William Thomas Clarke
Senior, Molecular, Cellular, and Developmental Biology
Seeking answers and treatments for inherited diseases

While many undergraduates dream of one
day becoming medical researchers who can
cure or tame disease, Tom Clarke is already
well on his way toward realizing that ambition.
A Howard Hughes Undergraduate Research
Scholar and recipient of a prestigious Marshall
Scholarship, Clarke is working in the labora-
tory of Assistant Physiology Professor Rachelle
Crosbie. There, Clarke has helped with research
on the genetic disorder of ciliary dyskinesia,
which causes respiratory illnesses and infertility;
and on Duchenne muscular dystrophy, which
usually results in death by the late teens.

“My research work has been the most ex-
citing experience of my collegiate career, and
has reinforced my decision to use the science
of medicine as a physician to develop novel
therapeutic tools for treating inherited human
diseases,” said Clarke.

Stephan J. Pennington
Senior, Musicology
Navigating marginalized musical voices

disadvantaged childhood, eight years
in the Army, and being both a person of
Black and a transsexual give Pennington an
inside perspective on education.

I always make sure to include a variety
of classes and viewpoints every time I teach,”
Pennington, who won the Distinguished
Young Scholar Award for 2005–06. “That
way, I can incorporate the histories of mar-
ginalized people that I myself never learned
about when I was in school.”

Pennington’s dissertation is on the
Hebrides Harmonists, a diverse German
music-making group that included Jews and flourished
before the Nazis came to power. Pennington, who
also plays banjo, sings and composes, learned
the group while he was in Germany
as an Army intelligence analyst.
Jennifer Pfeifer  
Graduate student, Psychology  
Mapping the neural basis of identity

Pfeifer is among just a few people in the country who are conducting research in the emerging field of developmental social neuroscience, according to Matthew Lieberman, one of her half-dozen academic advisors. Working in the Ahmanson-Lovelace Brain Mapping Center, Pfeifer uses magnetic resonance imaging and other tools to examine the social cognitive development of children and teens.

“My goal is to understand how the neural systems that support self and social perception develop and affect adjustment, achievement, attitudes and developmental disorders,” said Pfeifer, who received a master’s degree in developmental psychology from UCLA in 2003. “Identities are not solely about our unique qualities, but also about what connects us with others. Because identities bloom in the transition from childhood to adolescence, it’s the perfect time to examine their neural foundations as well as their effect on developmental outcomes.”

Hrayar Khanjian  
Senior, Linguistics  
Using mathematics to analyze language structure

Coming from a bi-cultural family and a high school that taught Armenian language and culture, and learning some French and Turkish, all have helped Hrayar Khanjian appreciate language and linguistics. At UCLA, he has combined that background with his research interests. A former mathematics major who works part time as a math tutor, Khanjian is applying mathematical techniques used by Linguistics Professors Edward Keenan and Edward Stabler to the study of grammatical structures in Central West Greenlandic, a dialect of Greenlandic Eskimo.

“I like how languages have multiple levels of structure that are not immediately evident,” said Khanjian. “There are tiers of structure in intonation, sound, word, phrase,