Justice Through Science: Bringing Modern DNA Evidence into the Courtroom

Information

Allegheny County Courthouse, Room 313
Friday, November 3, 2017
9:00 am to 4:30 pm
Continuing Legal Education
6 credit hours: 4 hours substantive & 2 hours ethics

Purpose

Forensic Science is poised to enter the twenty-first century. But failed evidence can raise forensic doubt. Older methods hinder justice, while better DNA science often goes unused. This full day CLE teaches how modernizing forensic science improves criminal justice. Nationally recognized lawyers, judges and scientists share their successes in bringing effective science into the courtroom. The full day speaker program offers 4 substantive CLE credits plus 2 ethics hours, and includes a mock trial.

Contact

Administrative

Carol Eddins (412) 350-5525 ceddins@alleghenycourts.us www.alleghenycourts.us

Program

Mark Perlin, PhD, MD, PhD
Justice Through Science (a Pennsylvania nonprofit public charity)
mark@perlin.com
www.justicethroughscience.org/conference.html

Course Schedule

8:15 AM 8:50	Registration & Continental Breakfast Welcome	Moderator
Morning (3 CLE hours)		
9:00	Prosecution	Cynthia Zimmer, Esq.
10:00	"The Prosecutor's New Silent Witness" Defense* "The Fickle Defender:	Clinton Hughes, Esq.
11:00	Embracing Your Old Forensic Enemy to I Innocence*	Defend Your New Client" Frances Watson, Esg.
12:00 PM	"The Legal Ethics of Wrongful Conviction" Lunch	· •
12:15	Keynote Address, Q&A (not for CLE) "Innocent Nightmare – 17 Years in Prison,	
Early Afternoon (1.5 CLE hours)		
1:15	Forensic Scientist "DNA in Justice (and Injustice)"	Dr. Greg Hampikian
1:45	Crime Laboratory "Using Computer Technology to Overcome	John Donahue, MA e Bottlenecks in the Forensic DNA
2:15	Testing Process and Improve Data Recovery Judicial Perspective "Failures in Forensic Science and DNA Even Should Know About Science and the Law	Hon. James Ross vidence: What Every Lawyer
2:45	Break	A View From the Benon
Late Afternoon (1.5 CLE hours)		
3:00	DNA Mock Trial "From DNA Report to Closing Argument"	Ferrara, Kohlhepp, Machen, Perlin, Sasinoski, Schupansky
4:30	Adjourn	

^{*} Ethics Credit

Presentation Descriptions

The Prosecutor's New Silent Witness

Cynthia Zimmer, JD (one hour) Supervising Deputy District Attorney, Kern County District Attorney's Office, Bakersfield, California

This presentation will explain how DNA has been used in criminal cases to convict gang murderers. Witnesses do not come forward in gang cases, but forensic science has enabled the state to have a silent witness. Advanced DNA statistical computing has opened new doors in the field of science and in the criminal justice system.

The Fickle Defender: Embracing Your Old Forensic Enemy to Defend Your New Client

Clinton Hughes, JD (one hour, ethics)
Senior Staff Attorney, DNA Unit, Legal Aid Society of New York City, New York

With the rise of forensic DNA technologies, defense attorneys face an old quandary with a new face: how to ethically and zealously represent clients in criminal cases using defenses that may run counter to past cases with past clients. Some prosecutors and scientists (and even a judge or two) will bristle at such apparent inconsistency. What must remain consistent, however, is that attorneys fulfill their obligation to effectively represent each individual client.

The Legal Ethics of Wrongful Conviction

Frances Watson, JD (one hour, ethics)
Professor & Director of the Wrongful Conviction Clinic,
Indiana University McKinney School of Law, Indianapolis, Indiana

This presentation will identify and analyze the Rules of Professional Conduct which impact wrongful convictions, including the rules governing competence, scope of representation, candor to the tribunal, fairness to the opposing party, trial publicity, and special responsibilities of the prosecutor. The presentation will include application of the relevant Rules of Professional Conduct Consider to the specifics of the Pinkins and Glenn case studies. Darryl Pinkins and Roosevelt Glenn were exonerated in recent

years as a result of newly discovered DNA evidence provided by modern probabilistic genotype computing.

DNA in Justice (and Injustice)

Greg Hampikian, PhD (half hour)
Professor & Director of the Boise Innocence Project, Boise State University,
Boise, Idaho

DNA deserves its reputation as the master of identity. However, that reputation has also led to errors and bias that can wrongfully convince and convict. This session will cover some of the basic trouble spots in DNA analysis: contamination, complex mixture interpretation, bias and fear. Participants will see actual case examples of errors, and how they were detected.

Using Computer Technology to Overcome Bottlenecks in the Forensic DNA Testing Process and Improve Data Recovery from Complex Samples

John Donahue, MA (half hour)
DNA Technical Leader, Beaufort County Sheriff's Office, Beaufort County,
South Carolina

DNA testing has been utilized in criminal investigations for over 30 years. In that time, technological advances have improved the ability of laboratories to provide information to investigators and the courts. While early DNA testing required body fluids containing large quantities of DNA and months to complete the test, current testing allows laboratories to complete the test in a matter of hours using DNA from small items that contain only a few cells. However, these technological improvements have increased both the number of samples submitted to laboratories and the complexity of the DNA profiles obtained from these samples, often leading to delays in reporting. In many situations, these DNA profiles are too complex for accurate human interpretation, which can lead to results being reported as inconclusive. This presentation will detail the methods that a small crime laboratory has used to implement automation and computer technology to expedite the case workflow. By using computer technology as an automated component of the workflow, the laboratory is able to identify potential DNA matches guicker and develop more profiles for submission to CODIS. In addition, the laboratory can compare all of its DNA data to crime scene investigators and laboratory staff.

Failures in Forensic Science and DNA Evidence: What Every Lawyer Should Know About Science and the Law – A View From the Bench

Hon. James Ross, JD (half hour)
Judge, Court of Common Pleas of Beaver County, Beaver County, Pennsylvania

In this presentation, the speaker will discuss oversight and mistakes made by trial attorneys in cases involving scientific and DNA evidence. Judge Ross will draw upon his trial experience as an attorney, and observations as a trial judge. He will cite specific examples (although names of cases still pending will not be mentioned to avoid any public statement on a pending case, which is prohibited by the judicial canons). These case illustrations will attempt to portray the abuse or misuse of forensic evidence, and important evidence that practicing trial lawyers may miss, fail to recognize, or do not seek in the discovery process.

Mock Trial: From DNA Report to Closing Argument

Lyndsie Ferrara, MS, Forensic Scientist, Duquesne University
Brian Kohlhepp, MA, Detective, Ross Township Police Department
Michael Machen, JD, Former Chief Public Defender, Allegheny County
Mark Perlin, PhD, MD, PhD, Chief Scientist, Cybergenetics
Hon. Kevin Sasinoski, JD, Judge, Court of Common Pleas of Allegheny County
Robert Schupansky, JD, Deputy District Attorney, Allegheny County
(one and a half hours)

A DNA report against a client can provoke a strong response – shock and denial, pain and anger, ultimately leading to resignation and plea bargain. But a lawyer need not abandon hope. While sometimes DNA is overwhelming, in other cases the biological evidence is limited, unpersuasive, problematic, or even exculpatory. A trial attorney is not a scientist, but can learn how to neutralize or overcome an opponent's DNA evidence. This mock trial will take the participant through key steps – experts, motions and arguments – that can facilitate an effective response to DNA.

Speaker Biographies

John Donahue, MA holds a bachelor's degree with a major in Zoology from the University of Tennessee, and a master's degree with a major in Microbiology from Indiana University. He began his career in forensic science in 1997 with the Texas Department of Public Safety as a serology/DNA analyst. In 2002 he was hired by the Charlotte-Mecklenburg Police Department to serve as the DNA technical leader. In 2008 he was selected by the Beaufort County Sheriff's Office in South Carolina to serve as the DNA technical leader. At Beaufort, he is responsible for planning and validating the entire DNA laboratory.

Lyndsie Ferrara, MS is a forensic science instructor at Duquesne University. She is a former forensic biologist at the U.S. Army Criminal Investigation Laboratory (USACIL), a forensics specialist/contractor for the Department of Justice's International Criminal Investigative Training Assistance Program (ICITAP) and project coordinator for a DNA mixture interpretation software company. She began working in the Duquesne University Forensics Science and Law program in May 2012, as a grant coordinator / program assistant and became a faculty member in 2014. Lyndsie's primary area of research relates to ethics education in forensic science. She also continues work related to DNA mixture interpretation. She is actively engaged with the Forensic Technology Center of Excellence through workshops and report writing. Lyndsie received her BS and MS degrees from Duquesne University.

Roosevelt Glenn grew up in Gary, Indiana, enjoying sports and the outdoors. On January 2, 1990, he was arrested for a crime he did not commit. He was wrongfully convicted, and imprisoned for 16 years, 8 months, 5 days and 12 hours. His innocence was later proven by new TrueAllele® computing on old DNA evidence, leading to his exoneration. Author Glenn talks about how he endured a tragic failure of criminal justice.

Greg Hampikian, PhD is professor of Biology and Criminal Justice at Boise State University (BSU), founder and Director of the Idaho Innocence Project (IIP) at BSU. His research includes discovery of the smallest sequences absent from nature that he has termed Nullomers. Nullomers have been used to protect forensic DNA samples against contamination, and to develop 198 Nullomer peptide drug candidates effective against cancer. Hampikian also holds patents for power generation and a miniature pump using magnetic shape memory alloys. He was awarded a PhD in Genetics from the University of Connecticut, and has held positions at the Yale University Medical School, the Worcester Foundation, Emory University, La Trobe University (Melbourne, Australia), and the CDC (Atlanta, GA). He is best known as a DNA expert on Innocence Network

cases around the world including that of Amanda Knox, Sarah Pearce, Darryl Pinkins (2016) and Roosevelt Glenn (2017), Chris Tapp (2017) and many others. Hampikian also helped the French police to solve a ten-year old using a new DNA technique. He co-authored the first study on Subjectivity and Bias in Forensic DNA, featured in *the Economist* and *New Scientist*, and his TedX talk, "Forensic DNA Mixups" is on YouTube. Hampikian's *New York Times* Op-eds, "Men Who Needs Them? (2012)" and "When May I Shoot a Student (2014)" both rose to the top of the *Times* most shared lists. A recent profile of his work appeared in *Science* (March 2016). His book *Exit to Freedom* with exoneree Calvin Johnson, chronicles Mr. Johnson's 17-year fight to prove his innocence using DNA.

Clinton Hughes, JD has spent 19 years as a Staff Attorney at the Legal Aid Society of New York City, where he specializes in Criminal Defense and DNA. He has tried multiple cases to verdict involving DNA evidence. He was lead attorney in the DNA litigation team that successfully precluded the use of the DNA mixture software STRmix and a modified random match probability in People v. Hillary, St. Lawrence Ind. No. 2515-2015, (August 26, 2016) (Catena, J.). He was also part of the DNA litigation team that successfully precluded the DNA mixture software FST and low copy number DNA testing in People v. Collins, 2015 Slip Op 25227 (Kings County July 2, 2015) (Dwyer, J.).

Brian Kohlhepp, MA is a Detective at the Ross Township Police Department. In this capacity, he is the primary investigator in the Ross Police Forensic Investigation Unit. He investigates all major criminal incidents such as suspicious deaths, sexual assaults, and child abuse. He has over 900 hours of specialized training in various policing subjects. He has a BA from Waynesburg University in Criminal Justice and a Master of Arts in Social Sciences from California University of Pennsylvania (Summa cum Laude). Detective Kohlhepp is on faculty teaching at Duquesne University, graduate school at California University of PA, and Waynesburg University, graduate and undergraduate courses at John Jay College of Criminal Justice. He also serves as a Program Director and Instructor in numerous criminal investigation and forensic continuing education classes for attorneys and law enforcement at the Center for Law and Public Policy at California University of PA held in the Pittsburgh and Philadelphia area. In addition, he regularly conducts continuing education seminars for John Jay at their main campus in New York City.

Michael Machen, JD is a graduate of Allegheny College and Widener University School of Law. He is a former Chief Public Defender of Allegheny County, Pennsylvania. As chief, he was instrumental in the settlement of the ACLU lawsuit that brought indigent clients quality representation. He was the President of the Public Defender Association

of Pennsylvania, and was the Chairman of the Criminal Litigation Section of the Allegheny County Bar Association. He was appointed by the governor to the Advisory Committee on Wrongful Convictions, and was part of the Committee to Revise the Pennsylvania Criminal Jury Instructions.

Mark Perlin, PhD, MD, PhD is President of Justice Through Science. He is also Chief Scientist and Executive at Cybergenetics, a Pittsburgh-based company. An expert in computational genetics for over 25 years, he developed the TrueAllele® computer system for interpreting complex DNA evidence. Dr. Perlin has worked on over 400 criminal cases, testifying about objective computer DNA evidence in over 50 trials in state, federal, military and foreign courts. He has testified as a DNA expert in over a dozen Frye or Daubert admissibility hearings, and lectures frequently at continuing legal education programs. He holds doctoral degrees in Mathematics (City University of New York) and Computer Science (Carnegie Mellon University, Pittsburgh, PA), and a medical degree (University of Chicago). He was a Senior Research Scientist in Computer Science at Carnegie Mellon University, and adjunct faculty in Human Genetics at the University of Pittsburgh. He is currently adjunct faculty in the Bayer School of Science at Duquesne University.

Hon. James Ross, JD graduated from Baldwin Wallace College in Berea, Ohio. He holds a Masters Degree in Public Administration from the University of Tennessee. His Juris Doctor is from Ohio Northern University, where he served as the Editor-in-Chief of the Law Review. Judge Ross clerked for United States District Judge Alan Bloch in the Western District of Pennsylvania. He was an Assistant United States Attorney for the Western District of Pennsylvania, and later Chief of the Erie Division. He was a partner at Bowers, Ross & Fawcett, practicing in Allegheny, Beaver, Butler, Dauphin, Lawrence, Mercer and Venango Counties. He litigated civil and criminal cases in Federal District Court, and in United States District Court. He has argued appeals before the Pennsylvania Supreme Court, and the United States Court of Appeals. He was elected as Judge of the Court of Common Pleas of Beaver County, beginning his ten-year term in 2014. He recently became an Adjunct Professor at the Duquesne University School of Law. He is starting a two year term as statewide Chair of the House of Delegates for the Pennyslvania Bar Association.

Hon. Kevin Sasinoski, JD is a judge in the Court of Common Pleas of Allegheny County, having been elected in 1999 and beginning his first term in January, 2000. After having served for two years in the courts Family Division, Judge Sasinoski is presently assigned to the criminal division. He is the former Director of the Allegheny County Public Defender's Office, and was in private practice for 19 years prior to becoming a

judge. He received a BA from the University of Pittsburgh in 1978, and a JD from Duquesne University School of Law in 1981.

Robert Schupansky, JD serves as a Deputy District Attorney in the Allegheny County District Attorney's Office. He earned his BA from Notre Dame University, and his JD from the University of Pittsburgh, PA. He has prosecuted many homicide cases, some involving complex DNA evidence.

Frances Lee Watson, JD has been a faculty member at IU McKinney School of Law since 1995. She currently directs the Wrongful Conviction Clinic and teaches Lawyering Practice, and Law and Forensic Science. The Wrongful Conviction Clinic is a founding member of the Innocence Network and provides representation to Indiana inmates claiming actual innocence and wrongful conviction. From 1993 to 1995, Professor Watson served as the first Chief Public Defender of the Marion County Public Defender Agency. She is a master and current president of the Indianapolis American Inns of Court, on the Board of Directors of the American Civil Liberties Union of Indiana, and participates as an active member of the Children's Policy and Law Initiative of Indiana. Professor Watson also is a founding member of the Board of the IUPUI Forensic Science Initiative, and an elected member of the American Academy of Forensic Science. In 2016, she was recognized by the Indiana Lawyer as a Distinguished Barrister, received the Spirit of Justice Award from the Indiana Public Defender Council, and the Women in the Law Committee Recognition Award from the Indiana State Bar Association. In June 2017, Professor Watson received the Outstanding Alumnus of the Year award from the IU McKinney Alumni Association.

Cynthia Zimmer, JD is Supervising Deputy District Attorney for the Kern County District Attorney. She has been a prosecutor at the Kern County District Attorney's Office for 32 years. She has served as a supervisor for nearly two decades, including the last 10 years as chief of the Gang Unit. Among the notable cases prosecuted by Zimmer is the trial of Billy Ray Johnson, the so-called "Eastside Rapist" who terrorized the east Bakersfield community the summer of 2013. Johnson was convicted of 24 crimes, including multiple counts of rape, and sentenced in May 2015 to life in prison without parole and 300 years to life, plus 123 years. SDDA Zimmer received an award for her prosecution work related to the Eastside Rapist from the Kern County Law Enforcement Foundation. She is a graduate of the California State University at Bakersfield, and Loyola Law School in Los Angeles.