## **FRANCIS** CUI I IC **FUSION OF SCIENCE AND THE ARTS**

**Human genome scientist** engages JMU students

BY LINDA CABE HALPERN,

dean of University Studies

While JMU students connected ideas through the Dance of Art and Science this academic year, they also engaged in conversation with the chief of the National Institutes for Health and mapper of the human genome, Francis Collins.

"Scientists' growing understanding of human genetics is leading to a revolution of how doctors prevent, diagnose and treat illness," says Collins. "This is a very exciting moment. Science and art can work together to improve humanity."

Collins presented the lecture, "Art Imitates Life: The Dance of DNA, Decoding and Doctoring," in conjunction with the opening of the Forbes Center for the Performing Arts. He also spoke to biology students and attended Furious Beauty: Genome, a Liz Lerman Dance Exchange performance that uses dance, video and music to explore genetics. Collins and Lerman shared the stage after the show to discuss the interplay in science and art, saying that the two complement each other and share many similarities, especially creativity.

Collins is well known throughout the world for his groundbreaking work, and he has published two books - The Language of God: A Scientist Presents Evidence for Belief (2006), and The Language of Life: DNA and the Revolution in Personalized Medicine (2010).

He led the effort to complete the Human Genome Project, the successful mapping of the human genome, while



serving as director of the National Human Genome Research Institute. His genetic research has led to the identification of the genetic variants associated with type 2 diabetes and the genes responsible for cystic fibrosis and Huntington's disease, among others.

What is perhaps less well known about Collins is his lifelong immersion in both science and the arts.

Want proof? Just look at his Huss & Dalton guitar, where the neck features an inlaid design of a double helix. He strapped on his guitar and shared a DNA-inspired tune with students after his lecture.

A Shenandoah Valley native, Collins grew up in Staunton and Augusta County. He grew up in an extraordinary household, filled with music, theater, dance, poetry and other celebrations of the arts from the extremely scholarly to the avant-garde to the crowd-pleasing. His father was Dr. Fletcher Collins, Yaletrained medieval musicologist, cultural laureate of Virginia, head of the theater program at Mary Baldwin College, and lifelong advocate for the contemporary

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Chief of the **National Institutes** for Health and mapper of the human genome, **Francis Collins** on stage with Liz Lerman. The duo talked about the similarities of their fields.

performance of medieval music and drama. Collins' mother, Margaret Collins, playwright and teacher, was quite simply a force of nature. Margaret and Fletcher Collins founded both the Oak Grove Theater in Augusta County and an organization called Theater Wagon to support the arts both locally and beyond. For many decades this dynamic pair gathered around themselves an amazing community of artists, writers and musicians, as well as generations of appreciators and participants.

I was fortunate enough to participate in this community, so I am sure the first time I ever saw Dr. Collins was probably sometime in the late 1960s. I'm sure he had a guitar in his hand.

Francis Collins has deep knowledge and respect for the performing arts that complements his extraordinary achievements in science and medicine. We are extremely honored that he shared his experiences with JMU students and the Madison community. M