**Developing Analytical 3D Models as a Mechanism for Visualizing Disease Evolution   
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**Instructions:** The models can be rotated simultaneously in Microsoft Word. Click on the model in Word to see the rotation icon appear in the center: Icon

Description automatically generated. By clicking and dragging the cursor over this icon, the object can be rotated in any direction.

This project used comparative analysis of pathological visual depictions to help identify the significance of the evolution of the syphilis host-pathogen relationship The research widened the use of 3D modeling for retrospective case study and analysis by exploring a new method of qualitative-to-quantitative analysis.

****The virulence for each century’s Gold Standard model was developed using the following formula:   
 **Width + Depth(2) + Redness = Virulence**

**18th Century**

Width: 15mm

Depth: 5mm

Redness: 6 out of 10

Virulence: 31

**19th Century**

Width: 14.8mm

Depth: 4.25mm

Redness: 6.67 out of 10

Virulence: 29.95

**20th Century**

Width: 9.7mm

Depth: 5.6mm

Redness: 7.9 out of 10

Virulence: 28.8

**21st Century**

Width: 11.65mm

Depth: 2.42mm

Redness: 7.17 out of 10

Virulence: 23.66