laboratory. We look forward to telling you about our newest findings in future Newsletters!

**Figure 1. Twin Correlations for Personality and Relationship Styles**



Riddle: Why are twin doctors puzzling? They are a paradox. (Pair of docs. Get it? ☺)

## Recognizing a Twin Study Pioneer

The scientific community recently recognized twin study researcher, Dr. Thomas J. Bouchard, Jr., by awarding him the 2005 Kistler Prize. The Kistler prize recognizes researchers whose work has contributed to the understanding of human genes and human society. Dr. Bouchard is from the University of Minnesota and was awarded the Kistler Prize for his research project, the Minnesota Study of Twins Reared Apart. Beginning in 1979, Dr. Bouchard studied twins who were adopted away

at birth and raised in separate homes to examine the extent to which traits are influenced by genetic and environmental factors. Dr. Bouchard found that genes largely contribute to traits such as conformity and shyness. Interestingly, Dr. Bouchard also found that MZ twins reared apart were eerily similar on many dimensions, including their occupations (i.e., both firemen) and the names they gave to their children! Congratulations to Dr. Bouchard, and thank you for your contributions to science!

Drs. Kelly L. Klump and S. Alexandra Burt  
Michigan State University  
107B Psychology Building  
East Lansing, MI 48824-1116



## Meet Ella and Reid!

The MSU Twin Studies would like to welcome Ella and Reid to the MSU family! Ella and Reid are the grandchildren of proud grandmother, Greta McVay. Greta is the administrative assistant for the Clinical Psychology program at MSU. Ella and Reid were born on February 27, 2006.



Ella and Reid admiring each other

## Our Current Twin Studies

We are currently conducting two twin studies at MSU:

**Same-sex adolescent male and female twins ages 10-15 years old.** This study aims to examine relationships between hormones, mood, eating attitudes and behaviors, family relationships, and personality characteristics.

**If you are interested in the adolescent twin study, or know someone who is, please contact us at:**

[Burtlab@yahoo.com](mailto:Burtlab@yahoo.com)

or call: (517) 355-6878

**Opposite-sex twins ages 18-30 years old.** This study aims to examine relationships between personality characteristics, relationship patterns, eating habits, and attentional abilities.

**If you are interested in the adult study, or know someone who is, please contact us at:**

[Klumplab@msu.edu](mailto:Klumplab@msu.edu)

or call: (517) 432-3665