**USC Discovery Scholars**
**2013 Prize Winners**

**Troy Armstrong,** Thornton School of Music

*Supercell*

A musical composition for full orchestra that captures and depicts the sound and fury of a Kansas thunderstorm through the sounds of traditional orchestra instruments.

**Jasneet Aulakh,** Dornsife College of Letters, Arts and Sciences

*Blood for Blood: 1984 India*

A thesis examining the characteristics of ethnic conflict and community violence through 70 interviews of witnesses and victims of the 1984 Anti-Sikh Pogrom in India.

**Alexander Fullman,** Dornsife College of Letters, Arts and Sciences

*Portfolio of Published Work*

Three published articles which: compare the history of racial discrimination and the use of affirmative action policies in higher education in the United States, South Africa, and Brazil; discuss the implications of a 2nd amendment ruling by the Supreme Court in 2010; and explore the significance of small donations in presidential campaigns.

**Christopher Hanke,** Roski School of Fine Arts

*Between a Rock and a Soft Paste*

A gallery installation of photo, video, and sculpture that explores the physicality of hard and soft matter and the possibility that all matter, organic and synthetic, stems from the same base substance.

**Devon Mott,** School of Architecture

*Architectural Scale: A Portfolio of Macro to Micro Design Solutions*

A portfolio of flexible and innovative design on different scales; from an urban master plan for the Xuhui district of Shanghai, to the fabrication of a jacket using unconventional materials – 3,000 crayons.
Julian (Jules) Pegram, Thornton School of Music

Neon Nights

A musical composition for full orchestra inspired by the vivid glow of neon lights in Las Vegas and South Beach and creating a vivacious, sonic collage of whimsical gestures and shimmering colors.

Roza Petrosyan, Dornsife College of Letters, Arts and Sciences

Voiceless Heroes: Female Resistance during the Armenian Genocide

A thesis investigating the previously overlooked contribution of Armenian women in the resistance movements; overcoming traditional gender roles to participate in the physical fighting and using nonconventional forms of resistance that ensured the survival of their families and the preservation of their culture.

Abhinav Prem, Dornsife College of Letters, Arts and Sciences

Photoionization profiles of metal clusters and the Fowler formula

A scientific article published in Physics Review A which establishes an application of classical physics theory to clusters that are quantum in nature as a valid method for measuring photoabsorption and provides insight into the emergence of bulk surface behavior from atomic or molecular phenomenon.

Russell Stewart, Dornsife College of Letters, Arts and Sciences

Spontaneous Oscillations in Intrinsic Signals Reveal The Structure of Cerebral Vasculature

A scientific article to be published in the Journal of Neurophysiology which develops an algorithm to filter out lower frequency oscillations and improve the spatiotemporal mapping of neural stimulus representations in the cortex.

Ka Ming Margaret To, School of Cinematic Arts

Mei

A documentary combining animation, photography, and live footage to portray a girl’s journey with her caretaker, Mei; capturing fond moments from her childhood in Hong Kong.