Slide 1- This poster presents several aspects of a larger treatment project. This painting came to Buffalo State for treatment after the owner, a small Catholic college, rediscovered it and a collection of other Renaissance paintings, behind a set of lockers during a building renovation.

The painting was executed on two red oak boards, subsequently cradled, and the cradle then became seized, leading to structural damage including cracks and a pronounced concavity at the join.

The cradle was composed of fixed horizontal battens that were adhered to the back of the panel using hide glue, plus 6 movable vertical battens which slide into slots in the fixed battens. The movable battens had become seized. The cradle design also had other deficits, and it was decided that it should be removed for the safety of the painting.
Slide 2 - After receiving a protective facing, the cradle was removed as follows. First, the locked-up movable battens were pushed out of their slots using clamps and progressively longer strips of wood. Next, the slots in the horizontal battens were gently sawed out using a Japanese pull-stroke saw. The remaining adhered blocks of wood were removed by first injecting methanol at the base of each block to dehydrate the adhesive, then using chisels to gently lever the wood blocks out of position.
Slide 3- Once the cradle was removed, extensive insect tunneling was revealed along the top edge, impacting the stability of the support in this area. The most damaged areas of tunneling were removed. Adjacent damage areas were strengthened by consolidation and filling remaining tunnels, and the removed sections replaced with wood of a similar species, a practice still common in panel paintings conservation. The painting’s wood was identified as a Red Oak, so new Red Oak fills were made to allow consistency in movement. These wood fills were cut in the same orientation as the original wood of the painting. Damaged wood was carefully removed using chisels, to half the depth of the panel, in most affected locations. Remaining tunnels were consolidated using Paraloid B-72 in xylenes and ethanol, then filled using a putty of phenolic microballoons and B-72. These fill materials were chosen after testing for their strength, flexibility and longevity. The wood fills were then attached, again using B-72.

The painting will also have a new flexible auxiliary support constructed, which will suspend the painting within its frame. This new support, based largely on designs by Simon Bobeck and Ray Marchant, will allow the wood to move while at the same time gently encouraging it into plane as it goes back to an environment with limited environmental controls.

Thank you to Queen’s for hosting. Thanks also to my advisors, James Hamm and Fiona Beckett, and to all of my professors, particularly Jonathan Thornton, Dr. Aaron Shugar and JJ Chen, for sharing their advice and expertise throughout this project.