



The Verdict Has Been Decided in the Chemistry Lab Murder Trial

By [Kirk Warren](#)

DECEMBER 17, 1998--At 9:30 P.M. on the evening of Tuesday, November 17, police were called to the apartment of Samuel Herrick at 110 West Park Street, where they [found Herrick dead](#) from a single gunshot wound to the head, victim of an apparent suicide. But as the investigation developed the focus turned quickly from suicide to murder and, on December 4, Herrick's girlfriend Donna Stevens was charged with the crime.

This grim scenario could have been taken from the front page of the local newspaper, an episode of *Colombo*, or an action-packed feature film. Instead, it was the premise for an unusual assignment in Professor of Chemistry Robert Q. Thompson's Analytical Chemistry class.

Students in the two lab sessions were asked to play the roles of expert witnesses for the prosecution and defense in a mock trial held December 12. Given samples of forensic evidence from the crime scene and from suspects--including blood samples, gunshot residues, and even a suicide note--students performed a variety of standard forensic tests, prepared their case, and argued its merits before a panel of judges that included James Zinser, professor of economics; Jan Cooper, John C. Reid Professor of English; and Marc Gilmore, a senior chemistry major from Drexel Hill, Pennsylvania. Thompson was the presiding judge.

"I wanted to create a situation where students would take the project on as their own and be excited about doing analytical chemistry," Thompson says, "to see that it really does have an impact."

Students had the opportunity to learn specific analytical procedures and see how forensic chemists contribute to the investigation and prosecution of criminal trials. And they found the overall experience both worthwhile and entertaining.

"I liked it," says Matt Soellner, a senior biochemistry major from Milford, Ohio, who performed postmortem blood-alcohol analysis for the prosecution. "I felt like you really got to know the instrumentation and analytical techniques."

"It was cool," Sam Hopkins, a sophomore from Portland, Oregon, adds. "I learned a lot from it."

Reflecting on the experience, Thompson says, "It went very well. For many students it really captured their interest. They felt like they were making a contribution to some goal. They were worrying about accuracy and precision and how to present results."



Judges (from left to right) James Zinser, Jan Cooper, and Marc Gilmore heard the arguments.



Students present their case using charts and graphs showing their chemical analysis.

PHOTOGRAPHY BY [MARY BETH HERTZ](#).

He plans to continue using the exercise and hopes to make the scenario even more realistic for future classes.

The trial had all the character and suspense of a real courtroom drama, complete with eloquent opening statements, aggressive cross-examination, persuasive closing arguments, and tense deliberations. With her dramatic opening argument prosecutor Emily Merrill, a senior from Loudonville, New York, set the tone for the proceedings. "This is not suicide but murder. Forensic science has enabled us to prove beyond reasonable doubt that we have caught the guilty party. The evidence is overwhelming."

The evidence and the murder scenario were prepared by Thompson and [Ruth Hook](#), a junior chemistry major from Warminster, Pennsylvania.

As usual, the defense tried to cast doubt on the veracity of the prosecution's evidence by emphasizing the role of interpretation in the presentation of forensic results.

"The evidence is not substantial enough to determine beyond a reasonable doubt that Ms. Stevens committed this crime," Hopkins argued for the defense.

But, as in a real trial only one side wins. The verdict?

Guilty as charged.

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