



**The 2020 University of Chicago Undergraduate Research Symposium Proceedings: Abstract**

**Conservation Science: Infrared Photography of *Socrates Tearing Away Alcibiades* by Jean-Baptiste Regnault**

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Mentor(s): Dr. Issa Lampe, Feitler Center, Smart Museum of Art; Dr. Lisa Zaher, Art History, The Art Institute of Chicago

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I am conducting a technical art historical study of *Socrates Tearing Away Alcibiades* by Jean Baptiste Regnault. Regnault's work can be situated in the context of the French Neoclassical art historical period. Neoclassical paintings are maligned by some as stiff, rigid, or uninventive in the way in which they reference classical themes. However, a visual of the initial underdrawing of *Socrates Tearing Away Alcibiades* may reveal crucial choices made by the artist. In order to accomplish this goal, I will conduct Infrared (IR) photography, which makes use of longer wavelengths of light which can 'pass' through the surface of a painting to enable aspects of the underdrawing to be reflected back into a specially modified camera. The camera lens will be covered with a series of external filters so that noise (color) from the visible spectrum is gradually reduced. Generating such images would help explicate the nuances of Neoclassical perspective(s) missed by historians who attempt to paint the period with all too broad of a stroke. Furthermore, this research may help explain subtle differences between this painting and its sister of the same name at the Louvre.



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**The Scientist: A Coldplay Musical**

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Mentor(s): Scott Elmegreen, Theater and Performance Studies; Professor Erik Shirokoff, Astronomy and Astrophysics

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We present “The Scientist”, a musical originally written for the *Storytelling in Musical Theater, The Art of the Libretto* class about life as a South Pole telescope winter-over. The plot consists of an astronomy graduate student and a theater graduate student going to the south pole to watch over the telescope during the winter data collection season. They soon run into trouble, however, when the telescope stops moving, with the sun about to fry the entire telescope if it does not start moving. The musical is accompanied by the sound of Coldplay, focusing on the album *A Rush of Blood to the Head*. The goal of this piece is to bridge the gap between arts and sciences: telling a scientific narrative through an artist’s lens. A main source of inspiration was how shows like *The Big Bang Theory* interweave science and everyday stories, often comically heightening both to accentuate the other. This show takes a slightly more realistic approach, all while appreciating and poking fun at stereotypes in *The Big Bang Theory*. At the symposium, we will show a full synopsis, concept art, and sample scenes and songs from the show.