

The Henry C. Lee College of Criminal Justice and Forensic Sciences

Combine New Technology and a Seasoned Pro: New Frontiers Emerge

Fourteen years in the Connecticut Forensic Science Laboratory, the state body charged with all forensic investigations statewide, has not robbed forensic scientist Virginia Maxwell of a sunny demeanor. Neither has it dimmed her dogged determination to get to the core of a case.

New technology has helped pave an easier path. A maker of material identification systems, XStream, has loaned an X-ray diffractometer to the Henry C. Lee Institute of Forensic Science to investigate whether the machine can be applied to forensic mysteries. It is able to identify distinctions in types of materials by analyzing the crystal structure.

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Dr. Maxwell — with her background in chemistry and forensics — is just the woman to be operating it. From a family of physicians in Nottingham, England, she attended the University of Liverpool — birthplace of the Beatles — where she became intrigued with forensic science after hearing a lecture by a prominent British forensic scientist from the Forensic Science Service.

After getting her bachelor's degree in chemistry, Dr. Maxwell earned a Ph.D. in physical chemistry with a specialty in electrochemistry at Oxford University. The Canadian Department of National Defense awarded her a fellowship to the Royal Military College in Kingston, Ontario.

Sometimes, where one works is decided by job availability, or proximity to family. For Dr. Maxwell, it was personal. She met her husband, a Glastonbury lawyer, through a mutual friend, and moved to Connecticut. She found a job at Yale for a year researching cutaneous T-cell lymphomas, then took the job at the state lab.

"I had no idea that in the future I would end up in a forensics lab, or abroad," she says, her British accent still ringing clear despite having lived in the United States for many years.

"I went from a quiet research lab at Yale to a place where just about anything could land on my desk. It was a real awakening, especially coming from Britain, where there was relatively no gun crime whatsoever. It was very different, but I loved it." She collected evidence at crime scenes and analyzed it, and served as an expert witness. But as lead criminalist in the state lab

supervising the trace evidence section, she was working on cases all the time. Her research interests went untended.

With her new work as an associate professor at the University, those concerns are abated. Here, she is able to research and teach.

"I do love it," she says.



The X-ray diffractometer (inset) that UNH Associate Professor Virginia Maxwell will be using to help identify materials left at a crime scene