

CURRICULUM VITAE

Name: Syed Fatehyab Ali

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Education:

June 1973 B.Sc. (Hons), Chemistry, Aligarh Muslim University, Aligarh, India

June 1975 M.Sc., Chemistry (Organic), Aligarh Muslim University, Aligarh, India

Dec. 1977 M. Phil, Chemistry (Neurochemistry), Brain Research Center, Aligarh Muslim University, Aligarh, India

June 1980 Ph.D., Chemistry (Neurochemistry), Brain Research Center, Aligarh Muslim University, Aligarh, India.

Brief Chronology of Employment:

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| 2000-Present | Senior Biomedical Research Scientist (SBRS), Neurochemistry Laboratory, Division of Neurotoxicology, National Center for Toxicological Research, Jefferson, Arkansas. |
| 1992-Present | Head, Neurochemistry Laboratory, Division of Neurotoxicology, National Center for Toxicological Research, Jefferson, Arkansas. |
| 1990 | Acting Chief, Pharmacodynamics Branch, Division of Reproductive & Developmental Toxicology, National Center for Toxicological Research, Jefferson, Arkansas. |
| 1987-1992 | Research Pharmacologist, Pharmacodynamics Branch, Division of Reproductive and Developmental Toxicology, National Center for Toxicological Research, Jefferson, Arkansas. |
| 1984-1986 | Staff Fellow, Pharmacodynamics Branch, Division of Reproductive and Developmental Toxicology, National Center for Toxicological Research, |

Jefferson, Arkansas.

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| 1983-1984 | Research Associate, Department of Biochemistry and Medicine, University of Arkansas for Medical Sciences, Little Rock, Arkansas. |
| 1982-1983 | Postdoctoral Research Fellow, Division of Toxicology, Department of Pharmacology, University of Arkansas for Medical Sciences, Little Rock, Arkansas. |
| 1981-1982 | Fogarty International Fellow, Laboratory of Behavioral and Neurological Toxicology, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina. |
| 1980-1981 | Postdoctoral Research Fellow of CSIR (India), Brain Research Center, J.N. Medical College, Aligarh Muslim University, Aligarh, India. |
| 1975-1979 | Junior and Senior Research Fellow of CSIR (India), Brain Research Center, J.N. Medical College, Aligarh Muslim University, Aligarh, India. |

Universities Affiliations:

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| 1986-Present | Adjunct Assistant, Associate and Full Professor, Department of Biochemistry and Molecular Biology, University of Arkansas for Medical Sciences, Little Rock, Arkansas |
| 1988-Present | Adjunct Assistant, Associate and Full Professor, Department of Pharmacology, School of Pharmacy, University of Mississippi, University, Mississippi |
| 1995-Present | Adjunct Associate and Full Professor, Department of Neurology, University of Arkansas for Medical Sciences, Little Rock, Arkansas. |
| 1990-Present | Adjunct Professor, College of Pharmacy and Pharmaceutical Sciences, Florida A & M University, Tallahassee, Florida. |
| 1991-Present | Adjunct Professor, College of Pharmacy, Northeast Louisiana University, Monroe, Louisiana |
| 1996-Present | Adjunct Professor, Department of Pharmacology, Meharry Medical College, Nashville, Tennessee |
| 2000-Present | Adjunct Professor, Department of Pharmacology, Duke University Medical Center, Durham, North Carolina |
| 2005-Present | Adjunct Professor, Department of Human Morphology, University Pisa School of Medicine, Pisa, Italy. |
| 2005 -Present | Adjunct Professor, Shandon University, Gina, Peoples Republic of China |

Membership in Professional or Honorary Societies:

The International Drug Abuse Research Society (**Co-founder**)
International Brain Research Organization (IBRO)
International Society for Neurochemistry
International Society for Developmental Neuroscience
Society of Toxicology (USA)
Society for Neuroscience (USA)
Founder Member of Society of Toxicology (India)
South Central Chapter, Society of Toxicology
Arkansas Chapter of the Society for Neuroscience
Sigma XI
Society for Experimental Biology and Medicine
Neurobehavioral Teratology Society
Indian Academy of Neuroscience (Life Member)
British Brain Research Association (honorary)
European Brain and Behavioral Society (honorary)

Extra Education and other Special Scientific Recognition:

Certificate in Computer FORTRAN Programming, Aligarh Muslim University, Aligarh, India, 1977
Diploma in Statistics, Aligarh Muslim University, Aligarh, India, 1978
CSIR, Individual Junior, Senior, and Postdoctoral Research Fellowship, 1975-1980
UGC, Individual Postdoctoral Research Fellowship, 1980-1981
Fogarty International Research Fellowship, 1981-1982
UNESCO/IBRO Travel Fellowship, 1983
Fidia Research Foundation Travel Award, 1987 and 1989
Federal Employee Quality Step Increases, 1988, 1992, 1993, 1994
FDA Special Act Award, 1995
HRC, NCTR/FDA Outstanding Achievement Award, 1995
Outstanding Service Award, 1995
FDA Equal Opportunity Achievement Award, 1996
FDA Award of Merit, 1997
NCTR/FDA Scientific Achievement Award "**Excellence in Laboratory Science**", 1997
Senior scientist Award-Neuroscience Division, ASIOA, Society for Neuroscience Meeting, Los Angeles, 1998
Zeneca Traveling Lectureship Award Sponsored by the Society of Toxicology, 1998
Credentialed as Senior Biomedical Research Scientist (SBRS) – 2000
Credentialed as Senior Biomedical Research Scientist (SBRS) - 2006
FDA Center/ORA Scientific Achievement Award, "**Outstanding Intercenter Scientific Collaboration**", 2007
Fellow, The Academy of Toxicological Sciences, 2008

FDA Center/ORA Scientific Achievement Award, “**Outstanding Intercenter Scientific Collaboration**”, 2009

FDA/NCTR ‘**Excellence in Laboratory Science Award**’ 2010

Editorial Responsibilities:

Associate Editor: *Journal of Environmental Biology*

Associate Editor: *Journal of Toxicology (Online)*

Associate Editor: *Journal of Neural Transmission*

Member, Editorial Board: *Neurotoxicology*

Member, Editorial Board: *International Journal of Toxicology, Occupational and Environmental Health*

Member Editorial Board: *Journal of Toxicology*

Member Editorial Board: *Journal of Neural Transmission*

Guest Editor: *Current Neuropharmacology*

Guest Editor: *Molecular Neurobiology*

Guest Editor: *Annals of the New York Academy of Sciences*

Journal Referee: *Brain Research; JPET; Journal of Neurochemistry; Molecular Neurobiology; Life Sciences; Toxicology Letters; Neurotoxicology and Teratology; Neurotoxicology; Toxicology and Applied Pharmacology; Fundamental and Applied Toxicology; Biochemical Pharmacology; Drug and Chemical Toxicology; Proceeding of Society of Experimental Biology and Medicine; Indian Journal of Experimental Biology, Journal of Neuroscience, Psychopharmacology, Neuropharmacology, European Journal of Neuroscience, Toxicological Sciences, American Journal of Neuroprotection and Neuroregeneration.*

Grant Reviewer: March of Dimes Birth Defects Foundation
North Atlantic Treaty Organization (NATO)
Biomedical Sciences
MBRS Research Grants
Grant Application The Johns Hopkins Center for Alternatives to Animals Testing
Ad Hoc Reviewer, NIDA and NIMH

FDA/NCTR Committee Responsibilities:

Research Scientist Group, NCTR, 1987-90

Appointed as a member to represent FDA/NCTR on the Ad Hoc Committee of CCEHRF to review the ATSDR/CDC document “The Nature and Extent of Childhood Lead Poisoning in the United States”, 1989-1991

Institutional Animal Care and Use Committee, NCTR, 1990-92

Summer Student Committee, NCTR, 1991

Science Internship Program, NCTR, 1994-95
NCTR Award Committee, 1994-present
EEO Councilor, NCTR, 1994-present
FDA Science Award Committee, 1995-present
Co-chair, NCTR Award Committee, 1996-1997
Chair, NCTR Award Committee, 1997-1998
Member, NCTR Quality of Life Committee, 1999-Present
Member, FDA Intercenter Neurotoxicity Working Group, 1998-present
Member, CDER liaison to the Control Substance Team
Member, Program Committee, FDA 2001 Forum
Member, Program Committee, FDA 2005 Forum

Workshop/Training Courses Attended:

February 19-March 4, 1979

Winter School on "Neurophysiological and Neurochemical Correlates of Behavior" and International Symposium on "Aggressive Behavior, "Department of Physiology, All India Institute of Medical Sciences, New Delhi, India

August 1-30, 1979

Short-Term Institute on Experimental Techniques in Medical Postgraduate Training for Medical Teachers, Postgraduate Institute of Basic Medical Sciences, University of Madras, Madras, India

August 12-13, 1986

Training Program in Introduction to PCs and Lotus 1-2-3, Parklawn Computer Center, Department of Health and Human Services, Public Health Service, FDA, NCTR, Jefferson, AR

September 8-11, 1986

Training Seminar on Good Laboratory Practice, Department of Health and Human Services, Public Health Services, FDA, NCTR, Jefferson, AR

November 17-19, 1986

Training Program in Basic Radiation Safety, Department of Health and Human Services, FDA, NCTR, Jefferson, AR

September 21-23, 1987

Workshop: Risk Assessment in Reproductive and Developmental Toxicology, Little Rock, AR

February 8-9, 1990

WordPerfect 5.0 Training Programs, FDA, NCTR, Jefferson, AR

May 7-11, 1990

An Introduction to SAS/VM Programs, FDA, NCTR, Jefferson, AR

June, 1990

EEO Seminar for Supervisors and Managers, FDA, NCTR, Jefferson, AR

November, 1990

Hazardous Waste Management Seminar, FDA, NCTR, Jefferson, AR

March, 1994

Sexual Harassment Prevention Training, FDA, NCTR, Jefferson, AR

August-September, 1994

EEO Councilor Training, Cheyenne, WY

September, 1994

Ethics Training, FDA, NCTR, Jefferson, AR

IACUC Training, FDA, NCTR, Jefferson, AR

January, 1995

Stress and Conflict Management Training, FDA, NCTR, Jefferson, AR

March, 1995

Disability Awareness Lecture Series, FDA, NCTR, Jefferson, AR

June, 1995

AIDS in the Federal Workforce, FDA, NCTR, Jefferson, AR

Professional Society Activities:

- 1982 Founding Member, Councilor, South Central Chapter, Society of Toxicology
- 1987,1990,1992,1999 Award Committee Member, South Central Chapter of the Society of Toxicology
- 1989-90 Secretary/Treasurer, South Central Chapter of the Society of Toxicology
- 1990 Member, Local Organizing Committee, South Central Chapter, Society of Toxicology Annual Meeting
- 1991-92 Vice President/Chairman Education Committee South Central Chapter of the Society of Toxicology
- 1991 Organized and chaired a symposium entitled "Recent Approaches for detection and characterization of Neurotoxicity" at the 2nd Congress of Toxicology in Developing Countries held from November 24-28, 1991, New Delhi, India
- 1992 Organized and chaired a symposium entitled "Phencyclidine Update: From behavior to Biochemistry" at the Annual Meeting of Neurobehavioral Teratology Society, June 25-28, 1992, Boca Raton, Florida
- 1993 Co-organized the International Society for Neurochemistry Satellite Meeting entitled "Cellular and Molecular Mechanism of Drug of Abuse: Cocaine and Methamphetamine," August 18-19, 1993, Nice, France
- 1993 Co-chaired, 11th International Neurotoxicology Conference entitled "Drugs of Abuse and Developmental Neurotoxicity" September 26-30, 1993, Little Rock, Arkansas
- 1993-94 President - Elect - South Central Chapter of the Society of Toxicology
- 1994 Co-Chair, Poster Session, Annual Meeting of the Society of Toxicology
- 1994 Chairman Scientific Session, Annual Meeting South Central Chapter of the Society of

- Toxicology
- 1994 Organized and chaired a symposium entitled "Age-Dependent susceptibility of Methamphetamine: Neurobehavioral, Neurochemical and Morphological Correlations." at the Annual Meeting of Neurobehavioral Teratology Society, June 25-28, 1994, Puerto Rico
 - 1994 Co-organized and chaired a symposium at International Congress of Biochemistry and Molecular Biology, September 18-22, 1994, New Delhi, India
 - 1994 Organized and chaired a symposium at the 5th International Conference on "Neurobehavioral Methods & Effects in Occupational & Environmental Health", December 3-7, 1994, Cairo, Egypt
 - 1994-95 President, South Central Chapter of the Society of Toxicology
 - 1995 Co-Chair, Poster Session, Annual Meeting of the Society of Toxicology
 - 1995 Co-organized and chaired a symposium entitled "Neurotoxicity of Metals in Developing Brain" at the Experimental Biology 95 meeting, April 9-13, 1995, Atlanta, GA
 - 1995 Organized and chaired a symposium entitled "Neurotoxicity of Drug of Abuse: Substituted Amphetamine" at 1st International Conference on Drugs of Abuse: Recent Advances in Clinical and Experimental Research, April 28-May 3, 1995, Funchal, Madeira, Portugal
 - 1995 Co-organized the International Society for Neurochemistry Satellite Meeting entitled "Cellular and Molecular Mechanism of Drugs of Abuse: Cocaine, Ibogaine and Substituted Amphetamines," June 28-30, 1995, Niigata City, Japan
 - 1996 Treasure, Arkansas Chapter for Sigma Xi
 - 1995-96 Past President/Councilor, South Central Chapter, Society of Toxicology
 - 1996 Co-Chair, Poster Session, Annual Meeting of the Society of Toxicology
 - 1996 Treasure, Arkansas Chapter for Neuroscience
 - 1996 Co-Organized and chaired a symposium entitled "Neurobiological basis of relapse Prediction in stimulant-induced Psychosis and Schizophrenia" at the XXth International Conference of the Collegium Internationale Neuro-Psychopharmacologicum (CINP), June 23-27, 1996, Melbourne, Australia
 - Co-organized 2nd International Conference on Drugs of Abuse: Bio-Psycho-Social Perspective, January 26-30, 1997, Shatin, Hong Kong.
 - 1997 Organized and chaired a symposium entitled "Neurotoxicity of Drugs of Abuse: Neurobehavioral and Neurochemical correlates" at 2nd International Conference on Drugs of Abuse: Bio-Psycho-Social Perspective, January 26-30, 1997, Shatin, Hong Kong.
 - 1997 Organized, International Society for Neurochemistry and American Society for Neurochemistry satellite Meeting "Cellular and Molecular Mechanism of Drugs of Abuse: Cocaine, Ibogaine and Substituted amphetamines," July 16-18, 1997, Hamilton, Bermuda
 - 1997-2000 President, Central Arkansas Chapter of Sigma Xi
 - 1998 Co-organized and chaired a symposium entitled "Neurobiological basis of stimulant-induced sensitization: from animals to man" at the XXIth International Conference of the Collegium Internationale Neuro-Psychopharmacologicum (CINP), July 12-18, 1998, Glasgow, Scotland, UK
 - 1999 Organized and co-chair a workshop entitled "Endocrine disruption and neurotoxicity: Why toxicologists should be concerned about the action of estrogenic chemicals in CNS" at the Annual meeting of the Society of Toxicology, March 12-16, 1999, New Orleans, LA
 - 1999 Organized an International Society for Neurochemistry and European Society for

- Neurochemistry Satellite Meeting "Cellular and Molecular Mechanism of Drugs of Abuse: Cocaine, Ibogaine and Substituted Amphetamines," August 4-6, 1999, Copenhagen, Denmark.
- 2001 Organized an "International Society for Neurochemistry and American Society for Neurochemistry Satellite Meeting," Cellular and Molecular Mechanism of Drugs of Abuse: Cocaine, Ibogaine GHB, and Substituted Amphetamines" August 22-24, 2001, Mar del Plata, Argentina.
- 2002 Co-organized and chaired a symposium entitled "Neurophysiological and Molecular Bases for Psychotic Symptoms and Addiction of Amphetamine and Cannabinoids" at the XXIIIrd International Conference of the Collegium Internationale Neuro-Psychopharmacologicum (CINP), July 22-28, 2002, Montreal, Canada.
- 2003 Co-organized an "International Society for Neurochemistry and Japanese Forum on Nicotine and Drug Dependence Studies," Current Status of Dependence/Abuse Studies: Cellular and Molecular Mechanisms of Drugs of Abuse & Neurotoxicity" July 29-August 1, 2003, Kyoto, Japan.
- 2004 Co-organized a Workshop at the Society of Toxicology Meeting, March 15-18, 2004 New Orleans, LA.
- 2004 Organized a session at the Neurotoxicity Society Satellite Meeting at the Society for Neuroscience Meeting, entitled "Neurotoxicity of Drug of Abuse" October 22, 2004, San Diego, CA.
- 2004 Co-organized a Symposium entitled "Neuroprotection in Inflammation-Related neurodegenerative Diseases" at the 7th International Neuroprotective Conference, to be held from November 14-18, 2004, Monterey, California.
- 2005 Co-organized a Symposium entitled "Bridging Neurobiology of Diseases: The Neurochemistry and Parkinson's Induced by Drug of Abuse" at the 20th Biennial ISN/ESN Meeting to be held from August 21-26, 2005, Innsbruck, Austria.
- 2005 Co-organized an ISN/ESN sponsor Satellite Meeting entitled "Cellular and Molecular Mechanisms of Drug of Abuse and Neurotoxicity: Cocaine, GHB, and Substituted Amphetamines" held from August 28-31, 2005, In Venice, Italy.
- 2007 Co-organized an ISN/ASN and IDARS Joint Satellite meeting entitled "New Research Frontiers and Advances in Drug Addiction" from August 14-17 in Merida, Mexico.
- 2008 Co-organized an International Symposium on Drug Abuse, from July 28-29, 2008 in Azores, Island of Sao Miguel, Portugal.
- 2009 Co-organized an 2nd IDARS, KDARS and ISN/APSIN Joint Satellite meeting entitled "New Research Frontiers and Advances in Drug Addiction" from August 17 – 21, 2009 in Seoul, Korea.
- 2011 Co-organized a Workshop at the 50th Anniversary Society of Toxicology Annual Meeting in Washington DC March 2011, entitled " **Technical characterization and dosimetry challenges associated with conducting or interpreting nanotoxicity.**
- 2011 Will Co-organizing a symposium at the 14th International Neurotoxicity Association meeting entitled "**The Neurotoxicity Potential of Engineered Nanomaterials**" which will be held from June 6-11, 2011 in China.
- 2011 Will Co-organized a Workshop at the EUROTOX-2011 which will be held from August 28-31, 2011 in Paris, France entitled "**Neurotoxicity and drug dependence of psychostimulants**"
- 2011 Will Co-organized a Roundtable at the ISN/ESN meeting in Athens, Greece, August 28 – September 3, 2011 entitled "**Nanotechnology, Nanomedicine and Biomedical Targets in Neurodegenerative Disease**".
- 2011 Planning to Organize the 3rd Biennial International Drug Abuse Research Society

(IDARS) from August 23-26, 2011 in Istanbul, Turkey.

Thesis Committees:

Doctoral Dissertation Committee Member, **Robert Williams**, College of Pharmacy, Florida A&M University, Tallahassee, Florida, Conferred, 1990

Doctoral Dissertation Committee Member, **Kimberly Benson**, University of Mississippi at Oxford, University, Mississippi, Conferred, 1992

Doctoral Dissertation Co-advisor, **Chandramallika Ghosh**, College of Pharmacy, Northeast Louisiana University, Monroe, Louisiana, Conferred, 1992.

Doctoral Dissertation Committee Member, **Rochmonde Moliaghegh**, Department of Physiology and Biophysics, University of Arkansas for Medical Sciences, Little Rock, Arkansas, Conferred, 1993

Doctoral Dissertation Committee Member, **Darrell Rodgers**, College of Pharmacy, Florida A&M University, Tallahassee, Florida, Conferred, 1994

Doctoral Dissertation Committee Member, **Hahmid R. Rasekh**, College of Pharmacy, Florida A&M University, Tallahassee, Florida, Conferred, 1994

Doctoral Dissertation Committee Member, **Oh-Seung Kwon**, Department of Pharmacology and Toxicology, University of Arkansas for Medical Science, Little Rock, Arkansas, Conferred, 1996

M.D./Ph.D. Dissertation Advisor, **Tim Freyaldenhoven**, Department of Biochemistry and Molecular Biology, University Arkansas for Medical Sciences, Little Rock, Arkansas, Conferred 1998

Doctoral Dissertation Committee Member, **Karmadi Mills**, Department of Pharmacology, Meharry Medical College, Nashville, TN, Conferred, 1998

Doctoral Dissertation Committee Member, **Marise-Melo-Furtado**, University of Mississippi at Oxford, University, Mississippi, Conferred, 1999

Doctoral Dissertation Committee Member, **C.J. Williams**, College of Pharmacy, Florida A&M University, Tallahassee, Florida, Conferred, 2000

Doctoral Dissertation Committee Member, **Karen McClendon**, Department of Pharmacology, Meharry Medical College, Nashville, TN, Conferred 2001

Doctoral Dissertation Committee Member, **Kenny Sheppard**, College of Pharmacy, Florida A&M University, Tallahassee, Florida, Conferred 2002.

Ph.D./M.S. Advisor, **Ms. Angela Disch**, Department of Pharmacology and Toxicology, University of Arkansas of Medical Sciences, Little Rock, AR.

Ph.D. Advisor, **Mr. Nawal Shekhawat**, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences, Little Rock, AR.

Doctoral Dissertation Committee Member, **Carmen Padilla**, University of Arkansas at Fayetteville, Fayetteville, AR.

Master Dissertation Committee Member, **Caleb Pingle**, Arkansas State University, Jonesboro, AR.

Doctoral Dissertation Committee Member, **Madhumita Paul**, Arkansas State University, Jonesboro, AR.

Doctoral Dissertation Committee Member, **Alokita karmara**, University of Arkansas at Little Rock, AR.

Doctoral Dissertation Committee Member, **Thikra Mustafa**, University of Arkansas at Little Rock, AR.

Postdoctoral Fellows/Visiting Scientists Supervised:

Dr. Ahmed Hikal, Visiting Scientist from the University of Mississippi, Oxford, Mississippi, 1987

Dr. Komalan Jairaj, Visiting Scientist from the University of Arkansas at Pine Bluff, Pine Bluff, Arkansas, 1987, 1988

Dr. John Matthews, Visiting Scientist from the University of Mississippi, Oxford, Mississippi, 1988

Dr. Malak G. Kolta, Postdoctoral Fellow from the University of Kentucky, Lexington, Kentucky, 1986-1988

Dr. Ramachander Gollamudi, Visiting Scientist from the University of Tennessee Health Science Center, Memphis, Tennessee, 1989

Dr. John Bowyer, ORISE Postdoctoral Fellow from the University of Colorado, Denver, Colorado, 1989-1992

Dr. Sun Hee Lee, Visiting Scientist from the National Institute for Safety Research, Seoul, Korea, 1990

Dr. Stanley G. David, Visiting Scientist from the University of Arkansas at Jonesboro, Jonesboro, Arkansas, 1991, 1992

Dr. Essam F. Soliman, ORISE Visiting Scientist from the University of Cairo, Egypt, 1991-1993

Dr. Xia M. Meng, ORISE International Postdoctoral Fellow from the Beijing Medical School, Beijing, China, 1993-1995

Dr. Saber Hussain, ORISE Postdoctoral Fellow from the University of Geneva, Switzerland, 1994-1997

Dr. Chellu S. Chetty, Visiting Scientist from Savannah State University, Savannah, Georgia, 1994, 1995

Dr. Syed Z. Imam, Visiting Scientist and ORISE Postdoctoral Fellow, Jamia Hamdard University, New Delhi, India, 1997-2004

Dr. David Cawthon, ORISE Postdoctoral Fellow, University of Arkansas, Fayetteville, Arkansas, 2002-2005.

Dr. Zengjun Xu, ORISE Postdoctoral Fellow, University of Arkansas Medical Sciences, Little Rock, Arkansas, 2002-2005.

Dr. Jianyong Wang, ORISE Postdoctoral Fellow, University of Arkansas for Medical Sciences, Little Rock, Arkansas, 2002 – 2009.

Dr. Yongbin Zhang, ORISE Postdoctoral Fellow, University of Oklahoma, Stillwater, OK. 2008 – 2010.

Dr. William Tricklet, ORISE Postdoctoral Fellow, University of Nebraska, Lincoln, NB 2009 – present.

Dr. Elvis Cuevas, ORISE Postdoctoral Fellow, UNAM, Mexico City, Mexico. 2010 – Present.

Dr. Wesley Ryan Hamilton, ORISE Postdoctoral Fellow, University of Houston, Texas, 2011 – present.

Summer Student Interns Supervised:

Mr. Robert Williams, College of Pharmacy, Florida A & M University, Tallahassee, Florida, 1988, 1989

Ms. Kimberly Benson, School of Pharmacy, University of Mississippi, University, Mississippi, 1991

Ms. Chandramallika Ghosh, Northeast Louisiana University, Monroe, Louisiana, 1990, 1991

Ms. Sherry C. LaBlanc, Northeast Louisiana University, Monroe, Louisiana, 1991

Ms. Kelly Kordsmeier, University of Central Arkansas, Conway, Arkansas, 1992, 1993

Mr. Rodney Burt, University of Arkansas at Pine Bluff, Pine Bluff, Arkansas, 1992

Mr. Darrell Rodgers, College of Pharmacy, Florida A & M University, Tallahassee, Florida, 1993

Mr. Rodney Burt, Meharry Medical School, Nashville, Tennessee, 1993, 1994

Mr. Richard Cole, University of Arkansas at Jonesboro, Jonesboro, Arkansas, 1995

Ms. Laura Allen, University of Arkansas at Little Rock, Arkansas, 1997

Mr. David Kuperman, Hendrix College, Conway, Arkansas, 1995, 1996

Ms. Michelle L. Oetinger, Lycoming College, Williamsport, PA, 2001

Invited Presentations:

1. "Toxicity of Organophosphorus Compounds" Brain Research Center, J.N. Medical College, A.M.U. Aligarh, India, March, 1978.
2. "Retrograde Axonal Transport of Horseradish Peroxidase (HRP)"-Technique Demonstrated in Short-Term Institute on Experimental Techniques in Medical Postgraduate Training for Medical Teachers, Postgraduate Institute of Basic Medical Sciences, University of Madras, India, August, 1979.
3. "Brain Stem Dopamine, Noradrenaline and Serotonin in Relation to Open Field Behavior and Motor Activity in DDVP-Intoxication" Brain Research Center, J.N. Medical College, A.M.U. Aligarh, India, September, 1980.
4. "Effect of an Organophosphate Pesticide on Neurochemical, Morphological and Behavioral Factors in Rats" National Institute of Environmental Health Sciences, RTP, NC, April, 1981.

5. "Organophosphate Pesticide Dichlorvos Induced Neurotoxicity of Rats: Neurochemical, Behavioral and Morphological Studies" Institute of Neurotoxicology, Albert Einstein College of Medicine, New York, March, 1982.
6. "Effect of Some Toxic Agents on Neurotransmitter and Neuropeptide System" National Institute of Environmental Health Sciences, Research Triangle Park, NC, April, 1982.
7. "Neurotoxicity of Organophosphate Pesticide and Some Heavy Metals in Rats" LeMoyne-Owens College, M.B.R.S. Division of Natural Science and Mathematics, Memphis, Tenn., October, 1982.
8. "Modulation of Neurotransmitter Levels and Receptor Binding by Trimethyltin in Mouse Brain" Division of Interdisciplinary Toxicology, University of Arkansas for Medical Sciences, Little Rock, AR, November, 1982.
9. "Effect of Kepone on Neurotransmitter and Neuropeptide System" Division of Interdisciplinary Toxicology, University of Arkansas for Medical Sciences, Little Rock, AR, February, 1983.
10. "Modulation of Anterior Pituitary Dopamine Receptors by Estradiol 17B" Department of Biochemistry, University of Arkansas for Medical Sciences, Little Rock, AR, September, 1983.
11. "Effect of Trimethyltin and other Heavy Metals on Lipid Peroxidation in Different Regions of the Rat Brain" Department of Medicine-VA Hospital seminar, Little Rock, AR, February, 1984.
12. "Neurotoxicity of Trimethyltin" College of Pharmacy, Xavier University of Louisiana, New Orleans, LA, March, 1986.
13. "Effect of THC on Neurotransmitter and Receptor Binding in Rats" Postgraduate College, Muzaffar Nagar, India, June, 1986.
14. "Chronic delta-9-tetrahydrocannabinol Produces Neurochemical and Morphological Changes in Rat Hippocampus" Brain Research Center, J.N. Medical College, A.M.U. Aligarh, India, June 1986.
15. "Chronic and residual effects of THC in rats CNS: Morphological, Neurochemical and Behavioral Studies" Department of Biochemistry, University of Arkansas for Medical Sciences, Little Rock, AR, September, 1986.
16. "Effects of MDMA (Ecstasy) on the Neurotransmitter Systems in the Rat Brain" School of Pharmacy, Research Institute of Pharmaceutical Sciences, University of Mississippi, University, MS, June, 1987.
17. "Neurochemical and Neurohistological Alterations Produced by Orally Administered Methylenedioxymethamphetamine (MDMA)" College of Pharmacy, Xavier University of Louisiana, New Orleans, LA, July, 1987.
18. "Chronic delta-9-THC Administration Produces Neurochemical and Morphological Changes in Rat CNS" College of Pharmacy, Xavier University of Louisiana, New Orleans, LA, November, 1987.

19. "Neurochemical, Neurohistological and Behavioral Alterations produced After Chronic Exposure of Delta-9-THC" Department of Pharmacology, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia, January, 1988.
20. "Selective Serotonergic Neurotoxicity Produced by MDMA (Ecstasy) in Rat Brain" Department of Pharmacology, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia, January, 1988.
21. "Chronic Delta-9-THC Administration Produces Neurochemical, Neurohistological and Behavioral Changes in Rat and Monkey" Biological and Medical Research Center, King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia, January, 1988.
22. "Neurochemical and Morphometric Studies of the Rat Hippocampus Following Chronic Exposure of Delta-9-THC" Interdisciplinary Brain Research Center, J.N. Medical College, A.M.U. Aligarh, India, February, 1988.
23. "Neurochemical and Neurohistological Alterations in Rat CNS Produced by Orally Administered methylenedioxymethamphetamine (MDMA)" Interdisciplinary Brain Research Center, J. N. Medical College, A.M.U. Aligarh, India, February, 1988.
24. "Gestational Exposure to Phencyclidine: Distribution and Neurochemical Alterations in Maternal and Fetal Brain" Neurotoxicology Division, U. S. Environmental Protection Agency, Research Triangle Park, NC, February 1989.
25. "Oral Administration of Methylenedioxymethamphetamine (MDMA) Produces Selective Serotonergic Neurotoxicity in Rat and Monkey" Chemical Industry Institute of Toxicology (CIIT), Research Triangle Park, NC, February, 1989.
26. "Methylenedioxymethamphetamine (MDMA) Produces Selective Serotonergic Neurotoxicity in Rodent and Nonhuman Primates" Department of Physiology and Biophysics, University of Arkansas for Medical Sciences, Little Rock, AR, September, 1989.
27. "Selective Serotonergic Neurotoxicity Produced by MDMA (Ecstasy) in Rats and Monkeys" Division of Pharmacology and Toxicology, School of Pharmacy, College of Pharmacy and Health Sciences, Northeast Louisiana University, Monroe, LA, February, 1990.
28. "Amphetamine Analog MDMA Produces Selective Neurochemical Alterations in Rats and Monkeys" Department of Experimental Pharmacology, National University of Athens Medical School, Athens, Greece, July, 1990.
29. "Methylenedioxymethamphetamine (MDMA; Ecstasy) Produces Selective Serotonergic Neurotoxicity in Rodent and Nonhuman Primates" Industrial Toxicology Research Center, Lucknow, India, December, 1990.
30. "Reactive Oxygen Species Formations as an Index of MeHg and TMT-Induced Neurotoxicity" Jawaharlal Nehru University, New Delhi, India, December, 1990.

31. "Drug of Abuse (MDMA; Ecstasy) Exposure Altered Brain Biochemistry" Arkansas Tech. University, Russellville, Arkansas, January, 1991.
32. "Methylenedioxymethamphetamine (MDMA; Ecstasy) Produces Selective Serotonergic Neurotoxicity in Rodent and Nonhuman Primates" Department of Biology, Stillman College, Tuscaloosa, Alabama, March 1991.
33. "Selective Serotonergic Neurotoxicity Produced by MDMA (Ecstasy) in Rat and Monkey" Department of Pharmacology, Medical School of Porto, Porto, Portugal, April, 1992.
34. "Organic and Inorganic Metals-Induced Neurotoxicity via Oxidative Stress" Jamia Hamdard University, New Delhi, India, February, 1993.
35. "Drugs of Abuse: Methamphetamine, MDMA Produces Selective Neurotoxicity in Rodent and Nonhuman Primates" Interdisciplinary Brain Research Center, J.N. Medical College, A.M.U. Aligarh, India, February, 1993.
36. "Prenatal Exposure to Drugs of Abuse: Selective Vulnerability of Brain" Institute of Anatomy, Medical School of Porto, Porto, Portugal, April, 1993
37. "Organometals-induced Neurotoxicity via Oxidative Stress" Department of Pharmacology, Geneva University Medical Center, Geneva, Switzerland, August, 1993.
38. "Methylenedioxymethamphetamine (MDMA, Ecstasy) Produces Selective Serotonergic Neurotoxicity in Rodent and Nonhuman Primates" Department of Psychiatry, University of Geneva, Switzerland, September, 1993.
39. "Reactive Oxygen Species (ROS) as a Biomarker of methyl mercury and Trimethadionen Neurotoxicity" Department of Pharmaceutical Sciences, College of Pharmacy, Florida A & M University, Tallahassee, Florida, December, 1993
40. "Neuropharmacology of Drugs of Abuse" Division of Pharmacology and Toxicology School of Pharmacy, College of Pharmacy and Health Sciences, Northeast Louisiana University, Monroe, LA, August, 1995.
41. "Serotonergic System and Drugs of Abuse" Department of Community and Environmental Medicine, University of California at Irvine, Irvine, CA, November, 1995.
42. "Role of free radicals in Methamphetamine-induced Neurotoxicity" Department of Psychiatry, University of California San Diego, La Jolla, CA, March, 1996.
43. "Serotonergic System and Drugs of Abuse "Department of Pharmacology, Meharry Medical, College, Nashville, TN, May, 1996.
44. "Methylenedioxymethamphetamine (MDMA, Ecstasy) Produces Selective Serotonergic Neurotoxicity in Rodent and Nonhuman Primates" Clinical Research Centre, Royal Brisbane Hospital Foundation, Bancroft Centre, Brisbane, Australia, July, 1996.
45. "Role of free radicals in manganese-induced neurotoxicity" Institute of Occupational Health, University of Brescia, Brescia, Italy, September, 1996.

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47. "Neuroprotective Role of Heat Shock Proteins in MPTP-induced Neurotoxicity" College of Pharmacy, Florida A & M University, Tallahassee, Florida, March, 1997.
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50. "Recent approaches for detection and characterization of Neurotoxicity and use of Transgenic animals in Neurotoxicity Testing" Zeneca Central Toxicology Laboratory, Aldeley Park, Macclesfield, Cheshire, UK, July, 1998.
51. "Neurotoxicity of Methylenedioxymethamphetamine (MDMA, Ecstasy)" Department of Pharmacology, The University of Sheffield, The Royal Hallamshire Hospital, Sheffield, UK, July, 1998.
52. "Similarity and Differences in MDMD and d-Fenfluramine-induced Selective Serotonergic Depletion in Rats and Monkey" Department of Pharmacology and Toxicology, University of London, London, UK, July, 1998.
53. "Role of Nitric Oxide and Peroxynitrite in Methamphetamine-induced Neurotoxicity" CNRS, INSERM, Strasbourg, France, July, 1998.
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58. "Pre- and Postnatal exposure to Substituted Amphetamines produces selective Neurobehavioral and Neurochemical Changes in Rats" Section of Behavioral Pathophysiology, Department of F.O.S., Italian Institute of Health, Rome, Italy, August, 1998.
59. "Neurotoxicity of Drugs of Abuse: Pharmacology and Potential treatment of Drug addiction". Department of Pharmacology, Meharry Medical College, Nashville, TN, February, 1999.

60. "Protective role of heat shock proteins in free radical-induced methamphetamine and MPTP neurotoxicity" Duke University Medical Center, Durham, NC, February, 1999.
61. "Role of Nitric Oxide and Peroxynitrite in Methamphetamine-induced Neurotoxicity" College of Pharmacy, Florida A&M University, Tallahassee, Florida, March, 1999.
62. "Neuroprotective role of heat shock proteins in free radical-induced methamphetamine and MPTP neurotoxicity" Institute of Cellular and Molecular Biology, University of Porto Medical School, Porto, Portugal, January, 2000.
63. "Role of Free Radicals in Methamphetamine-induced Dopaminergic Neurotoxicity" Institute of Cellular and Molecular Biology, Faculty of Medicine, University of Buenos Aires, Argentina, August 2001.
64. "Role of Oxidative Stress in Methamphetamine-induced Neurotoxicity" College of Pharmacy, Florida A&M University, Tallahassee, Florida, October, 2001.
65. "Role of Free Radicals in Methamphetamine-induced Dopaminergic Neurotoxicity" Duke University Medical Center, Durham, NC, February 2002,
66. "Oxidative Stress and Methamphetamine-induced Dopaminergic Neurotoxicity" Instituto de Biologia Molecular e Celular, University of Porto, Porto, Portugal, December 2003.
67. "Role of Nitric Oxide in Methamphetamine-induced Dopaminergic Neurotoxicity" Institute of Neuroscience, University of Aveiro, Aveiro, Portugal, December 2003.
68. "Role of Free Radicals in Methamphetamine-induced Dopaminergic Neurotoxicity" Department of Physiology, University of Central Caribe, Bayamon, Puerto Rico, February 2005.
69. "Role of peroxynitrite in methamphetamine-induced dopaminergic neurotoxicity" Presented at the 3rd Annual Meeting of Global College of Neuroprotection and Neuroregeneration, March 1-3, 2005, Uppsala, Sweden.
70. "Nanoparticles: Friends or Foe; Neurotoxicity and Neuroprotection" " Presented at the 3rd Annual Meeting of Global College of Neuroprotection and Neuroregeneration, March 1-3, 2005, Uppsala, Sweden.
71. "Probing alterations of the mitochondrial membrane proteome in a murine model of Parkinson's disease using liquid chromatography-tandem spectrometry" Presented at the FDA Science Forum, April, 27, 2005 in Washington DC.
72. "MPTP Neurotoxicity: Recent Advances" Presented at the 6th Satellite Neurodegenerative Diseases, May 18-19, 2006, Mexico City, Mexico.
73. "Drug Abuse and Neurotoxicity" Presented at the Ground Round in Department of Neurology, University of Arkansas for Medical Sciences, Little Rock, AR June 9, 2006.
74. "Methamphetamine-induced dopaminergic neurotoxicity" Vanderbilt University, Nashville, TN, Feb 2007

75. MPTP-induced Dopaminergic Neurotoxicity: A model of Parkinson's disease" Department of Neurology and Department of Neurosciences, University of Arkansas for Medical Sciences, Little Rock, AR, Feb 2007
76. "Drug Abuse and Neurotoxicity "Department of Chemistry and Biochemistry, University of Arkansas at Fayetteville, Fayetteville, AR March 2007
77. "Role of Free Radicals in Neurodegenerative diseases" Department of Neurology and Department of Neurosciences, University of Arkansas for Medical Sciences, Little Rock, AR, April 2007
78. Nanomaterials-Nanoparticles - An Emerging Field" Department of Biology, ABI, Arkansas State University, Jonesboro, April 2007
79. "Drug of Abuse and Oxidative Stress" University of California Irvine, Irvine, CA, April 2007
80. "Role of Free Radicals in Neurodegenerative Diseases" National Institute of Neurology and Neurosurgery, Mexico, City, Mexico, May 2007.
81. Methamphetamine-induced dopaminergic Neurotoxicity: Role of nitric oxide and peroxynitrite" Institute of Pharmacology and Therapeutics, Faculty of Medicine, University of Coimbra, Portugal, June 2007
82. "Nanotoxicology: What really we know about these nanomaterials" University of California Irvine, Irvine, CA, Sept. 2007
83. "Drug of Abuse and Neurotoxicity" National Institute of Neurology and Neurosurgery, Mexico City, Mexico, October, 2007
84. Presented at the Society for Neuroscience Annual Meeting, November, 2007. San Diego, CA "Methamphetamine dysregulates astrocytes functions, increasing oxidative stress."
85. "Role of Nitric oxide and peroxynitrite in METH-induced dopaminergic neurotoxicity" Departamento de Psychobiological, Facultad de Psicologia, UNED, Madrid, Spain, April, 2008
86. "Role of Free Radicals in Neurodegenerative Diseases" Department of Cellular and Molecular Biology, University of Aveiro, Aveiro, Portugal, July, 2008.
87. Presented at the International Symposium on Drug Abuse, Island of Sao Miguel, Portugal, July 28-29, 2008. " Role of nitric oxide and peroxynitrite in meth-amphetamine -induced dopaminergic neurotoxicity."
88. Presented at the International Symposium on Drug Abuse, Island of Sao Miguel, Portugal, July 28-29, 2008. "Methamphetamine dysregulates astrocytic functions, increasing oxidative stress."
89. Presented at the Society for Neuroscience Annual Meeting, Washington, DC, November 15-19, 2008 "Alterations in blood-brain-barrier function and pathology by morphine and methamphetamine: neuroprotective effects of antioxidant h-290/51."

90. Presented at the 48th Annual Meeting of Society of Toxicology, Baltimore, MD, March 15-19, 2009. "Synthesis, Characterization, and Cytotoxic Effects of Manganese Nanoparticles"
91. Presented at the Experimental Biology meeting, New Orleans, LA, April 18-22, 2009. "Cytotoxic effects of manganese nanoparticles using different solvent system in astrocytes and neuronal cultured cell."
92. Presented at the 2nd Annual International Drug Abuse Research Society (IDARS) & International Society for Neurochemistry Satellite Meeting in association with Korean Society for Drug Abuse Research, Recent Frontiers and Advances in Drug Addiction, August 17-21, 2009. "Age-related changes in the blood-brain barrier by methamphetamine."
93. "Role of Nitric oxide and peroxynitrite in METH-induced dopaminergic neurotoxicity" Catholic University, Santiago, Chile, September 2009
94. "Free Radicals and Nanotoxicology" Society of Free Radical Biology and Medicine meeting held in Santiago, Chile, Also co-chair a session entitled "Nanotoxicology" at the same meeting, Santiago, Chile, September, 2009.,
95. Presented at the Society for Neuroscience Annual Meeting, Chicago, ILL., October 7-21, 2009. "Age-related changes in the blood-brain barrier by methamphetamine"
96. "Role of Free Radicals in Nanotoxicology" Department of Toxicology, College of Pharmacy, University of Porto, Porto, Portugal December 2009
97. "Drug of Abuse, Blood-brain-barrier and Neurotoxicology" Department of Pharmacology and Therapeutic, School of Medicine, University of Coimbra, Portugal, December 2009.
98. "Role of Nitric oxide and peroxynitrite in METH-induced dopaminergic neurotoxicity" SCRIPP Institute, San Diego, CA, January 2010.
99. "Oxidative stress and Nanotoxicology" Interdisciplinary Toxicology Program, Department of Cancer Biology, Duke University Medical Center, Durham, NC, March 2010
100. "Parkinson's Diseases" Department of Biology, ABI, Arkansas State University, Jonesboro, AR, July 2010
101. Istanbul, Turkey
102. Duke Med Ctr, Durham, NC
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