

BRIAN A. McMILLEN, Ph.D.
Professor & Director, Science Education Partnership Program

ADDRESS:

Department of Pharmacology & Toxicology
Brody School of Medicine
East Carolina University
Greenville, NC 27858

DATE OF BIRTH:

September 21, 1949
Greenwich, Connecticut

TELEPHONE:

(252)-816-2758 office
(252)-816-3203 facsimile

e-MAIL:

mcmillenb@mail.ecu.edu

EDUCATION:

Beloit College, Beloit, Wisconsin, **B.S.**, Chemistry, 1971
University of Illinois at the Medical Center, Chicago, Illinois, **Ph.D.**, Pharmacology, 1977
University of Texas Health Science Center, Dallas, Texas, Postdoctoral Fellow, 1977-1978

HONORS:

Phi Eta Sigma, 1968
J. H. Nair Scholar in Chemistry, 1970-1971
Medical Center Student Leadership Award, 1976
Governor's Award for Outstanding Volunteer Activities, 1995
Pitt County School System Volunteer of the Year, 1995-1996

PROFESSIONAL EXPERIENCE:

Analytical Chemist, Student Trainee, Food and Drug Administration, Washington, D.C. (1969-1970)
USPHS Trainee, Department of Pharmacology, University of Illinois at the Medical Center, Chicago, IL (1971-1976)
Postdoctoral Fellow, Department of Pharmacology, University of Texas Health Science Center, Dallas, Texas (1977-1978) Instructor (1978-1980), Assistant Professor (1980-1982), Department of Pharmacology, University of Texas Health Science Center, Dallas, TX
Assistant Professor (1982-1987), Associate Professor (*tenured*, 1987-1995), **Professor** (1995-), Department of Pharmacology, School of Medicine, East Carolina University, Greenville, NC
Science Fellow, Governor's Institute on Alcoholism and Substance Abuse, Inc., Curriculum Task Force, Research Triangle Park, NC (1992-1996)
Adjunct Professor, Department of Biology, East Carolina University, Greenville, NC (1998-)

PROFESSIONAL APPOINTMENTS:

Consultant, CNS Section, Bristol-Myers Co. (1982-1986)
Editorial Board, *Journal of Neural Transmission*, Springer-Verlag, Vienna, Austria (1984-)
Editor, *CADAS Report*, Quarterly newsletter, Center for Alcohol and Drug Abuse Studies (1992-2001)
Reviews and Commentary Editor, *Alcohol*, Elsevier Science, Inc., New York (1993-1999)
Editorial Advisory Board, *Alcohol*, Elsevier Science, Inc., New York (1996-2001)

ACADEMIC APPOINTMENTS:

East Carolina University Faculty Senate (exp. 2004)
Research Ethics Oversight Committee (exp. 2002; past Chair)
Personnel Committee, Department of Pharmacology (1995-)
Trustees' Initiative to Reduce Alcohol, Drug Abuse and Violence at ECU (Co-chair, 2001-)

PUBLICATIONS: (out of 92, does not include 70 abstracts)

- Henderson, M. G. and McMillen, B. A., Changes in dopamine, serotonin and their metabolites in discrete brain areas in rat offspring after *in utero* exposure to cocaine or related drugs. *Teratology* 48:421-430, 1993.
- Johns, J. M., Means, M. J., Bass, E. W., Means, L. W., Zimmerman, L. I. and McMillen, B. A., Prenatal exposure to cocaine: Effects on aggression in Sprague-Dawley rats. *Develop. Psychobiol.* 27:227-239, 1994.
- McMillen, B. A., Walter, S., Williams, H. L. and Myers, R. D., Comparison of the action of the 5HT₂ antagonists, amperozide and trazodone, on preference for alcohol in rats. *Alcohol* 203-206, 1994.
- Myers, R. D., McMillen, B. A. and Adell, A. Neurotransmitter and neuromodulatory mechanisms involved in alcohol abuse and alcoholism: Epitome of cerebral complexity. *Neurochem. Intl.* 26:337- 342, 1995.
- McMillen, B. A., Reviews and comments on alcohol research. *Alcohol* 12:79-81; 173-176; 295-297; 393-396, 1995.
- McMillen, B. A. and Williams, H. L., Volitional consumption of ethanol by Fawn-Hooded rats: Effects of alternative solutions and drug treatments. *Alcohol* 12:345-350, 1995.
- Jones, E. A. and McMillen, B. A., Amperozide attenuates the reinforcing effects of cocaine in the conditioned place preference paradigm in rats. *Pharmaceut. Sci.* 1:471-474, 1995.
- McMillen, B. A., Reviews and comments on alcohol research. *Alcohol* 13:103-105; 217-219; 321-323, 1996.
- McMillen, B. A., Toward a valid model of alcoholism: multiple animal models for multiple diseases. *Alcohol* 14:409-419, 1997.
- McMillen, B. A., Means, L. W. and Matthews, J. N., Comparison of the alcohol preferring P rat to the Wistar rat in behavioral tests of impulsivity and anxiety. *Physiol. Behav.* 63:371-375; 1998.
- Wilcox, R. E. and McMillen, B. A., The rational use of drugs as therapeutic agents for the treatment of the alcoholisms: A commentary. *Alcohol* 15:161-177; 1998.
- McMillen, B. A. and Williams, H. L., Role of taste and calories in the selection of ethanol by C57BL:6Hsd and Hsd:ICR mice. *Alcohol* 15:193-198; 1998.
- Johns, J. M., L. R., Zimmerman, L. I., McMillen, B. A., Means, L. W., Walker, C. H., Lubin, D. A., Meter, K. E., Nelson, C. J., Pedersen, C. A., Mason, G. A. and Lauder, J. M., Chronic cocaine treatment alters social/aggressive behavior in Sprague-Dawley rat dams and in their prenatally exposed offspring. in *Cocaine: Effects on Developing Brain, New York Academy of Science* vol. 846, pp. 399-404; 1998.
- Rohrer, G. E., McMillen, B. A. and Reed, J. G., Calculation of blood alcohol concentrations in criminal defendants. *Amer. J. Trial Advocacy* 22:177-190, 1998.
- Myers, R. D., Robinson, D. E., West, M. W., Biggs, T. A. G. and McMillen, B. A., Genetics of alcoholism: Rapid development of a new high-ethanol preferring (HEP) strain of female and male rats. *Alcohol* 16:343-357, 1998.
- Jones, E. A. and McMillen, B. A., The cardiovascular effects of amperozide: Interactions with cocaine. *Pharmacol. & Toxicol.* 84:53-58, 1999.
- Arolfo, M. P. and McMillen, B. A., Effects of amperozide and tiospirone, atypical antipsychotic 5-HT₂ drugs, on food-reinforced behavior in rats. *Physiol. & Behav.* 68:93-98, 1999.
- Wolfe, J. R., Means, L. W., and McMillen, B. A., Effects of pregnancy and progesterone on the consumption of ethanol by the high ethanol preferring (HEP) rat. *Alcohol & Alcoholism* 35:344-350, 2000.
- Arolfo, M. P. and McMillen, B. A. Tiopirone and reinforcing effects of cocaine in the conditioned place preference paradigm in rats. *J. Pharm. Pharmacol.* 52:977-981, 2000.
- McMillen, B. A., Unexpected findings: Reviews and Comments on Alcohol Research, *Alcohol* 21:291-295, 2000.
- Lucas, L. A. C. and McMillen, B. A., Differences in brain area concentrations of dopamine and serotonin in Myers' high ethanol preferring (mHEP) and outbred rats. *J. Neural Transm.* 109:279-292, 2002.
- Lucas, L. A. C. and McMillen, B. A., Conditioned taste aversion and the Myers' high ethanol preferring (mHEP) rat. *Alcohol & Alcoholism* (in press), 2002.
- Mega, B. T., Sheppard, K. W., Williams, H. L. and McMillen, B. A., On the role of monoamine oxidase-A for the maintenance of the volitional consumption of ethanol in two different rat models. *Naunyn-Schmiedeberg's Arch. Pharmacology* (in press), 2002.

FORENSIC PHARMACOLOGY: (Selected cases)

- North Carolina *versus* McHone, provided affidavit for Motion for Appropriate Relief of Death Penalty which provided a calculation of the blood alcohol concentrations in the defendant at different times during the night of the murders. (1994)
- North Carolina *versus* Daniels, appointed Expert in Pharmacology by Superior Court of Mecklenberg County. Provided affidavit for Motion for Appropriate Relief of Death Penalty that had a calculation of the blood alcohol and cocaine concentrations at different times during the day and night of the murder and during questioning by the police. (1995)
- North Carolina *versus* Moore, appointed Expert in Pharmacology by Superior Court of New Hanover County. Provided affidavit and expert testimony during guilt/innocence phase on defendant's blood alcohol concentrations during the day of the murder (2/14/96).
- North Carolina *versus* Boone, appointed Expert in Pharmacology by Superior Court of Wayne County. Provided affidavit and expert testimony during penalty phase on defendant's blood alcohol concentrations and interactions with marijuana during the day of the murder (9/17/96).
- North Carolina *versus* Burmeister, appointed Expert in Pharmacology by Superior Court of Cumberland County. Provided affidavit and gave expert testimony during guilt/ innocence phase on defendant's blood alcohol concentrations during the day and night of the murders. (2/24/97)
- Faircloth *versus* CSX Transportation, Inc., performed calculation of blood alcohol concentrations for plaintiff in a civil suit filed in Superior Court of Robeson County. Provided affidavit with calculations and response to defendant's expert witness (4/17/97). Case is pending.
- North Carolina *versus* Kearney, testified as an Expert in Pharmacology in the Superior Court of Pitt County, Mr. Kearney and a witness stated he had only two beers, but the Intoxilyzer 5000 read 0.12. Provided calculations both for two beers and the number of drinks to reach 0.12. The jury found Mr. Kearney **not guilty**. (6/11/97)
- North Carolina *versus* Hyde, appointed Expert in Pharmacology by Superior Court of Onslow County. Provided testimony during penalty phase as to defendant's blood alcohol concentration at time of murder and interpreted his level of impairment. (7/14/98)
- Pennsylvania *versus* Gibson, provided affidavit with calculations of blood alcohol concentrations and interpretation for a motion for appropriate relief for Mr. Ronald Gibson, represented by the Defenders Office in Philadelphia, PA. (9/98)
- Provided calculations for numerous defendants in additional DUI cases. Testified in cases in Beaufort, Lenoir, Onslow, Pitt and Wake Counties. Results with jury trials have been mixed, but in District Court the judges often go with the results from the Intoxilyzer 5000. NC v. Price, **not guilty**: Intoxilyzer 5000 read 0.12, calculation was 0.04. (8/25/99) Also, have had three cases where my calculation and the Intoxilizer 5000 were in harmony.
- New York *versus* J. F. Cahill, provided interpretation of effects of medications provided to juror who had dizziness and palpitations the day before start of deliberations for purposes of appeal. Public Defenders office of Rochester, NY made the request. (9/99)
- North Carolina *versus* Jacobs, prepared calculation of BAC for Angish Jacobs and testified in Cumberland County Court at a hearing for a suppression motion regarding statements made to police after his arrest and while intoxicated. Motion was denied, but DA offered reduction from first to second degree murder which was accepted. (2/15/99)

- Pennsylvania *versus* Craver, provided affidavit with calculations of blood alcohol concentrations and interpretation for a motion for appropriate relief for Sherman Craver, represented by the Defenders Office in Philadelphia, PA. (8/99)
- Estate of Peter T. Higgins v. Memorial Mission Hospital. Provided review of medical records, explanations of antihypertensive drugs and effects, and reviewed transcripts of depositions for a medical malpractice case. Prepared attorney for deposition of medical expert from one of the other parties. As of 4/1/2000, case pending.
- North Carolina *versus* General Douglas O'Neal, subpoena from District Attorney of Johnston County to testify as an expert witness in pharmacology of cocaine. General (given name) O'Neal was at fault in a fatal motor vehicle accident and his blood and urine tested positive for cocaine. Pled guilty without need for testimony (3/20/2000).
- North Carolina *versus* Clifton Hayes, prepared calculation of BAC for Clifton Hayes and testified in Johnston County Court for a suppression motion regarding statements made by Mr. Hayes at the time of his arrest (8/12/99). Scheduled to testify in first degree murder case, but defendant pled guilty to second degree murder after mistrial declared due to inadmissible testimony by the state's expert (5/3/200).
- North Carolina *versus* Joseph Mealey, Appointed expert in pharmacology for Onslow County court. Prepared affidavit which interpreted blood concentrations of cocaine from deceased and explained likely psychological effects. Defendant accepted plea of second degree murder during trial (4/20/2000).
- North Carolina *versus* Shaun White, appointed expert in pharmacology by Johnston County Superior Court. Prepared affidavit on behalf of Shaun White charged with second degree murder for beating death of a man who accosted a group of teens. Provided analysis of medical report on victim that showed substantial amount of cocaine, metabolites, cocaethylene and alcohol in his blood. After prosecution rested, defense accepted plea of voluntary manslaughter with a mitigated sentence. (6/29/2000)
- Texas Alcoholic Beverage Commission complaint #058699, prepared affidavit based on report filed by a TABC agent that recommendation suspension of the license of a nightclub, The Copa, in Beaumont, TX for serving an already intoxicated person. Based on the autopsy report, it was possible to state that this person had not had any alcohol for at least an hour prior to death. The complaint was dismissed after the affidavit was read to commission. (1/18/2001)
- North Carolina *versus* John McDonald, appointed expert in Harnett County Superior Court to testify regarding the validity of blood alcohol content determined in a blood sample that had sat on the rear seat of a State Police patrol car for 3 days. Judge left to jury the validity of the sample. (4/4/2001)
- C. Feldmeth *versus* S. L. Dykstra, reviewed accident report, medical records, and depositions for a damage suit that involved Ms. Dykstra as the driver in Ft. Myers, FL on behalf of Mrs. Feldmeth's attorney. Report was written 5/7/01. Provided deposition by phone teleconference and court testimony. Plaintiff was awarded \$250,000 for damages and penalties. (Ft. Myers, FL, 4/30/2002)
- H. R. Dittrich, et al. *versus* River House, Inc., et al., reviewed accident and autopsy records of a man who died in a two vehicle collision and had a BAC of 0.23 g/dl. Dittrichs are suing the restaurant that served the alcohol. Provided affidavit that estimated the number of drinks consumed based on the plaintiff's scenario and the restaurant's scenario. (9/24/2001 case pending).