

1014-Z1-1317 **R Travis Kowalski*** (travis.kowalski@sdsmt.edu), 501 East Saint Joseph Street, Rapid City, SD 57701. *Using the CSI effect in Calculus: applying forensic science to infinite series*. Preliminary report.

Countless newspapers and magazines have cited the recent pop culture surge of interest in forensic and genetic science, due in large part to the success of television's current high-profile crime-investigation dramas. Fueled by this so-called CSI effect, there is a renewed interest in science, chemistry, genetics, and law. This presentation discusses using the CSI effect to further boost interest in the calculus sequence, by presenting sequences and series as "functional forensics."

Specifically, this presentation presents an extended metaphor that compares infinite sequences and series to modern genetics, by identifying power series as "function DNA." This metaphor presents standard topics such as convergence tests or Taylor approximations in a "forensic" light as mathematical analogs of DNA testing or genetic profiling. This gives students, nowadays fluent in the language of "extracting DNA" and "getting a hit off of CODIS," a familiar vantage point to understand and explore this fascinating part of calculus. We present an outline for implementing such material, including online resources, animations, and supplemental material, as well as describing positive student responses to this approach. (Received September 27, 2005)