CURRICULUM VITAE

Joanie Brocato, Ph.D., MLS(ASCP)

Date: 1.9.2025
School: School of Allied Health Professions
Department/Program: Medical Laboratory Science

Current Title: Department Head
Business Address: 1900 Gravier Street, New Orleans, LA 70112
Business Telephone: 504-568-4430
Business email Address: jbroc3@lsuhsc.edu

Initial Appointment at LSUHSC Date: January 2020
Current Academic Rank: Associate Professor
Date of Appointment to Current Rank: January 2020

Education:

Undergraduate:
Louisiana State University Medical Center New Orleans, Louisiana
Bachelor of Science of Medical Technology
August 1992

Graduate
Louisiana State University Baton Rouge, Louisiana
Doctor of Philosophy – College of Human Science and Education, Kinesiology
May 2008

Certification:
National Certification, Registry of Medical Technology of the American Society of Clinical Pathology (ASCP), 1992
Lean Six Sigma Black Belt Certification by the Council for Six Sigma Certification, 2018

Licensure:

State, license number, effective dates
Louisiana, Louisiana State Board of Medical Examiners, Clinical Laboratory Personnel, Generalist, #G00790, 1994 - Present

Academic, Professional, and Research Appointments:
1992-1993
Earl K. Long Medical Center, Clinical Chemistry/Special Chemistry, Medical Technologist

1993-2002
Pennington Biomedical Research Center, Clinical Research Laboratory, Research Associate/Manager of Personnel, Business, and Continuing Education

2002-2007
Louisiana State Police Crime Laboratory, Crime Lab Analyst 1/2/3, Forensic DNA

2007-2010
Louisiana State Police Crime Laboratory, DNA Supervisor

2010-2019
Louisiana State Police Crime Laboratory, DNA Manager – Forensic DNA Casework and Combined DNA Index System (CODIS) Units

2019-2020
Louisiana Office of Public Health Laboratory, Clinical Laboratory Assistant Director/Interim Newborn Screening Technical Supervisor

2020
AHEC, COVID-19 Emergency Operations Center Manager

2020-Present
Louisiana State University Health Sciences Center, Department of Medical Laboratory Science, Department Head, Associate Professor

Awards and Honors:

- Honorable mention, 11th Annual Graduate Research Day, LSUMC, New Orleans, LA, May 1996
- Honorable mention for Outstanding Achievement for Student Research Award at the AACC National Meeting, Chicago, IL, July 1996
- State of Louisiana, Department of Public Safety and Corrections, Office of State Police Unit Citation Award Meritorious Service Award for exemplary service of duty during Hurricanes Katrina and Rita, December 31, 2005
- United States Department of Justice, Office of Justice Programs, National Institute of Justice, Certificate of Appreciation for exceptional assistance in testing sexual assault kits and bringing long-awaited justice to victims of sexual assault, April 4, 2012
- State of Louisiana, Department of Public Safety and Corrections, Office of State Police Unit Citation Award for Louisiana State Police Crime Laboratory Backlog Reduction Initiative, November 18, 2011
- New Orleans Police Department Superintendent's Coin Service of Excellence Award, September 1, 2011, Superintendent Ronal W. Serpas
- New Orleans Police Department Superintendent's Coin Service of Excellence Award, November 9, 2011, Superintendent Ronal W. Serpas
- Crime Laboratory Backlog Reduction and Lean Six Sigma Project awarded as one of the ten semi-finalists for the 2011 IACP/Motorola Webber Seavey Away for Quality in Law Enforcement, July 2011
- Recipient of the 2015 Sexual Trauma Awareness and Response Excellence in Service Award

- State of Louisiana, Department of Public Safety and Corrections, Office of State Police Professional Excellence Award – Lean Six Sigma Project at Police Logistical Services, December 21, 2018
- 2023 Omicron Sigma Award - ASCLS President's Honor Roll for Outstanding Service

Teaching Awards:

- Awarded the 2022-2023 Outstanding Scholarship and Innovation Award for LSU Health New Orleans, School of Allied Health Professions, Faculty Assembly Annual Award (April 2023)

TEACHING EXPERIENCE AND RESPONSIBILITIES

Course/Clerkship/Residency or Fellowship/CME Directorships

- Louisiana State Police Crime Laboratory – 2007-2019
    - Developed and oversaw the modular, classroom setting student/trainee program for Forensic/CODIS DNA
    - Due to the federal regulations for Forensic DNA Testing Laboratories and the lack of forensic DNA training from university programs, an internal student training program was developed
    - Designed to educate up to 8 students/trainees through a 9-month program for 40 hours per week
    - Consisted of required literature readings, lectures, laboratory demonstrations, laboratory observations, independent laboratory exercises, examinations, and laboratory practicals
- Louisiana State University Health Sciences Center, Department of Medical Laboratory Science
    - Quality Management and Laboratory Math (MLS 3140; 2 credit), Jan 2020 – Jan 2024 – Joint Course Coordinator
    - Chemistry/Immunology Practicum (MLS 4130, 3 credit course), Jan 2020 – Present – Joint Course Coordinator
    - Statistics and Quality Assurance (MLS 3140, 2 credit course), Jan 2024 – present – Course Coordinator
    - Biochemistry (MLS 5109; 4 credit course), Jan 2020 – August 2024, Course Coordinator
    - Clinical Biochemistry Laboratory (MLS 4120; 2 credit course; 2 sections), Jan 2020 – August 2024, Course Coordinator
    - Laboratory Management (MLS 4118, 2 credit course), Jan 2024 – Present, Course Coordinator
    - Serve as clinical site liaison to Ochsner Lafayette General Medical Center, Our Lady of the Lake Regional Medical Center, and New Orleans Veterans Affairs Medical Center for the MLS students

Curriculum Development/Implementation

- Developed and implemented 5 Categorical Certificate Programs – Microbiology, Chemistry, Immunohematology, Hematology, Chematology, 2022
- Developed and implemented a MLT to MLS Bachelor of Science in Medical Laboratory Science program, 2023

- Developed and in the process of implementing a Master of Science in Medical Laboratory Science program (2024 – Present)

Creation of Enduring Teaching Materials

- Assisted in the development of electronic learning tool and simulator with large data sets for Clinical Chemistry in a routine clinical lab environment. Tool has been licensed for sale through a Cooperative Endeavor Agreement with the University of Minnesota (2021-2022)
- Assisted in the development of electronic learning tool and simulator for Quality Control Evaluation. Tool has been licensed for sale through a Cooperative Endeavor Agreement with the University of Minnesota for sale and distribution. (2023)
- Assisted in the development of electronic learning tool and simulator for Lab Math in the MLS Challenger. Tool has been licensed for sale through a Cooperative Endeavor Agreement with the University of Minnesota for sale and distribution. (2024)

Formal Course Responsibilities

- Louisiana State University, Introduction to Forensic DNA Typing, Biotechnology Education for Students and Teachers, Baton Rouge, LA (June 2003)
- Southern University Law Center, Crime Lab Analysis of DNA Evidence, Military Law Institute, Baton Rouge, LA (June 2003)
- Louisiana State University, DNA in the Forensic Laboratory, Biotechnology Summer Course, Baton Rouge, LA (December 2003)
- Our Lady of the Lake College, Forensic Science Survey Course (FOSC 100) – Forensic Serology and DNA: The Indispensable Forensic Science Tool, Baton Rouge, LA (Spring, 2004)
- Our Lady of the Lake Health Science Center, Serology and DNA, The Indispensable Forensic Tool, Forensic Science Survey (FOSC 100), Baton Rouge, LA (April 2006)
- Louisiana State University, Forensic Approach to DNA Analysis, Biotechnology Education for Student and Teachers Course, Baton Rouge, LA (June 2006)
- Louisiana State University, Forensic DNA, – Mentor Seminar Series, Baton Rouge, LA (July 7, 2010)
- Louisiana State University Health Sciences Center, Guest Lecturer – June 30, 2018 – July 1, 2019
    - Laboratory Management, MTEC 4118, Department of Clinical Laboratory Science, yearly 2 hour lecture on Lean Six Sigma
- Louisiana State University Health Sciences Center
    - Professional Skills in CLS (MLS 3112) – select labs, 2 hour lab, 2020 - Present
    - Laboratory Management (MLS 4118) - Lean Six Sigma and Interviewing & Standards and Performance Appraisal lectures, 2 hour lecture, 2020 – 2024
    - Molecular Diagnostics (MLS 5119) - Forensic DNA lecture, 2 hour lecture, 2020 – Present
    - Quality Management and Laboratory Math (MLS 3140; 2 credit), Jan 2020 – Jan 2024 – Joint Course Coordinator, taught half of course
    - Chemistry/Immunology Practicum (MLS 4130, 3 credit course), Jan 2020 – Present – Joint Course Coordinator

- Biochemistry (MLS 5109; 4 credit course), Jan 2020 – August 2024, Course Coordinator, taught all but two lectures
- Clinical Biochemistry Laboratory (MLS 4120; 2 credit course; 2 sections), Jan 2020 – August 2024, Course Coordinator, taught 50% of labs
- Statistics and Quality Assurance (MLS 3140, 2 credit course), Jan 2024 – present – Course Coordinator – teach whole course
- Laboratory Management (MLS 4118, 2 credit course), Jan 2024 – Present, Course Coordinator, teach all except 1 lecture
- Physician Assistant, Introduction to Medical Laboratory, August 2024 – Present, teach two hours yearly

Formal Mentoring and Advisor:
Department of Medical Laboratory Science, Class of 2025 Student Advisor

RESEARCH AND SCHOLARSHIP

Grants and Contracts:

Funded

- Participated in the oversight and use of 2005 – 2008 NIJ Backlog Reduction and Capacity Enhancement Grants, PI, co-PI, and consultant
- Oversight of the 2012-2018 National Institute of Justice DNA Capacity Enhancement and Backlog Reduction Grants for all Louisiana crime laboratories (over $7 million)
- Authored and Awarded a National Institute of Justice 2018 DNA Efficiency Improvement and Capacity Enhancement Program Grant ($721,888) to implement the use of Rapid DNA Technology in the arrestee booking station for the State of Louisiana – only state to receive Rapid DNA federal funding, PI
- Authored and awarded the 2019 Association of Public Health Newborn Screening Systems Quality Improvement Grant to improve efficiency of the State of Louisiana Newborn Screening Program that screens over 50,000 newborns for genetic, metabolic and congenital abnormalities ($142,975), PI
- Assisted the Louisiana Department of Health - Office of Public Health Laboratory and Emergency Operation Center (EOC) during COVID-19 pandemic in staffing the EOC response and grant application for the CARES Act Epidemiology and Laboratory Capacity (ELC) Enhanced Detection grant for $150 million for SARS-CoV-2 testing and emergency response
- Assisted in authoring and awarded East Baton Rouge Parish Sheriff's Office request to U.S. Representative Garret Graves to receive Byrne Jag/COPS Grant funds to pilot Rapid DNA implementation as an investigative tool (March 2021, $650,000)
- Authored and awarded the 2021 American Society for Clinical Pathology (ASCP) Medical Laboratory Science Program Director Educational Grant - Enhancement of Laboratory and Outreach Recruitment Capabilities to provide for program enrichment, advertising, and outreach effort to promote the profession to potential students ($10,000), PI
- Oversight and monitoring of MLS Professional Services contract for the Louisiana State Board of Medical Examiners Clinical Laboratory

Personnel Committee (CLPC) to provide Clinical Education Programs to all licensed laboratory personnel ($75,000 - 91628 annually) 2020-Present
- Oversight and monitoring of MLS Professional Services contract for the Louisiana State Board of Medical Examiners and to provide the Associate Director for Licensure for Clinical Laboratory Personnel at the LSBME ($39780 annually) 2020 - 2024
- Applied and awarded for the LCMC Healthcare Profession Pipeline RFP for the establishment of a partnership between LSUHSC Department of MLS and LCMC - Letter of Intent received for 18 $8000 student scholarships along with administrative and advertisement/recruiting funding. Total funding $174,000 (2023-2025)

Pending funding
- Applying for the Louisiana Department of Health Healthcare Employment Reinvestment Opportunity (HERO) Grant for the establishment of a partnership for the establishment of a Medical Laboratory Science Off-Campus Instructional Site and Student Scholarships and Stipends, Total funding $1,628,521 (2025-2027)

Major Area of Research Interest:
- Lean Six Sigma and Efficient Work Processes
    - Laboratories/Law Enforcement/Government Officials from around the world visited LSPCL for demonstrations on how to apply Lean Six Sigma management practices to a forensic laboratory setting:
        - Department of Justice International Criminal Investigative Training Assistance Program (ICITAP), Costa Rica Forensic Scientists, Governor of Coahuila Mexico, Texas Department of Public Safety, Illinois State Police, Arkansas State Police, New York City Office of Chief Medical Examiners, Houston Police Department, Arizona Department of Public Safety, Nashville Police Department, and Phoenix Police Department
    - Performed a Lean Six Sigma Project in the Department of Public Safety Fleet Unit to increase the efficiency and quality in law enforcement vehicle manufacturing – resulted in a 100% increase in capacity (August – November 2018)
- Forensic DNA – Rapid DNA in the Booking Station
- "Brachial Artery Flow-Mediated Vasodilation: Effect of Chemical Analytes, Diet, Exercise, and Genetic Markers" Coursework emphasis in Pathology, Molecular Biology, and Clinical Chemistry

Journal Publications:

Refereed Published:
- Truett GE, Walker JA, **Wilson JB**, Redmann Jr SM, Tulley RT, Eckardt GR, Plastow G, and Lefevre M. ELISA detection of restriction site polymorphisms in the pig ryanodine receptor locus. Mamm Genom 9: 629-32, 1998.
- **Wilson J**, Tulley RT. The role of homocysteine in vascular disease. Advance for Administrators of the Laboratory 8:14-15, 1999.

- Allen JD, Wilson JB, Tulley RT, Lefevre M, Welsch MA. Influence of age and normal plasma fibrinogen levels on flow-mediated dilation in healthy adults. Am J Cardiol. 2000 Sep 15;86(6):703-5, A9.
- Parish TR, Allen JD, Tulley R, **Wilson JB**, Smith S, Lefevre M, Welsch MA. Association of brachial artery size with cardiovascular risk factors. Med. Sci. Sports Exerc, May; 35 (5) Supplement: S41, 2003.
- Tulley RT, Vaidyanathan J, **Wilson JB**, Rood JC, Lovejoy JC, Most MM, Volaufova J, Peters JC, Bray GA. Daily Intake of Multivitamins During Long-Term Intake of Olestra in Men Prevents Declines in Vitamins A and E but Not Carotenoids, Journal of Nutrition, June 2005 Volume 135 Number 6.
- **Wilson JB**, Welsch M, Allen J, Thomson J, Tulley R, Lefevre M. The association of homocysteine and related factors to brachial artery diameter and flow-mediated dilation. Metabolism. 2007 May;56(5):641-8.
- Romsos EL, French JL, Smith M, Figarelli V, Harran F, Vandegrift G, Moreno LI, Callaghan TF, **Brocato J**, Vaidyanathan J, Pedroso JC, Amy A, Stoiloff S, Morillo VH, Czetyrko K, Johnson ED, de Tagyos J, Murray A, Vallone PM. Results of the 2018 Rapid DNA Maturity Assessment. J Forensic Sci. 2020;65(3):953-959. doi:10.1111/1556-4029.14267.

Books:

- Jarreau P, Bakeer M, **Brocato J**, Broussard L, Foley A, Haun D, Held D, Lawrence L, Williams E, Zitzmann. Clinical Laboratory Science Review – A Bottom Line Approach, 6th Edition, Louisiana State University Health Sciences Center Foundation, 2021, 2023 reprint.

Scientific Presentations/Published Abstracts/Oral Sessions and Posters:

Published Abstracts/Proceedings
Scientific Presentations
Oral Sessions
International Workshops

- Introduction to Lean Fundamentals and Six Sigma Operational Improvement Workshop, American Academy of Forensic Sciences, Seattle, Washington – 1 Day Workshop (February 20, 2018)
- Presented Rapid DNA to the TF Senior Global Market Managers for Advanced Cell Models – Human Identity Testing Scientific Group (March 10, 2021)
- Present Rapid DNA Integration at the Booking Station to ThermoFisher North America Marketing Team (March 26, 2021)

International Conference/Webinar Oral Presentations

- Relationship of Homocysteine and B Vitamins to Vascular Disease (Roundtable), American Association for Clinical Chemistry (AACC) National Meeting, Chicago, IL (July, 2001)
- Relationship of Homocysteine and B Vitamins to Vascular Disease (Roundtable), American Association for Clinical Chemistry (AACC) National Meeting, Orlando, FL (July, 2002)
- Comparison of Buccal Cell Collection Methods, American Academy of Forensic Sciences, 57th Annual Meeting, New Orleans, LA (February, 2005)
- Increasing Efficiency in a DNA Unit using Lean Six Sigma, 22nd International Symposium on Human Identification, National Harbor, Maryland (October 4, 2011)

- Increasing Efficiency in a DNA Unit using Lean Six Sigma, 23rd International Symposium on Human Identification, Nashville, Tennessee (October, 2012)
- Preparing for a Successful Booking Station Implementation of the NDIS-approved ANDE Rapid DNA Identification System, 29th International Symposium on Human Identification, Phoenix, Arizona (September 26, 2018)
- Rapid DNA Booking Station – Implementation Considerations and Best Practices, Forensic Magazine (April 1, 2021)
- Every Minute Counts When it comes to Apprehending and Eliminating Suspects, Training Webinar, FBI National Academy (November 30, 2021)
- Identifying and Excluding Suspects Faster – The Louisiana State Police and East Baton Rouge Parish Sheriff's Office Rapid DNA Booking Program, Human Identification Solutions Virtual International Conference May 12, 2022
- Webinar: Rapid DNA Arrestee Booking – Identify and exclude Suspects for Unsolved Cases; FBI National Academy (November 15, 2022)

National Conference Oral Presentations

- Real Time Laboratory Support of Violent Crimes, Bode West, San Diego, California (April 11, 2012), Orlando, Florida (May 23, 2012), Charlottesville, Virginia (September 20, 2012)
- Lean Six Sigma – Crime Laboratory Efficiency Four Years Later, Promega Technology Tour Seminar, Bode East, Orlando, Florida (May, 2014)
- Lean Six Sigma – Crime Laboratory Efficiency Four Years Later, Promega Technology Tour, Los Angeles, California (August 12, 2014)
- Lean Six Sigma – Crime Laboratory Efficiency Five Years Later, Promega Technology Tour, Walnut Creek, California (March 24, 2015)
- Changes in Louisiana Law Results in Need for Increased Sexual Assault Testing Capacity, Promega Technology Tour, New York, New York (June, 2015)
- Better Faster Stronger – Strengthening Communications between Labs and Law Enforcement, Bode Mid-Atlantic, Philadelphia, Pennsylvania (November, 2016)
- 90 minutes Can Change Everything – It's time to expedite crime-solving with rapid DNA, National Criminal Justice Association webinar (June 29, 2021)
- Workshop – Advancing DNA Forensics for Investigative leads: 90 Minutes Can Change Everything, 20th Annual Forensic DNA Conference, Bode 2021, Denver, Colorado (October 22, 2021)
- Rapid DNA Booking Station Implementation Best Practices, 20th Annual Forensic DNA Conference, Bode 2021, Denver, Colorado (October 19, 2021)
- Rapid DNA in the Booking Station, Sexual Assault Victim's Summit, National Forensic Science Technology Center at Florida International University, Clearwater, Florida (December 6, 2021)
- Rapid DNA: Progress, Programs and Partnerships, 21st Annual Forensic DNA Conference, Bode 2022, Tampa Bay, Florida (April 5, 2022)
- Clinical Chemistry Simulator - Early Experience, Clinical Laboratory Educators Conference, March 2023
- The Journey to Implementing the First Arrestee Booking Station with Rapid DNA, 2023 American Society for Crime Laboratory Directors (ASCLD) Symposium Plenary Session Speaker (May 2023)

State/Local Conference Presentations

- DNA: The Crime Solving Tool of Forensic Scientists, Baton Rouge Medical Technology Society, Baton Rouge, LA (August, 2003)

- DNA in the Forensic Laboratory, Louisiana and Mississippi Societies for Clinical Laboratory Scientists, 2005 Annual Meeting, New Orleans, LA (April, 2005)
- DNA in the Forensic Laboratory, Clinical Laboratory Personnel Committee (CLPC), Louisiana State Board of Medical Examiners, Lafayette, LA (April, 2005), Baton Rouge, LA (September, 2005), New Orleans, LA (August, 2005)
- DNA in the Forensic Laboratory, Our Lady of the Lake Health Science Center, Clinical Laboratory Science, Baton Rouge, LA (February, 2006)
- UnEZ, Louisiana Association of Forensic Scientists Spring Meeting, Baton Rouge, LA (April 13, 2010)
- DNA Evidence and Best Practices for Specimen Collection, 2011 Louisiana Statewide SANE Conference – Interim LSU Public Hospital, New Orleans, LA (July 15, 2011)
- Cold Case Training, Joint Emergency Services Training Center – Louisiana State Police, Baton Rouge, LA (June 13-14, 2011)
- Baton Rouge Serial Home Invasions, Louisiana Association of Forensic Scientists Spring Meeting, Baton Rouge, Louisiana (April, 2014)
- Real Time Forensic DNA Analysis Aids Investigations – How Did We Get There?, Clinical Laboratory Personnel Committee of the Louisiana State Board of Medical Examiners, New Orleans, Jennings, and Baton Rouge, Louisiana (March, May and June, 2014)
- Familial Searching – The Investigative Tool, American Society for Clinical Laboratory Science of Mississippi and Louisiana, 2017 Bi-State Annual Meeting, Baton Rouge, Louisiana (April 7, 2017)
- DNA Crime Lab Analysis, Major County Prosecutors' Council, Baton Rouge, Louisiana (January 18, 2018)
- Louisiana DNA Database – Arrestee DNA Collection for CODIS at the Booking Station, Louisiana Sheriffs' and Wardens' Conference, Destin, Florida (February 20, 2018)
- Using DNA Databases to Identify Potential Relatives – Familial Searching – An Investigative Tool, Clinical Laboratory Personnel Committee of the Louisiana State Board of Medical Examiners, November, 2020
- Body in the Barrel and Use of Forensic DNA, Clinical Laboratory Personnel Committee of the Louisiana State Board of Medical Examiners, April, 2021
- 90 Minutes Could Change Everything – Expediting Crime Solving with Rapid DNA, Mississippi – Louisiana Bistate Meeting, New Orleans, Louisiana (April 21, 2022)

<u>Poster</u>

- Tulley, R., J. Wilson and K. Kleinpeter. Erythrocyte enzyme assays as markers of nutritional status on the Beckman CX5. Clin Chem 42: S304, 1996 (Abs).
- Keenan M.J., M. Hegsted, K.L. Jones, R.T. Tulley, J.B. Wilson, G.S. Morris, N.D. Vaziri and D. Pandian. Effects of ovariaectomy, vitamin D, and boron on low vitamin D colony, retired female breeder rats. Exp Biol, 1996 (Abs.)
- Wilson J., R. Tulley, and M. Lefevre. An ELISA based assay for genotyping restriction polymorphisms applied to fatty acid binding protein 2 (FABP2). Clin Chem 42: S203, 1996 (Abs.)
- Walker, J.A., J.B. Wilson, M. Lefevre, R. Tulley, S. Redmann, D.B. West, and G.E. Truett. ELISA assays for murine obesity mutations. FASEB J 11: A593, 1997 (Abs).

- Wilson, J.B., J.A. Walker, M. Lefevre, S. Redmann, G.E. Truett and R. Tulley. Detecting known mutations with ELISA methods. Gene Mutational Analysis: Detection Methods & Clinical Applications. IBC Conference, 1997 (Abs).
- Truett, G.E., J.A. Walker, J.B. Wilson, S. Redmann, M. Lefevre and R. Tulley. An ELISA assay for high-throughput detection of tub genotype. NAASO/NIH Sponsored Workshop "Advancing the Genetics of Obesity: Strategies and Methods," 1997 (Abs).
- Allen JD, Wilson J, Tulley RT, Lefevre M, Welsch M. Influence of age and normal plasma fibrinogen levels on flow mediated dilation in healthy adults. Am Coll Sports Med, 1999 (Abs).
- Wilson, JB, Tulley RT. Adaptation of a method for the analysis of serum and erythrocyte glutathione peroxidase on the Beckman CX5. Clin Chem, 2000; 46(S6):A147 (Abs).
- Allen J, Lefevre M, Smith S, Tulley RT, Welsch M, Wilson J, Methylenetetrahydrofolate reductase genotype expression and brachial artery flow mediated dilation, Med Sci Sports Exercise, 35:5:S42, 2003.
- Kleist AM, Northrup TP, Oubre Jr. DJ, Poe NH, Saadi A, Sozer AC, Tourre M, Vaidyanathan J, Wilson JB, and Wojtkiewicz P, Comparison of Buccal Cell Collection Methods, Promega 15th International Symposium on Human Identification, October, 2004 (Poster Presentation).
- Kupferschmid, TD., Hooiman, D, Barnum, L., Richard, M., Becnel, A., Saadi, A., Dubois, J., Sparacino, E., Wilson, JB. 100% Increase in Laboratory Productivity Due to the Implementation of Laboratory Lean Six Sigma, Promega 21st International Symposium on Human Identification, October, 2010 (Poster Presentation).
- Barnum L., Becnel A., Dubois J., Fahrig G., Hooiman D., Kupferschmid T., Naragoni S., Richard M., Robichaux M., Saadi A., Sparacino E., Wilson J., Increasing Efficiency in a DNA Unit using Lean Six Sigma, American Academy of Forensic Science, February, 2012 (Poster Presentation).

Videos, Electronic Media, and Multimedia:

- Wilson JB, Tulley RT. The role of homocysteine and B vitamins in cardiovascular disease, internet computer continuing education program, American Society of Clinical Laboratory Scientists, http://www.virtualfactory.com/PVOL/presintro.htn, 1999.
- Kupferschmid, TD, et al. Shovel Away Your DNA Backlog with Lean Six Sigma Tools. [Internet] 2011. [cited: year, month, date]. Available from: http://www.promega.com/resources/articles/profiles-in-dna/2011/shovel-away-your-dna-backlog-with-lean-six-sigma-tools/
- Appeared in crime series broadcasts in Killing Fields (Discovery Channel) and Cold Case Justice (TNT)
- Assisted ThermoFisher in the development of Rapid DNA training guides for law enforcement agencies (February 2021)
- Interviewed by ThermoFisher Scientific – FBI Approves ThermoFisher Scientific's Rapid DNA Solution for use in Law Enforcement Booking Stations (July 8, 2021)
- Interviewed by Fox Business - FBI approves new DNA Database System to speed up Investigations (July 12, 2021) Fox News 8 interview "New Orleans approved for rapid DNA testing at the Orleans Justice Center" (February 27, 2023)

- Fox News 8 interview "Battling for New Orleans: How rapid DNA testing could prevent future crimes" (February 15, 2023)
- PBS Newshour Interview "How Louisiana police are using a DNA 'lab in a box' to solve crime" (May 8, 2023)
- Louisiana Unfiltered Podcast, "Still Unsolved – The murders of 10 Baton Rouge Women from 1996 to 2002 – interviewed (May 23, 2024)

Editorial Posts and Activities:

Journal Editor or Associate Editor:

- Editor of Jarreau P, Bakeer M, **Brocato J**, Broussard L, Foley A, Haun D, Held D, Lawrence L, Williams E, Zitzmann. Clinical Laboratory Science Review – A Bottom Line Approach, 6th Edition, Louisiana State University Health Sciences Center Foundation, (2024 - Present

SERVICE AND ADMINISTRATION

University/Institutional Service:

LSUHSC (campus) committees

School committees

- Served on Dr. Rachel Chappell Review for Promotion Committee, Fall 2021
- Chair of Search Committee for SAHP Counseling Department Head, August – December 2023
- Served on search committee for SAHP Occupation Therapy Department Head, 2023 – 2024
- Served on search committee for SAHP Counseling Department Head, 2022
- SAHP Curriculum Committee / Academic Affairs Committee, 2020 – Present
- SAHP Administrative Council, 2020 – Present

Departmental committees

- MLS Admissions Committee, 2020 – Present
- MLS Advisory Committee, Chair, 2022 – Present
- MLS Clinical Affiliate & Advisory Committee Meeting, Co-chair, 2020 – Present
- MLS Curriculum Committee, Co-chair, 2020 - Present

Special assignments

- Served on promotion review for the University of Maryland School of Medicine for Ivana Vucenik, Ph.D. – Professor (non-tenure), June 2022
- SAHP Ad Hoc Faculty Handbook Committee, 2023 – 2024
- SAHP Ad Hoc Promotion and Remediation Committee, 2024 – Present

State/Regional Service:

Professional society committees

- According to the Executive Order BJ 2014-17 issued in December 2014 by Governor Jindal, served as the Department of Public Safety representative to work with the Department of Health and Hospitals to convene stakeholders to evaluate and revise policy and procedures for sexual assault victims, 2014
- Pursuant to the direction of the 2017 Regular Session of the Louisiana Legislature according to House Concurrent Resolution No. 26 conducted, with the Louisiana's Attorney General's Office, a study to assess the feasibility of a Sexual Assault Forensic Examination Tracking System, 2017 - 2019

    - Collaborated with the Louisiana Commission on Law Enforcement, Louisiana Department of Hospitals, Governor's Office of Women's Policy, Louisiana Foundation Against Sexual Assault, and the Sexual Trauma Awareness and Response
- Served on the Louisiana State Board of Medical Examiners Molecular Diagnostic Committee, Fall 2021
- Newborn Advisory Council to evaluate the addition of testing of heritable disorders in newborns and children from the Recommended Uniform Screening Panel, 2019
- Baton Rouge and New Orleans Sexual Assault Response Teams, 2010 – 2019
- Louisiana Sexual Assault Oversight Commission, 2010 - 2019
  Leadership role
- Region VII ASCLS Government Affairs Committee (GAC) Liaison, August 2022 – June 2025

National Service:

Professional society committees

- FBI Rapid DNA Booking Station – Rapid DNA Pilot and Implementation Committee, 2018 – 2019
- NIJ and SWGDAM Efficiency Improvement Working Group to develop "Best Practices for DNA Laboratory Efficiency Improvements," 2018 – 2019
- AMLEP Medical Laboratory Task Force, Nov 2024 - Present
- Member on the Government Affairs Committee (GAC) for American Society for Clinical Laboratory Science (ASCLS), May 2022 – June 2025
- Serve on the Clinical Laboratory Educators Conference Poster Review Committee, 2021 – 2024
- Serve on the Clinical Laboratory Educators Conference Steering Committee, 2021 - 2024
  Leadership role
- Co-chair of the National Technology Validation and Implementation Collaborative (NTVIC) Technical Validation Working Group – Rapid DNA, August 2023 – Present

Membership in Professional Organizations:

2019-Present	American Society of Clinical Laboratory Science
2019-2020	Association of Public Health Laboratories
2010-2019	American Society of Crime Laboratory Directors
2002-2019	American Academy of Forensic Science (#118634)
2002-2019	Louisiana Association of Forensic Scientists

Regulatory Agency/Accrediting Body Service:

- Scientific Working Group on DNA Analysis Methods (SWGDAM) – Rapid DNA Subcommittee, 2018 – 2019

Other Professional Service:

Court Qualified Expert Witness

- Provided expert DNA testimony – Qualified as an expert witness in DNA in East Baton Rouge, Lafourche, St. Tammany, Pointe Coupee, Natchitoches, Ascension, East Feliciana, Tangipahoa, East Carroll, Assumption and West Baton Rouge parishes in Louisiana

- Qualified as expert in Forensic DNA – East Baton Rouge Parish, May 2021
- Provided testimony in Daubert Hearings validating the use of new DNA technologies in criminal cases
- Serve as a subject matter expert for Louisiana State Police and the Louisiana Legislature regarding sexual assault and DNA legislation

Administrative Responsibilities:
LSUHSC
Department Head and Associate Clinical Professor
Medical Laboratory Science Department, LSU Health Sciences Center – New Orleans
January 2020 – Present

- Provide comprehensive oversight of administrative, budgetary, grants, and educational functions of the department
- Manage all department contracts and the successful sale of *Clinical Laboratory Science Review - A Bottomline Approach*, generating over $200,000 in annual revenue
- Established and manage an Amazon Business account for the sale of the 6th Edition of *Clinical Laboratory Science Review - A Bottomline Approach* since November 2020, enhancing global accessibility and sales efficiency.
- Spearheaded the organization, development, and implementation of an MLT to MLS program to enhance career progression opportunities for laboratory professionals
- Designed and launched five categorical certificate programs to address specialized workforce needs in the field of medical laboratory science

Continuing Education Courses Attended:
2023

- *The Funnel and the Bucket: Challenging Paradigms and Heuristics to Actually Fix a Laboratory Workforce Shortage* (GEN 1) – 3/2/2023 (015-504-23)
- *Avoiding Distractions: Techniques for a Deep and Effective Learning Process in the Online Classroom* (EDU, GEN 1) – 3/2/2023 (015-508-23)
- *Why and How You Should Create Accessible Content for Your Courses* (EDU, GEN 1) – 3/2/2023 (015-512-23)
- *Supporting Non-Traditional Students in Our Online Programs* (EDU, GEN 1) – 3/2/2023 (015-518-23)
- *The Jerks and Joys of Worklife: Managing Workplace Incivility* (GEN 1) – 3/3/2023 (015-520-23)
- *Teaching Students Who Haven't Learned How to Learn: A Modern Day Approach to Teaching* (EDU, GEN 1) – 3/3/2023 (015-525-23)
- *Infusing Medical Ethics into the Curriculum* (ETH 1) – 3/3/2023 (015-527-23)
- *Elevate and Enrich: A Model for Providing Categorical Certification* (EDU, GEN 1) – 3/3/2023 (015-526-23)
- *Clinical Chemistry Simulator, Early Experience* (EDU, GEN 1) – 3/4/2023 (015-535-23)
- *Strategies for Increasing Your Program's Enrollment* (EDU, GEN 1) – 3/4/2023 (015-542-23)
- *Imagine the Opportunity in Conflict* (EDU, GEN 1) – 3/4/2023 (015-543-23)
- *Increase Enrollment through Undergraduate Research: If You Build It, They Will Come* – 3/3/2023 (015-526-23)

- *LSU Refresh: New Energy for Teaching* – 2023

2024

- *Charting the Course: Navigating the NAACLS 2012 and 2024 Standards for Success* – Renaissance Chicago O'Hare Suites Hotel, 11/7/2024
- *CSF Assays for Alzheimer's Disease: Supporting the Path to an Earlier Diagnosis* (Chemistry 1) – 3/26/2024 (167-005-24)
- *Detecting Mild Traumatic Brain Injury* (General 1) – 3/26/2024 (167-008-24)
- *Natriuretic Peptides: Scientific Evidence Supporting Analytical and Clinical Application* (Chemistry 1) – 3/27/2024 (167-011-24)
- *The Mindful MLS* (General 1) – 3/27/2024 (167-015-24)
- *We're Still Standing: (Re)Building Community in Today's World* (GEN 1) – 2/22/2024 (015-501-24)
- *Adapting to Current Student Recruitment Trends* (GEN 1) – 2/22/2024 (015-502-24)
- *Building a Long-Term Pipeline of Medical Laboratory Talent* (GEN 1) – 2/22/2024 (015-507-24)
- *Integrating Generative Artificial Intelligence into the Classroom* (GEN 1) – 2/22/2024 (015-508-24)
- *Implementing Reasonable Accommodations in an MLS Program* (ETH 1) – 2/22/2024 (015-510-24)
- *The Student Toolbox: Classroom Strategies to Enhance Students' Study Skills, Exam Preparation, and Self-Reflection* (GEN 1) – 2/22/2024 (015-511-24)
- *Time for a Tune-Up?* (GEN 1) – 2/23/2024 (015-513-24)
- *Focus on AI* (GEN 1) – 2/23/2024 (015-514-24)
- *Teaching Strategies and Methods of Delivery for CLS Courses Across All Academic Levels* (GEN 1) – 2/23/2024 (015-518-24)
- *This Was My Favorite Lab: Quality Assurance* (GEN 1) – 2/23/2024 (015-520-24)
- *Dynamic Lecturing: Strategies to Enhance Your Lecture Effectiveness* (GEN 1) – 2/24/2024 (015-535-24)
- *STEM Matters, Because YOU Matter: The Rallying Cry for Today's Educator* (GEN 1) – 2/24/2024 (015-538-24)

2025

- *LSU Faculty Colloquium* – Dr. Bonni Stachowiak: *Go Somewhere – Reimagining Technology in Education for a Better Tomorrow* – 1/10/2025