

**BIOGRAPHICAL SKETCH**

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**NAME:** Matthews, Robert**eRA COMMONS USER NAME** (agency login):**POSITION TITLE:** Research Associate Professor & Imaging Specialist**EDUCATION/TRAINING** (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Ursinus College, Collegeville, PA	BS	06/1971	Biology
University of Florida, Gainesville, florida	PHD	06/1978	pharmacology
Univ Texas Southwestern Medical School, Dallas, Texas	Postdoctoral Fellow	06/1980	neuropharmacology
Univ Texas Southwestern Medical School, Dallas, Texas	Postdoctoral Fellow	07/1983	neurophysiology

**A. Personal Statement**

My research interests include discovering molecular and cellular mechanisms that underlie synaptic plasticity. In particular, plasticity that results from stress, repeated exposure to drugs of abuse, high fat diets and their interactions. I use a combination of techniques that include stereotaxic surgery to place tracers, viral vectors and drugs into mice as well as immunohistochemistry, fluorescent in situ hybridization (i.e., RNAscope), wide-field, single and multi-photon confocal and super-resolution fluorescent imaging. I have extensive experience in these techniques including advanced microscopy training as part of my role as a staff member in the Vanderbilt Cell Imaging Shared Resource core facility. I also collaborate with other investigators on projects where my expertise in optogenetics and whole tissue clearing techniques (i.e., CLARITY) benefit ongoing research in energy metabolism, aging of the nervous system and diabetes.

**B. Positions and Honors****Positions and Employment**

1973 - 1973	Junior Pharmacologist, W. H. Rorer Inc., Fort Washington, PA
1983 - 1991	Assistant Professor, Depart. of Anatomy, Texas A&M University, College of Medicine, TX
1991 - 1996	Assistant Professor, Depart. of Anatomy & Cell Biology, Meharry Medical College, Nashville, TN
1996 - 2001	Assistant Professor, Depart. of Anatomy & Physiology, Meharry Medical College, Nashville, TN
2001 - 2005	Associate Professor, Depart. of Anatomy & Physiology, Meharry Medical College, Nashville, TN
2005 -	Research Associate Professor & Imaging Specialist, Dept. Molecular Physiology & Biophysics, Vanderbilt Univ., Nashville, TN

**Other Experience and Professional Memberships**

1971 - 1973	technician, Histological Enterprises, Ambler, PA
1979 -	Member, Society for Neuroscience

1980 - Member, AAAS  
1984 - 1987 Secretary/Treasurer , TAMU Chapter of the Society for Neuroscience  
1985 - 1987 Member, New York Academy of Sciences  
1988 - 1991 Councilor, TAMU Chapter of the Society for Neuroscience  
1990 - 1990 Visiting Associate Professor, Depart. of Anatomy, Ponce School of Medicine, Ponce, Puerto Rico  
1991 - 1991 Ad Hoc Reviewer, NIMH Small Grant Program  
1991 - 2004 Course director of Medical Neuroscience, Meharry Medical College  
1992 - 1996 Ad Hoc Reviewer, Swiss National Science Foundation  
2002 - 2004 Visiting Associate Professor, Dept. Mol. Physiol. & Biophys., Vanderbilt Univ.

## **Honors**

1990 Teaching Award, Texas A&M University, College of Medicine

## **C. Contribution to Science**

Complete List of Published Work in My Bibliography:

<http://www.ncbi.nlm.nih.gov/myncbi/robert.mattthews.1/bibliography/43695569/public/?sort=date&direction=ascending>

## **D. Research Support**

### **Ongoing Research Support**

DK70332-11, NIH 2014/04/01-2019/03/31  
Cone, Roger (PI)  
Allosteric modulators of MC4R signaling  
Role: OP

1R21 MH103950-10, NIH 2014/04/01-2016/03/31  
Winder, Danny (PI)  
BNST Glur2B and CRF signaling in the antidepressant actions of ketamine  
Role: KP

### **Completed Research Support**

5R01 AA19455-01A1:4 , NIH 2010/07/01-2015/04/30  
Winder, Danny (PI)  
Alcohol action on extended amygdala synapses  
Role: KP

5R01 DA19112-06A1:10 , NIH 2010/04/01-2015/03/31  
Winder, Danny (PI)  
Noradrenergic Regulation in the BNST  
Role: KP