Deconstructing Santiago Ramón y Cajal
Elisabet Pujadas MSII
Medical Student Research Day
Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

ABSTRACT
Santiago Ramón y Cajal (1852-1934), who was awarded the Nobel Prize in 1906 for his contributions to neuronal theory, is an icon of Spanish science and culture. Caught in the battles over historical memory in Spain, his image and legacy were appropriated as a political and cultural tool by both the regenerationist movement following the defeat of 1898 and by Franco's Regime (1939-1974). As even Cajal's leading modern biographer, López Piñero, has stated, "there is no doubt that [Cajal] has been mythologized". In this project I analyze the evolution and use of this mythical Cajal by exploring how successive biographers have dealt with key episodes in his life and with his views on subjects such as patriotism, science, religion, and manhood in a manner that resonated with each historical period.

BACKGROUND
This project is a contribution to the study of historical memory in 20th Century Spain and an initial step toward excavating a scientist who was as significant for Spain as was Pasteur for France, Pavlov for Russia, and Darwin for England. This topic is especially timely, as the younger generations in Spain are starting to question the official accounts of what happened during the Civil War and Franco's Dictatorship. Finally, this study will add another example of how sociopolitical contexts significantly alter the way we think about and relate to a scientist's life and work.

METHODS & SOURCES
This project is based upon a close reading of the multiple editions of Cajal's autobiography, Recuerdos de Mi Vida, and biographies written by a variety of authors between the years 1918 and 2010. In my review of those biographies, I am identifying key episodes in Cajal's life and looking for areas of contention and silences. Most important is the 1960 biography by García Durán Muñoz, friendly to the Franco regime, as it was regarded as a reference work by other biographers. During my time in Spain this summer, I also spoke with the curator at the Instituto Cajal, Spanish historians and Cajal family members.

RESULTS
Durán y Muñoz, the most influential biographer during Franco's regime, directly manipulated passages from Cajal's Recuerdos de Mi Vida. An example below shows Durán y Muñoz's attempt to simplify Cajal's complex religious views to be less at odds with the highly catholic Franco establishment by downplaying a childhood incident, the death of a priest by lightning, that Cajal used to express his religious doubts.

From Cajal: "Through the impetus of my weak intellect, those golden threads that link our souls to the heavens kept thining and threatened to snap. In my wandering, I had appeared as that deserted, solitary being that melancholically goes about crossing a world without love or charity and where, in order to escape the fierce dangers of the cosmic forces, he ought to display incredible wit and vigilance. I even went so far as to suspect that compassion and goodness are exclusively human sentiments that man has projected, along with many other of its perfections, onto the presumed causes of natural phenomena."

From Durán y Muñoz: "The importance of this event has been overstated by some of his biographers, perhaps without realizing that [Cajal] describes it in an excessively literary fashion. There is in him a tendency to dramatize, as if the urge of the novelist overcame the conscientious description of the historian . . . . All of this confirms our hypothesis that one should not convey too much meaning to what [Cajal] tells us about his childhood, if not so much about the facts themselves, about the comments that he argues were inspired by these events . . . . We deny that his faith weakened during his childhood."

CONCLUSIONS
Cajal is a fascinating, complex figure of controversial identity. My research, still in its initial stages, shows that Cajal biographers took great license in their portrayals, often distorting and damaging Cajal's memory for their own benefit. The profound influence of Durán Muñoz was facilitated by the false legitimation that he gained by marrying into the pro-Franco side of the family. My analysis of existing biographies can demonstrate what we do not know and perhaps serve as a start to deconstructing such myths.