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Following completion of postdoctoral fellowships at Johns Hopkins and NIH, Kelly became a Principal Investigator at NIH. After several years, he transferred to the ECU School of Medicine to have the opportunity to do both research and teaching. In 2000, he semi-retired from laboratory research to relocate to his original hometown and teach high school science, something that he had always wanted to do. He has been a science instructor at KCHS for the past 20 years. Kelly studies the Shroud as a subject important to both faith and science, with a specific interest in the properties of the bloodstains.

ABSTRACT

Blood clotting, serum halo rings, and the bloodstains on the Shroud of Turin

One of the most interesting characteristics of the bloodstains on the Shroud is the presence of serum "halos" or "rings" surrounding various wounds in the ventral and dorsal portions of the image. These areas were noted in the 1978 STURP investigation during examination of the cloth under ultraviolet light. The presence of such markings led to the interpretation that clotted blood was transferred to the cloth, and thus, could not have been fabricated by the direct addition of whole blood. Relatedly, the improbability that a forger would have added the detail of "halos" or "rings" in anticipation of their eventual discovery by the then unknown method of ultraviolet detection has also been commented on relative to the direct addition of blood to the cloth. Here, I have investigated various characteristics of blood clotting and accompanying halos or rings and discuss these findings in relation to what is present on the Shroud.