

## THOMAS S. PITTMAN, Ph.D

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The University of Southern Mississippi  
College of Science and Technology  
Department of Administration of Justice  
Forensic Science Program  
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### EDUCATION

- 2008 University of Southern Mississippi  
Hattiesburg, MS  
Major: Biology  
Degree: Ph.D.  
Dissertation Topic: Use of  $\Delta$ -9-Tetrahydrocannabinol Monoclonal Antibodies Chemically Bound to Polystyrene Using Glutaraldehyde for the Purpose of Extracting  $\Delta$ -9-Tetrahydrocannabinol and  $\Delta$ -9-Tetrahydrocannabinol Carboxylic Acid from Postmortem Whole Blood Samples
- 1989 University of Southern Mississippi  
Hattiesburg, MS  
Major: Biology  
Degree: M.S.
- 1978 University of Southern Mississippi  
Hattiesburg, MS  
Degree: B.S.  
Major: Biology  
Minor: Chemistry
- 1976 Jones County Junior College  
Ellisville, MS  
Degree: A.A.  
Major: Chemistry

## **CERTIFICATIONS**

Diplomat Forensic Toxicology Certification Board –Forensic Alcohol  
Mississippi Crime Laboratory – Forensic Toxicology  
Mississippi Crime Laboratory – Intoxilyzer 8000

## **ACCEPTED as EXPERT in TOXICOLOGY in the FOLLOWING STATES**

Mississippi  
Alabama  
Missouri

## **EMPLOYMENT**

**August 2008**

**University of Southern Mississippi – Assistant Professor**

**August 2005 to 2008**

**University of Southern Mississippi - Instructor**

Department of Administration of Justice Forensic Science Division Responsibilities includes class lectures and laboratory instruction to undergraduate students seeking degrees in Administration of Justice or Forensic Science. Establish class curriculum criteria, graduation criteria and advise students pursuing a Forensic Science degree. Pursuit of research in the field of Forensic Science especially relating to the specialty of Forensic Toxicology.

**August 2000 - present**

**Self- Employed Consultant: ToxConsulting, LLC**

Consultant for law firms dealing with interpretation of drug and alcohol impairment as they relate to probable cause of accidents and/or injury(s).

Serve as consultant for major instrumentation manufacturer specifically dealing with operation and maintenance of gas chromatographic and mass spectroscopy instrumentation and Beta site tester of new products and software.

**August 2000 - August 2005**

**Mississippi Crime Laboratory Section Chief-Toxicology** Responsibilities include supervision and training of forensic scientists as well as day-to-day operations of the Toxicology Section. Method development, verification and equipment purchases and performance of analytical testing are part of my duties.

**August 1998 -2000**

**Self-employed Consultant and President of Diversified**

**Laboratory Services, LLC.** Responsibilities included set up of all aspects of a Toxicology screening laboratory. Establish and validate esoteric testing methods and training of employees in client laboratories.

**April 1984 – July 1998**

**Puckett Laboratory Assistant Laboratory Manager**

Duties included oversight of the day-to-day operations of the main clinical laboratory and three regional laboratories. Method development, procedure manuals, supervision of employees, accreditation and budgeting comprised the specific responsibilities.

**Puckett Laboratory Director of Clinical Toxicology** Responsible for supervision and training of toxicology employees, method development, CAP-FUDT accreditation and client resource for issues dealing with all aspects of drug and alcohol testing in the workplace.

**Puckett Laboratory Positive Certifying Scientist**

Duties included training of employees in NIDA laboratory and review of analytical data plus chain-of-custody for drug and alcohol results.

**Puckett Laboratory Supervisor of Special Chemistry** Duties included direct supervision of employees; maintain accreditation, procedure manuals and equipment maintenance.

**Puckett Laboratory Research and Development Assistant Responsible** for updating drug testing procedures and equipment to secure accreditation from CAP-FUDT and NIDA.

**MEMBERSHIPS in SCIENTIFIC ASSOCIATIONS**

Mississippi Academy of Science  
International Association of Identification

**TEACHING EXPERIENCE**

William Carey College

Pharmacology for Nurses  
Chromatography  
Medical Genetics  
Comparative Anatomy  
Clinical Chemistry

University of Southern Mississippi

Physical Science  
Biological Sciences  
Medical Genetics  
Cellular Physiology  
Forensic Toxicology  
Arson and Explosives

Drug Identification  
Introduction to Forensic Science  
Forensic Analysis  
Forensic Seminar  
Field Study  
Internships

## **GRANTS**

Concept Proposal Submitted to National Institute of Justice, November, 2005 accepted February, 2006; Full Proposal submitted March, 2006. Not funded.

Forensic Science Initiative Department of Justice, September 2006. \$2 M fully funded.

Forensic Science Initiative Department of Justice, November 2009. \$1 M fully funded.

NIJ Proposal for Validation Headspace GC/FID and GC/MS Methods for Inhalants in Conjunction with the Mississippi Crime Laboratory. Submitted April 14, 2010, rejected

## **PARTICIPANT in PRESENTATIONS**

July 2010 – International Association for Identification, Spokane, WA  
Topic: *Comparison Extraction Techniques for  $\Delta$ -9-Tetrahydrocannabinol from Urine*

July 2010 - International Association for Identification, Spokane, WA  
Topic: *A Statistical Comparison of Four Chemical Processes used to Oxidize Pre-Fired Brass Cartridge Casings for Finger Prints*

July 2010 - International Association for Identification, Spokane, WA  
Topic: *Identification and Uses of SNPSTRS for Forensic DNA Analysis*

July 2010 - International Association for Identification, Spokane, WA  
Topic: *Comparison of the Amplification Efficiencies of Different Taq DNA Polymerases*

August 2009 – International Association for Identification, Tampa, FL  
Topic: *Multiple Different DNA Extractions from Simulated Sexual Assault Kit Samples for Enhanced DNA Recovery.*

Topic: *Whole Genome Amplification and its uses in Forensic Human Identification.*

Topic: *A Processing Technique using Muriatic Acid and 1-2-Indanedione to Develop Latent Prints on Thermal Paper.*

March 2009 – Pittsburg Conference, Chicago, IL.

Topic: *Hydrogen as carrier gas for improved runs times for blood alcohol and other volatile substances.*

August 2008 - Louisiana Association of Forensic Scientist Meeting

Topic: *“Forensic Toxicology, A Test of Your Resolve.”*

April 2006 - ASCLS-MS/LSCLS Annual Meeting

Topic: *Forensic Toxicology: “What It Is and What It Is Not.”*

July 2005 - Perkin Elmer International Sales Meeting

Topic: *Use of GC/MS SIFI Mode in Forensic Toxicology*

October 2004 - Prosecutor's Fall Meeting

Topic: *Forensic Toxicology “What It Is and What It Is Not.”*

October 2004 - Grand Rounds UMC Pathology Department

Topic: *Postmortem Drug Testing*

2004 - Prosecutor's Spring Meeting

Topic: *An Overview of Forensic Toxicology*

June 2004 - Municipal Prosecutors Conference

Topic: *Basic Toxicology for Prosecutors*

September 2003 - Grand Rounds UMC Pathology Department

Topic: *Forensic Toxicology*

2003 - Coroner's Spring Meeting

Topic: *How the MCL Toxicology Section helps you.*

2002 - Coroner's Fall Meeting

Topic: *Instrumental Analyses of Drugs in Postmortem Samples*

2001 – Coroner’s Fall Meeting

Topic: *Proper Collection and Storage of Postmortem Samples*

## **COURT/EXPERT WITNESS EXPERIENCE**

Deposed as expert toxicologist in the BAC level and ethanol effects on motor vehicle driver and probable BAC of deceased passenger.

September 2, 2010. Gartman, et. al v Ford Motor Co., Inc., et.al; Case # CIV 07-24-1, Circuit Court Hot Springs County, Arkansas.

Testified as an expert witness in method validation of headspace gas chromatography of abused inhalants, especially difluoroethane, in the civil suit of S. Kisling v. Chelsie Huffman, Heather Huffman and Thomas Larry Michael Stark. (Case No. 0931-CV13475, Greene County Circuit Court, Springfield, MO, May 5, 2010.)

Testified as expert witness in motion to exclude urine drug test results in civil suit. Case was Kim Dodson vs. Bunge North American, Inc., Contractor Services & Fabrication, Inc., Hubbard and Drake, Inc. (Circuit Court of Morgan County, AL, Civil Action No. CV 07-9000207, January 21, 2010)

Testified as expert witness on headspace gas chromatography and results generated in the case State of Mississippi vs. Deric Bailey in Circuit Court of Hinds County, Jackson, MS. (Cause Number 02-0-717; December 8, 2009).

Testified as an expert witness on the analysis of a controlled substance in the Municipal Court of the City of Gulfport, MS. (City of Gulfport vs Jennifer Beard, Docket # 200900046, July 24, 2009).

Testified as an expert witness on the analysis of Marijuana plant material in the Municipal Court of the City of Gulfport, MS. (City of Gulfport vs Marcus Maurice Roberts, Docket # 200908066, July 24, 2009).

Testified as expert by deposition on effects on an individual's ability to safely operate a motor vehicle with a BAC of 0.196 g/dL. (Patrick vs Ford Motor Co). Trial pending in Tuscaloosa, AL.

Testified by deposition on the maximum BAC level an individual would obtain following drinking of one 24 ounce beer. (Buckley et al. vs David Ducksworth and Smith Brothers, Inc., First Judicial District, Jasper County, Mississippi).

Testified as expert witness on back extrapolation of blood alcohol and interpretation of the effects on an individual's ability to operate a motor vehicle. (Lowndes County Circuit Court, February 28, 2008, S. Coleman vs. Ford Motor Co.)

Testified as expert witness on cocaine metabolite result in vitreous fluid by Immunoassay. Testimony given via video tape at offices of Baker Donelson in Jackson, MS August 7, 2007. (Wanda Collins vs. Ford Motor Co.)

Testified as expert witness by deposition concerning blood testing for Cannabinoids by immunoassay. Jerry Cooper Payne, Administrator vs. Stephen R. Thomas, Does 1-10 and Doe 11. March 15, 2007. (Case pending Panola County Circuit Court).

Testified as expert witness concerning a person's ability to drive a motor vehicle with a blood alcohol concentration of 0.22% and the approximate number of drinks required to obtain said blood alcohol concentration. (Adams County Circuit Court, February, 2007, Yancey vs. Ford Motor Co.)

Testified as expert witness on interpretation of ethyl alcohol in combination with SOMA in motion to suppress drug evidence. (Circuit Court, Pearl River County, State of MS vs. D. Bordelon, March, 2006)

Testified as expert witness on amphetamine drug toxicology. (Circuit Court, Warren County: State of MS vs. R. Vaughn, December, 2005)

Testified as expert witness on the effects of ethyl alcohol on a person's ability to operate a motor vehicle. (Circuit Court, Harrison County, January, 2005)

Testified as expert witness in deposition concerning blood/serum alcohol assay using a VITROS 950 dry slide instrument. (November, 2004 - Deposition taken at Baker Donelson, Jackson, MS - Case of Sandra Coleman vs. Ford Motor Co., et. al. # 2002-0209-CV-1).

Testified as expert witness on effects of cocaine on victim in homicide case. Circuit Court, George County, December, 2004)

Testified as expert witness on negative alcohol and drug test results of homicide victim. (Circuit Court, October, 2003)

Testified as expert witness on Etomidate and Laudanosine. (Circuit Court, Forrest County, State of MS vs. Stephanie Stevens, September, 2003)

Testified as expert witness on urine marihuana confirmation. (Justice Court, June 2003)

Testified as expert witness on urine marihuana confirmation. (Justice Court, May, 2003)

Testified as expert witness on methods for analysis of "crack" cocaine. (Municipal Court, May 1996)

Testified as expert witness in arbitration case concerning methods used in screening and confirmation of marihuana in urine. (May, 1992)

Testified as expert witness on the validity of methods used for analysis of blood alcohol. (Circuit Court, January 1992)

Testified as expert witness in case concerning passive inhalation of "crack" cocaine as well as methods used for the detection of cocaine and cocaine metabolites in urine. (Federal Court, April 1991)

Testified as expert witness in DUI case concerning ingestion of ethyl alcohol over a 12 hour period and the effects on subsequent blood alcohol levels. (Circuit Court, April 1991)

Testified as expert witness on chain-of-custody procedures for receiving, testing, storage and return of marihuana exhibits for Metro Narcotics Force. (Youth Court, April 1991)

Testified as expert witness on methods used for the detection and quantification of ethyl alcohol, marihuana and cocaine metabolite in blood. (Circuit Court, November 1989)

## **PUBLICATIONS:**

Peer-reviewed journals, abstracts and presentations/posters

N. Thompson, T. Pittman, D. Bertram and K. Balamamuugan. The study of multiple differential DNA extractions with low DNA quantities. *J. Miss. Academy of Sciences*. 55 (1): 137-138. 2010 (Abstract)

J. Hammons, D. Bertram, T. Pittman and K. Balamamuugan. The significance of whole genome amplification in forensic sciences. *J. Miss. Academy of Sciences*. 55 (1): 138. 2010 (Abstract)

Pittman, Thomas S. Use of  $\Delta$ -9-Tetrahydrocannabinol monoclonal antibodies chemically bound to a polystyrene surface using glutaraldehyde for the purpose of extracting  $\Delta$ -9-tetrahydrocannabinol and  $\Delta$ -9-tetrahydrocannabinol carboxylic acid for quantitative analysis by gas chromatography mass spectrometry. University of Southern Mississippi, Hattiesburg, MS Dissertation, January 2008.

Broussard, L., Broussard, A., Pittman, T., & Lirette, D. (2000). Case Report: Death Due to inhalation of Ethyl Chloride. *Journal Forensic Sciences*, 45(1), 223-225.

Broussard, L., Broussard, A., Lirette, D., & Pittman, T. (1999, February). Death due to inhalation of ethyl chloride. Paper presentation at the American Academy of Forensic Sciences Annual Meeting, Orlando, FL.

Broussard, L., Broussard, A., Pittman, T., & Lirette, D. (1999). Death due to inhalation of ethyl chloride. Proceedings of the American Academy of Forensic Sciences, V, 269.

Broussard, L., Lafferty, D., Pittman, T., & Presley, L. (1998, February). Headspace Gas Chromatographic Method for the Measurement of Difluoroethane in Blood. Paper presented at the American Academy of Forensic Sciences Annual Meeting, San Francisco, CA.

Atkins, K. D., Broussard, L., Broussard, A., Brustowicz, T., Lafferty, D., Lirette, D., Pittman, T., & Presley, L. (1998, May) Inhalant Abuse in the New Orleans Area: 2 Case Studies. Paper presentation at the Southern Association of Forensic Scientists (SAPS) Spring Meeting; New Orleans, LA.

Broussard, L., Pittman, T., Lafferty, D. & Presley, L. (1998). Headspace Gas Chromatographic Method for Measurement of Difluoroethane in Blood. Proceedings of the American Academy of Forensic Sciences. IV, 248

Broussard, LA, Presley L, Pittman T, Clouette R, Wimbish GH. The Simultaneous Identification and Quantification of Codeine, Morphine, Hydrocodone and Hydromorphone in Urine as Trimethylsilyl and Oxime Derivatives. *Clin Chem* 1997;43 (6) 1029-32

Broussard LA, Brustowicz T, Pittman T, Atkins K, Presley. (1997). Case Report: Two Traffic Fatalities Related to the Use of Difluoroethane. *Journal of Forensic Sciences*. vol. 42(6); 1186-87

Broussard LA, Blakeney J, Pittman T, Presley L. (1997). False Negative Methadone Results in Diabetic Patient. AACC Southeast section and Clinical Chemists of Georgia Spring Meeting Program, Atlanta, GA March (abstract)

Broussard LA, Brustowicz T, Pittman T, Atkins K, Presley L. Measurement of Difluoroethane in Blood by Gas Chromatography. (1997) AACC Southeast section and Clinical Chemists of Georgia Spring Meeting, Atlanta, GA (abstract)

Broussard LA, Blakeney J, Pittman T, Presley L. False Negative Results for Drugs of Abuse in Diabetic Ketoacidosis. Clinical Chemistry, 43(6) S207 (abstract)

Blakeney, J., Broussard, L., Pittman, T., & Presley, L. (1997, March). False Negative Methadone Results in a Diabetic Patient. Paper Presentation at the Annual Meeting of the AACC. Atlanta, GA.

Pittman, Thomas S. Characterization of dictyline granules and associated matrices in species of Cribariaceae: Myxomycetes. University of Southern Mississippi, Hattiesburg, MS Thesis, May 1989

## **THESIS COMMITTEE PARTICIPATION**

Chair: Shanna L. Nesser - Graduated  
Ashlyn C. Harmon – Graduated  
Kelly Counts - Graduated  
Jon S. Byrd - Graduated  
John S. Kocktitzky - Graduated  
Lauren G. Smith  
Megan Dutton  
Meghan Tanner  
Kristen Pilgram

Member: Nicole Thompson - Graduated  
Jennifer Hammons - Graduated  
Brandi Keys  
Denise Dent