

Curriculum Vitae

I. Personal Information

- a. UID: 100713510, **Mauriello, Thomas, Paul**, 8775 Teresa Lane, Laurel, MD 20723, tmauriel@umd.edu, www.forensiqinc.com

- b. Academic Appointments at UMD
 - i. Lecturer - University of Maryland @ College Park, Department of Criminology and Criminal Justice – (1977 to 2013)
 - ii. Adjunct II Lecturer - University of Maryland @ College Park, Department of Criminology and Criminal Justice – (January 29, 2014 to present)

- c. Administrative Appointment at UMD
 - i. University of Maryland Police Department @ College Park – Police Officer and Criminal Investigator – (1973 to 1982)

- d. Other Employment
 - i. US Department of Defense – (1982 to 2012) Retired
 1. Special Agent
 2. Counterintelligence Investigator
 3. Polygraph Examiner
 4. Chief of the Security Operations Center
 5. Chief of Police for the National Security Agency Police Department
 6. Investigator for the US Senate Subcommittee for Investigation
 7. Director, Occupational Health, Environmental and Safety Services
 8. Director of the National Operation Security, Interagency OPSEC Support Staff
 9. Chief of Staff for the US DoD, National Cryptologic School
 10. Chief of Polygraph
 - ii. ForensIQ, Inc. – (2011 to present), Founder & CEO - forensic consultation services. www.forensiqinc.com

- e. Educational Background
 - i. Master of Forensic Sciences - The George Washington University – Washington, DC (1976)
 - ii. Bachelors of Arts in Criminology – Suffolk University – Boston, MA (1973)

- f. Continued Education
 - i. 2010-2017 – Attended the American Academy of Forensic Sciences Annual Scientific Meetings. Participated in the following workshops:
 1. The Recognition, Selection, and Significance of Gun Shot Residues
 2. Strengthening Forensic Sciences in the US □ Communication in Forensics

3. Homicide and Death Investigation
 4. Innovation in Forensic Image and Video Analysis
 5. Practical Ethics in Forensic Sciences Science in the Courtroom
 6. On the Leading Edge of Forensic Science
 - ii. April 2013 - Forensic Magazine sponsored webinar: Expert Witness – What Makes a Credible Witness?
 - iii. FRENZY 2000 Conference – “Beyond the Rape Kit: Trauma Center and ER Evidence Collection for Investigators.”
 - iv. 1982 - US DoD, Special Agents Training (320 hours)
 - v. 1985 - CIA Polygraph Training (12 weeks)
 - vi. 1974 - Prince George’s County Municipal Police Academy (256 hours)
 - vii. 1975 - Mobile Crime Lab Technical Training with MD State Police (100 hours)
 - viii. 1975 - Criminal Investigation School with MD State Police (80 hours)
- g. Professional Certifications, Licenses, and Memberships
- i. Fellow, American Academy of Forensic Sciences
 - ii. Active Member, International Association for Identification
 - iii. Honorary Life Member, The Operations Security (OPSEC) Professional Society
 - iv. Active Member, Maryland Polygraph Association
 - v. Certified by the Maryland Police Training Commission - to teach subjects in forensic evidence; crime scene identification and preservation of evidence; medical-legal examination of sex crime victims; and the medical-legal examination of death.
 - vi. Certified Forensic Hypnotist
 - vii. National Cryptologic School – Adjunct Faculty Instructor
 - viii. Certified by the Federal Aviation Administration (FAA) as a Small Unmanned Aircraft Systems (sUAS) Pilot.

II. Research, Scholarly, Creative and/or Professional Activities

- a. Books Authored
 - i. Legal treatise, “Criminal Investigation Handbook – Strategy, Law and Science,” LexisNexis – Publisher. ISBN: 978-0-8205-1673-8, First published in 1990 and updated annually to the present, used nationally as a guide for investigators, prosecutors and defense attorneys that provides the legal and technical background needed for a comprehensive understanding of the investigative process.
Appendix 1: The Simpson-Goldman Murder Investigation — Analysis of the Investigative Issues.
Appendix 2: The 2002 Washington, D.C. Area Sniper Shootings A Case Analysis of the Multi-Jurisdictional Investigation.

- ii. “The Dollhouse Murders,” published by Pearson Education in 2004, ISBN: 0-13-145165-0, illustrates the use of six uniquely designed crime scene dioramas, each coupled with story lines used to study the crime scene investigation process.
 - iii. Presently authoring a digital e-textbook, “Introduction to Criminalistics – From Crime Scene to Court Room,” publisher, Green River Learning/Kendall Hunt Publishing Company. Manuscript and software due to be published in Fall 2017.
- b. Production of “Online App”
- i. Branded “C.S.I. Checklist” - a quick reference guide organized in a bulleted checklist type format for uniformed police officers, investigators, and crime scene evidence technicians engaged in all stages of crime scene investigation and evidence processing.
 - ii. Scheduled to be posted on all social media stores by Spring 2017.
- c. Published Conference Proceedings
- i. February 19, 2015, presented a scientific paper at the American Academy of Forensic Sciences (AAFS) 67th Annual Scientific Meeting, Orlando, Florida. The paper is entitled, "The Flipped Classroom - Turning Your Forensic Education Program Upside-Down."
 - ii. Feb. 21, 2013 - presented a scientific paper, “A Case of Double Jeopardy: How 3D Laser Scanning Clarified the Truth,” at the American Academy of Forensic Sciences, 65th Anniversary Meeting, Washington, D.C.
 - iii. February 22-25, 2012 – presented a scientific paper at the American Academy of Forensic Sciences Annual Meeting – Title, “Forensic Polygraph in a Global Environment: Comments on the Worldwide Growth of an American Obsession,” – Co-Presented with Frank Horvath, Ph.D., National Center for Credibility Assessment.
- d. Conferences, Workshops, and Talks
- i. Keynotes
 - 1. March 16, 2016 – Luncheon keynote speaker at the Malden Kiwanis Meeting in Malden, MA - “A Look Thru the Eyes of a Forensic Scientist.”
 - 2. July 21, 2016 – Presented the keynote address at the Breakfast Meeting of the Maryland Chapter of the Association of Certified Fraud Examiners (ACFE) entitled, “Truth and Lies of the Polygraph.”
 - 3. October 15, 2015 – Luncheon Keynote speaker at the Malden Kiwanis Meeting in Malden, MA. Members of the Malden, Everett, Medford, Revere, Chelsea and Somerville Kiwanis Clubs were present. The presentation focused on the use of the polygraph in criminal and counterintelligence activities.

4. June, 18, 2014 - Presented the keynote address to over 1500 participants at the NCMS 50th Annual Seminar, Gaylord Hotel and Convention Center, Harbor Place, MD - "The Flipped Classroom - Turning Your Security Education Program Upside-down."
5. April 2, 2013 - Keynote presentation, 7th Annual ISAC (Industrial Security Awareness Council) of Central Maryland Training Seminar, The Johns Hopkins Applied Physics Laboratory, MD, Topic: "Truth and Lies of the Polygraph."
6. May 7, 2012 – Keynote speaker at the Operations Security Professional Society (OPS) Social, held in conjunction with the 23rd Annual National OPSEC Conference, Anaheim, California - "Critical Thinking for the Security Professional."
7. April 18, 2012 - Keynote speaker at the JSAC/NCMS (Joint Security Awareness Council/National Classification Management Society) Security Seminar, Dallas, Texas. Topic, "Critical Thinking for the Security Professional."

ii. Invited Talks

1. April 4, 2016 – Hosted a group of 30 law enforcement officials from the People’s Police Academy of Vietnam (PPA) introducing them to the academic and training contain and crime lab facilities at the University of Maryland. Sponsored by the BSOS – OIEP.
2. April 4-6, 2016 – Presented at the Impact 2016 National Security Institute’s 31st Annual Security Forum held in Chantilly, Virginia. Presenting an Education Session entitled “The Flipped Classroom – Turning Your Security Education Program Upside-down.”
3. October 29, 2015 – Presented a forensic sciences lecture for an after school program sponsored by the YMCA YOUTH AND FAMILY SERVICES at the Albert Einstein High School in Montgomery County, Maryland.
4. November 24, 2015 – Guest speaker for the NCMS Chesapeake Bay Chapter Annual Seminar at the Johns Hopkins University Applied Physics Laboratory, Laurel, Maryland. Topic was the “Truth and Lies of the Polygraph.”
5. October 20, 2015 – Guest lecture for Professor Marilyn London’s Forensic Anthropology class at the University of Maryland. The presentation included a tour of the teaching crime laboratory and mock crime scene facility on the College Park campus.
6. September 8, 2015 – Guest lectured at Roosevelt High School, Greenbelt, MD in four forensic sciences classes.
7. July 29, 2015 – Presented to middle schoolers from all over the State of Maryland attending the EXST016: SCIENCE DETECTIVES: AN INTRODUCTION TO FORENSIC SCIENCE Course sponsored by

- the University of Maryland Office of Extended Studies Young Scholars Discovery Program. The students got to learn about the crime lab, what college students learn, discussed criminal cases and they were walked through three mock crime scenes.
8. July 28, 2015 – Presenting a one-hour brown bag type presentation to adjunct instructors for the US Department of Defense on the topic of “Flipped Classroom-Blended Learning” techniques used to transform traditional platform courses.
 9. May 2, 2015 – Presented at the “DC Criminal Defense Lawyers Association Rights of Spring,” CLE session. The title of the presentation was “Evaluating a Case for the Need for An Expert.”
 10. April 21, 2015 – presented to the Reservoir High School, Howard County Maryland, forensic sciences class who visited the UMD CCJS Crime Laboratory and received a presentation and demonstration of the forensic sciences activities in the lab and a walk through tour of the Mock Crime Scenes Facility.
 11. September 26, 2014 – presented at the UMD - Learning Technologies Faculty Brown Bag Lunch Discussion Series on the topic of ”A Flipped and Blended Learning Classroom – Turning your Course Up-Side-Down.”
 12. July 23, 2014 - Guest lecture, Georgetown University, Summer Forensic Sciences Institute. Washington, D.C. Topic, “Forensic Pathology and Death Investigation.”
 13. May 27, 2014 - presented a one- hour forensic sciences overview presentation to science students at the Triton Regional High School, Byfield, MA. The 60 plus students were studying forensic sciences and biology.
 14. April 25, 2014, co-presented with Jun Yang, Division of Information Technologies, Course Developer, at the UMD’s "Innovations in Teaching and Learning Conference." The topic of the presentation was "Engaging Video Lectures in a Flipped Classroom.”
 15. December 13, 2013 - Guest speaker for three forensic science classes at Duval High School, Prince George's County, Maryland. Focus was on the forensic sciences techniques and the career field and mentorship.
 16. October 17, 2013 - Presentation for the UMD Federal Semester Program students preparing to go through the security clearance process for intern positions. The topic for discussion was the “federal security clearance process and the use of the polygraph.”
 17. September 19, 2013 - presented at the Northeast Maryland Security Council (NMSC) Annual Seminar, Aberdeen, MD. The topic presented was “Critical Thinking — A ‘Thought’ Provoking Presentation,” for the security professional.

18. June 6 – 8, 2013 - at the Hyatt Regency Santa Clara CA, presented two presentations for the California Association of Licensed Investigators (CALI), 2013 Annual Conference. The first with "Critical Thinking for the Investigator," and the second was the "Truth and Lies of the Polygraph."
19. May 18, 2013, presented four demos and presentations on the polygraph at the International Spy Museum's – Spy Fest 2013 – KidSpy Family Festival, Washington, DC.
20. April 26, 2013 - presented for the Association of Forensic Science Students at The George Washington University, Washington, D.C. Topics included, "A Case of Double Jeopardy – How 3D Laser Scanning Clarified the Truth," and "The Truth and Lies of the Polygraph."
21. September 3 – 7, 2012 - Guest speaker at the World Association of Detectives', 87th Annual Conference, held at the Boston Park Plaza Hotel Boston, MA. Topic, "Critical Thinking — A 'Thought' Provoking Presentation," for their worldwide audience of investigators and security professionals.
22. March 29, 2012 - a guest lecture at the UMD Shady Grove Campus, speaking to criminal justice students in the Special Topics in Forensic Sciences course. He lectured on the "Use of Forensic Interview Techniques during the Investigative Process."
23. December 9, 2011 - Presentation "The Truth and Lies of the Polygraph" – Presented to the American Small Business Consortium – at the Loyola University Maryland: Graduate Center Columbia, MD.

iii. Workshops and Seminars

1. August 18, 2016 – Presented a daylong seminar to 30 mid-level police officers and graduate students from the People's Police Academy of Vietnam. Topic presented was entitled, "Criminal and Crime Scene Investigations and the Application of the Forensic Sciences," The seminar was hosted by the UMD BSOS – Office of International and Executive Programs (OIEP).
2. July 20, 2016 – Presented a 3-hour workshop and demonstration of the crime laboratory to 20 students enrolled in the summer course, ANTH221 – Introduction to Forensic Sciences. These students were participating in the summer three week "Terp Young Scholars" Academic Program.
3. July 11-19, 2016 – Taught a two-week non-credit workshop for 30 Chinese Police Science students at the UMD. The students were undergraduates enrolled in Zhejiang Police College in China. The topic of the material focused on the US criminal justice system in

- general and then specifically on the police and forensic activities. The workshop was hosted by the BSOS - OIEP.
4. October 27-28, 2015 – Presented three 2-hour seminars for the BSOS - OIEP at the UMD. The participants were supreme court judges of the Supreme People’s Court of Hunan Province, China. The topics included “Standards and procedural rules governing the introduction of expert testimony and scientific evidence in the U.S. court system,” “Strategies for responding to expert testimony and scientific evidence in the U.S. court system,” and “Appealing criminal convictions through the use of expert testimony and scientific evidence.”
 5. October 13-16, 2015 – Taught a four-hour workshop at the Northeastern Association of Forensic Scientists (NEAFS) annual conference in Hyannis, Massachusetts. The topic “Your Attention Please! – A Public Speaking Skills Workshop” presented to improve participant’s oral communications skills in the classroom, courtroom and conference room.
 6. October 6, 2015 – Presented two 2.5-hour workshops entitled “Your Attention Please – A Public Speaking Skills Workshop,” at the Human Resources Research Organization (HumRRO), Alexandria, Virginia during their HumRRO Fall Conference.
 7. September 23, 2015 – Presented a four-hour workshop on how to integrate the use of video editing software to create a “Flipped Classroom – Blended Learning” course. The workshop was presented to adjunct instructors teaching courses for the US Department of Defense.
 8. September 15, 2015 – Taught an eight-hour block of instruction for 10 police officer new recruits attending the UMD Police Academy. Modules included crime scene processing and preservation of evidence; forensic sciences; and mock crime scene practical exercises.
 9. February 17, 2015, presented a half-day workshop at the American Academy of Forensic Sciences (AAFS) 67th Annual Scientific Meeting, Orlando, Florida. The workshop was entitled, "Your Attention, Please! - A Public Speaking Skills Workshop." A workshop to improve presentation skills through strategic planning, preparation, and performance.
 10. September 11, 2014 - presented a "Critical Thinking" workshop at the Emerald Coast NCMS Chapter 21st Annual Seminar, Fort Walton Beach, Florida.
 11. August 13-15, 2014 - Presented a workshop entitled, “Video Lecture Engagement Strategies in a Flipped Classroom” at the "Interactive Learning Technologies 2014 SALT® Conf.," held in Reston, VA.
 12. May 20, 2014 - presented an 8-hour block of instruction for the UMD Police Academy's "Basic Police Training Academy." The topic of

instruction was "Forensic Science Capabilities for the Law Enforcement Officer."

13. March 19, 2014, presented for the National Security Training Institute (NSTI), a 4-hour workshop on public speaking skills entitled, "Motivation through Communications," for senior security managers at the National Conservation Training Center, Shepherdstown, WV.
14. November 26, 2013 - taught an 8-hour block of instruction for the UMD Police Academy. The topic was "Identification, Protection and Analysis of Forensic Evidence" - For the law enforcement officer.
15. July 11, 2013 - presented a "Gun Recognition and Identification for Professional Journalists," four-hour workshop sponsored by The Poynter Institute and the UMD College of Education.
16. June 25-28, 2013 - Co-sponsored and co-taught a forensic educators workshop for high school teachers, "Crime Scenes in the Classroom," at the UMD, CCJS Crime Laboratory.
17. April 18, 2013 - presented a four-hour workshop "Motivation through Communications - A Briefing Skills Presentation" to a group of senior security managers in government at the DNI/NCIX Senior Security Professional Seminar in Chantilly, VA.
18. October 31, 2012 - presented the four-hour workshop "Motivation through Communications - A Briefing Skills Presentation" to a group of senior security managers in government at the DNI/NCIX Senior Security Professional Seminar in Shepherdstown, WV.
19. April 19, 2012 - presented a leadership workshop, "Motivation through Communications —A Briefing Skills Presentation," at the Senior Security Professionals Seminar, for the National Counterintelligence Executive (NCIX) at St. Michaels, MD.
20. February 13, 2012 – 8-hour police training module - UMD Police Academy – Subjects included forensic sciences and evidence processing.

iv. Book Review

1. March 27, 2012 – Review of "Criminal Evidence," by Samuel Newton and Teresa Welch, Wolters Kluwer/Aspen College Series.

v. Significant Works in Public Media

1. November 2016 – Commentary and a crime laboratory ballistics demonstration for Discovery Channel's Investigation Discovery (ID) production of episode 4, "Internal Affair," in the series "Reasonable Doubt," first aired on TV May, 17, 2017.
2. June 4, 2016 – Appeared as a guest on the radio show "Crime Talk Radio" hosted by retired NYPD Homicide Detective, Joseph Giacalone. The show was broadcast on WRCN 103.9 FM Suffolk

- County, NY. Discussed the future of forensics, the forensics programs being taught in high school all over the country and providing advice for students interested in forensics.
3. February 28, 2013 - Interviewed on WJZ TV 13 News, Baltimore, concerning the investigation into how Johns Hopkins gynecologist Nikita Levy secretly videotaped perhaps thousands of his patients.
 4. February 23, 2013 – Interviewed on CTV News reference a discussion about the US Supreme Court arguments reference the collection of DNA and 4th amendment violations.
 5. Interviewed by WUSA TV 9 News, Washington, D.C. – Forensic Evidence from the Chandra Levy Death Investigation in Washington, D.C.
 6. Interviewed by WJZ TV News, Baltimore – Highlighting the six crime scene dioramas used in the CCJS crime laboratory and my book, “The Dollhouse Murders.”
 7. Interviewed and conducted on camera analysis for the Investigation Discovery (ID) Cable TV Channel – “Forensic You Decide” Series – Episode 13, “Silent Witness.” Conducted an experiment comparing the blood spatter caused from a blood soaked dog at a crime scene with an impact spatter caused from a blunt force object striking the head of a human.
 8. Interviewed and conducted on camera analysis for the Investigation Discovery (ID) Cable TV Channel – “Forensic You Decide” Series – Episode 5, ‘Caught on Tape,’ – Demonstrates evidence uncovered by forensic consultant, Tom Mauriello in a Baltimore City Arson/Homicide Case.
 9. On camera demonstration in a CCJS 320 lecture hall class for WUSA, Channel 9 TV News. The subject of the experiment was the credibility of Eyewitness Testimony.
 10. Interviewed on MSNBC Cable News with Lester Holt Live, discussing the “CSI Effect.”
 11. Interviewed on Fox Cable News, “The O’Reilly Factor Show” with Bill O’Reilly on the evening the Washington D.C. Snipers were arrested to discuss the forensic evidence and investigation.
 12. Interviewed on ABC World News – Discussing the forensic evidence in the O.J Simpson Murder Trial.
 13. Interviewed by Erin Moriarty on CBS Sunday Morning News, reference the Madrid, Spain Train Terrorist Bombing and the initial suspect, Brandon Mayfield concerning the reliability of fingerprints.
 14. Interviewed on UMD Cable TV Show, “Researching Maryland,” discussing how scientists assist in criminal investigations.

15. Produced the video, “Truth and Lies About Polygraph,” used by U.S. government and contractor personnel preparing to take a polygraph examination as part of their security processing.
16. On camera forensic investigator for the Discovery Channel’s documentary, “Lizzie Borden Had An Ax,” where he reinvestigate the Lizzie Borden double murders committed in 1892.
17. Created and produced the webcast TV show, “ForensicWeek.com,” hosting 80 episodes interviewing forensic scientists and investigators from all over the world. See www.forensicweek.com

III. Teaching, Extension, Mentoring, and Advising

a. Courses Taught

- i. Past courses taught for CCJS between 1977-1980:
 1. LENF 100 – Introduction to Criminal Justice
 2. LENF 220 – Introduction to Investigations
 3. LENF 350 – Police Community Relations
- ii. CCJS 320 – Introduction to Criminalistics
 1. Created the course in 1980
 2. Began teaching it in Fall 1980 and teaching it exclusively to the present.
 3. At the same time created the CCJS Crime Laboratory (presently in 2401 Marie Mount Hall) with State of MD funds associated with the construction of LeFrak Hall, the laboratory’s original location.
 4. 2015 Created the CCJS Mock Crime Scene Facility – 0406 Marie Mount Hall

b. Teaching Innovations

- i. Fall 2013 transformed CCJS 320 into a “Flipped Classroom Blended Learning” format producing 81 video lectures on Camtasia software and integrating it into Canvas, the UMD’s new learning management system (LMS).

c. Course and Curriculum Development

- i. 1980 - Developed the course and curriculum for CCJS 320.
- ii. 1980 - Developed the CCJS 320 Crime Laboratory to integrate curriculum for the CCJS 320 course.
- iii. 2012 - Developed a three-day course for US Department of Defense Special Agents, “Critical Thinking for the Investigator.”
- iv. 2015 - Developed a two-week seminar for high school teachers who teach forensic sciences courses.
- v. 2016 - Developed a 30-hour course for OIEP presented to police officer college students from China. The field of study - “U.S. Criminal Justice System.”

- vi. Developed and present an 8-hour curriculum of study and training for police officers attending the UMD Police Training Academy in the areas of forensic sciences and crime scene investigation.

d. Mentorship

- i. Mentor to all students as requested.
- ii. Written hundreds of letters of recommendation and have been interviewed regularly for students applying for employment; graduate, law and medical schools; internships; study abroad programs; government clearances; and scholarships.
- iii. Fellow and Faculty Mentor for the UMCP Gemstone Program from 1999-2002 for the “Non-Lethal Weapons Research Team.” At their graduation, 22 May 2002, the team was honored with “The Outstanding Gemstone Team Research Presentation Award.” For three years met with this team weekly; brought them to the University of New Hampshire for an annual DoD Non-Lethal Weapons Conference, where they participated in presenting their research in a poster format.
- iv. Formal faculty mentor for a student (Reggie Jones) participating in the UMCP Baltimore Incentive Awards Program from 2002-2004. Meet with him monthly throughout the program, and during his senior year he was a student in my CCJS 320 class and then my Teaching Assistant for the same class.
- v. Mentored a student participating in the Individual Studies Program (IVSP) from approximately 2002-2006. Assisted in developing a curriculum for him integrating CCJS/forensic sciences/chemistry and biology courses, to create his own major entitled, “Forensic Investigations.” He went on to graduate from University of Miami Law School and is now an attorney.
- vi. Mentored a UMD Shady Grove student, David Miller, a recipient of the Camille and Clifford Kendall Endowed Scholarship/USG Kendall Scholars Mentoring Program, 2011-2012.
- vii. March, 27, 2012 - Review of UMD Gemstone Team research report, “Trigger: Testing the Reliability of the Identification of Guns through Gemstone Research.”
- viii. Mentor for the UMD Federal and Global Semester Programs providing guidance for students concerning national security processing.

IV. Service and Outreach

- a. Committees, Professional & Campus Services
 - i. 2016-2017 Outreach Committee, General Section, American Academy of Forensic Sciences.
 - ii. February 2012 & 2014 - Moderator for the American Academy of Forensic Sciences (AAFS) General Section scientific session at the 64th and 66th AAFS Scientific Meeting held at the Washington State Convention Center in Seattle.

- iii. March 2014 & 2016 - Judge at the Mt. Saint Mary's University, Emmitsburg, MD, C.S.I. Challenge Competition, where two groups of 6 CCJS students participated in both competitions demonstrating their crime scene investigation skills.
- iv. 2015 to present - Board Member for the Stevenson University, Center for Forensic Excellence.
- v. Security Clearance Consultant for the UMD Federal and Global Semester Program.
- vi. 2014 - 2015-2016 - Maryland Day – Participated in presenting the activities of the CCJS Crime Laboratory.
- vii. Created crime scenes and related scenarios at the National Academy of Sciences' (NAS) Marian Koshland Science Museum on two occasions in 2004 and 2206. The program was entitled, "Murder in the Museum," a program where participants paid a fee to investigate a mock crime and crime scene and learn about the forensic sciences and investigative process.

Thomas P. Mauriello

Date: