NAME: Nilesh S. Tannu MD, MS

PRESENT TITLE: Assistant Professor

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HOSPITAL APPOINTMENTS: UT Physicians at Cinco Ranch and Sienna Village; Harris Health Outpatient Center; Memorial Hermann Hospital and LBJ Hospital ER.

LICENSURE: Texas

CERTIFICATION: The American Board of Psychiatry and Neurology

# **Education**

(1) <b>Psychiatry Residency</b> The University of Texas Medical School at Houston	07/2011-08/2015
(2) <b>Master of Science (Biomedical Engineering)</b> University of Tennessee Health Science Center (UTHSC): Memphis, TN	01/2001-05/2003
<ul> <li>(3) Bachelor of Medicine and Surgery (M.B.B.S.)</li> <li>(Five and half years Graduate M.D. Program)</li> <li>B. J. Medical College (BJMC), India. BJMC is ranked as among the top ten medical schoo</li> </ul>	08/1992-02/1998 ls in India.
Honors/Awards	
(1) <b>Chief Resident of Psychiatry</b> The University of Texas Medical School at Houston Department of Psychiatry and Behavioral Sciences	07/2014- 07/2015

(2) <b>Most Outstanding Psychiatry Resident Research Award</b> The University of Texas Medical School at Houston Department of Psychiatry and Behavioral Sciences	07/2014- 07/2015	
(3) <b>Society of Biological Psychiatry's 2014 Domestic Travel Fellowship Award</b> To attend 69 <sup>th</sup> annual scientific meeting, May 8-10, 2014 in New York, NY	05/2014	
(4) <b>American Academy of Addiction Psychiatry's (AAAP) 2013 Travel Scholarships</b> 12/2013 To attend the 24th Annual Meeting and Symposium on December 5-8, 2013 in Scottsdale, Arizona.		
<ul> <li>(5) Janssen Resident Psychiatric Scholar Award: Awarded by the American Psychiatric Institute for Research and Education.</li> <li>Travel Award: To attend American Psychiatry Association 2013 Annual Meeting- \$ 1250.00</li> <li>Research Award: To help conduct the research project "Proteomic analyses of rodents chronically administered cocaine and the peroxisome proliferator activated receptors- γ agonist, pioglitazone"- \$ 2500.00</li> </ul>		
(6) <b>Research Track Psychiatry Resident PGY3 and PGY4</b> The University of Texas Medical School at Houston Department of Psychiatry and Behavioral Sciences	07/2013- 07/2015	
(7) <b>Most Outstanding PGY2 Psychiatry Resident</b> The University of Texas Medical School at Houston Department of Psychiatry and Behavioral Sciences	07/2012- 07/2013	
Work Experience		
(1) <b>UTHealth, The University of Texas Medical School at Houston</b> Assistant Professor, Department of Psychiatry and Behavioral Sciences	08/2015 - Current	
<ul> <li>(2) Wake Forest University School of Medicine, North Carolina Research Assistant with Dr. Scott E. Hemby Research Projects <ol> <li>The Center for Neurobiology of Addiction Treatment.</li> <li>Molecular fingerprint of cocaine abuse analysis.</li> <li>Molecular fingerprint of schizophrenia and antipsychotic drugs.</li> <li>Molecular signature of cocaine addiction and abstinence.</li> </ol> </li> </ul>	02/2004-06/2011	
(3) <b>University of Tennessee Health Science Center, Memphis</b> Post Doctoral Fellow with Dr. Rajendra S. Raghow Post translational modification proteomic analysis of C2C12 cells undergoing myogenic	05/2003 - 02/2004 differentiation <i>in vitro</i> .	
(4) <b>University of Tennessee Health Science Center, Memphis</b> Graduate Research Assistant, Dr. Rajendra S Raghow A comprehensive proteomic analysis of C2C12 cells undergoing myogenic differentiatic	01/2001 - 05/2003 on <i>in vitro</i> .	

#### (5) **B.J. Medical College, India**

Clinical Research Fellow with Dr. Balasaheb B. Ghongane Captopril/losartan-enhanced renal scintigraphy in the diagnosis of reno-vascular hypertension.

### **Other Experience and Professional Membership**

(1) Editorial Board Journal- BMC Genomics Journal- Proteomics Insights, New Zealand	2016- Current 2008- 2012
(2) Manuscript Referee Journal- Proteomics, Germany Journal of Proteome Research, U.S.A. Neuropsychopharmacology, U.S.A Expert Reviews, UK BMC Genomics, UK	2007- 2010 2008- 2010 2008- 2010 2008- 2010 2010- 2011
(3) Investigator: Yale/NIDA Neuroproteomics Center.	06/2013- 05/2014
(4) Educational Committee Member Residency Training Committee Class Representative: PGY 1, PGY 2, PGY 3 and PGY4 University of Texas Medical School at Houston	07/2011- 07/2015
<b>(5) Educational Activities</b> University of Texas Medical School at Houston <b>Resident Coordinator:</b> Senior Resident Journal Club and Advanced Psychopharmacolog	y. 2013- 2014
<ul> <li>(6) Professional Societies Member:</li> <li>American Psychiatric Association.</li> <li>American Academy of Addiction Psychiatry</li> <li>Society of Biological Psychiatry</li> <li>Texas Medical Association.</li> <li>Houston Psychiatry Society</li> <li>The Society for Neuroscience</li> <li>The College on Problems of Drug Dependence</li> <li>American Society for Mass Spectrometry Conference</li> </ul>	09/2011- Current 10/2013- Current 01/2014- Current 07/2011- Current 07/2011- Current 07/2006- 12/2010 2006- 2007 2004 and 2009

### **Publications**

(1) **Tannu NS** and Saunders A. Teenager threatens to jump off the school building: case report. <u>Manuscript to</u> <u>be submitted to 'Psychiatric Annals'</u>.

(2) **Tannu NS** and Scott E. Hemby. Proteome analysis of superior temporal gyrus in schizophrenics demonstrates disease specific changes. *Manuscript in preparation*.

(3)**Tannu NS**, Gajwani P, Green C, Herrera J, Khader KM, Lane SD, Ponnada PA, Schmitz JM. Proteomics and DTI Tractography Analyses for Evaluation PPAR-Gamma Agonist Treatment for Cocaine Dependence. <u>Manuscript</u> <u>in preparation</u>.

(4) Tannu NS. Biomarkers in Psychopharmacology: The Present and Future. <u>The American Journal of</u> <u>Psychiatry, The Residents Journal.</u> 2014 July; 9 (7): 6.

(5) **Tannu NS** and Okusaga O. Sudden onset behavioral disturbance in a woman with no prior psychiatric or medical history. *Psychiatric Annals.* 2014 April; 44 (4): 175-177.

(6) Bough KJ, Amur S, Lao G, Hemby SE, **Tannu NS**, Kampman KM, Schmitz JM, Martinez D, Merchant KM, Green C, Sharma J, Dougherty AH, Moeller FG. Biomarkers for The Development of New Medications for Cocaine Dependence. *Neuropsychopharmacology*. 2014 Jan; 39(1):202-19.

(7) **Tannu NS,** Leonard Howell and Scott E. Hemby. Integrative proteomic analysis of the nucleus accumbens in rhesus monkeys following cocaine self-administration. *Molecular Psychiatry*.2010 Feb;15(2):185-203.

(8) Scott E. Hembyand **Tannu NS.**Synaptic proteome of the hippocampal formation in rhesus monkeys. <u>Journal</u> <u>of Neurochemistry.</u>2009 Mar; 108 (Suppl. 1); 80-80.

(9) **Tannu NS,** Leonard Howelland Scott E. Hemby. De novo sequence analysis of nucleus accumbens cytosolic fraction from MacacaMulatta. *BMC Genomics*.2007 Aug 8; 8: 270.

(10) **Tannu NS**, Deborah Mash and Scott E. Hemby. Cytosolic proteomic alterations in nucleus accumbens of cocaine overdose victims. *Molecular Psychiatry*. 2007 Jan; 12(1):55-73; 2006 Oct 31.

(11) Hemby SE, **Tannu NS**, Mash DC. Quantitative proteomic profiling of cocaine's effects in the primate brain. *Neuropsychopharmacology*.2006 Dec; 31 (Suppl. 1); S205-S205.

(12) **Tannu NS** and Scott E. Hemby. Two-dimensional fluorescence difference gel electrophoresis for comparative proteomics profiling. *Nature Protocols*. 2006 Nov' 16; 1(4): 1732-1742.

(13) **Tannu NS**, Brambila G, Kirby P, Andacht T. Effect of staining reagent on peptide mass fingerprinting from in-gel trypsin digestions: A comparison of SYPRO Ruby and Deep Purple. *Electrophoresis.* 2006 June; 27(15): 3136-3143.

(14) **Tannu NS** and Scott E. Hemby. Quantitation in two dimensional fluorescence difference gel electrophoresis (2DIGE): effect of protein fixation. *Electrophoresis*. 2006 May; 27(10): 2011-2015.

(15) **Tannu NS**, Rao VK, Chaudhary RM, Giorgianni F, Saeed AE, Gao Y, Raghow R. Comparative proteomes of the proliferating C2C12 myoblasts and fully differentiated myotubes reveal the complexity of the skeletal muscle differentiation program. *Molecular and Cellular Proteomics*. 2004 Nov; 3(11):1065-82.

(16) **Tannu NS**, Wu J, Rao VK, Gadgil HS, Pabst MJ, Gerling IC, Raghow R. Paraffin-wax-coated plates as matrixassisted laser desorption/ionization sample support for high-throughput identification of proteins by peptide mass fingerprinting. <u>*Analytical Biochemistry*</u>. 2004 Apr 15; 327(2):222-32.

# **Book Chapters**

(1) Scott E. Hemby, Wendy J. Lynch and **Nilesh S. Tannu**. Novel Methodologies: Proteomic Approaches in Substance Abuse Research. <u>*Addiction Medicine*</u>, Johnson Bankole A. (Ed.), 2010,Springer Science. **ISBN:** 978-1-4419-0337-2.

(2) Scott E. Hemby and **Tannu NS**. Modeling substance abuse for applications in proteomics. <u>Neuroproteomics</u>, Ottens Andrew K, Wang Kevin K.W. (Eds.)2009;Vol (566):69-83, Springer Science. **ISBN:** 978-1-934115-84-8.

(3) **Tannu NS** and Scott E. Hemby. Methods for proteomics in neuroscience. *Functional Genomics and Proteomics, in the Clinical Neurosciences*(*Progress in Brain Research*), 2006; 158:41-82. **ISBN:**10: 0-444-51853-3.

(4)**Tannu NS**, Rao VK and Raghow RS. Cellular and Molecular Paradigms of Myogenesis. <u>*Recent Research*</u> <u>*Developments in Molecular Biology*</u>, 1(2003): 73-95 **ISBN:** 81-271-0032-3.

# **Conferences and Workshops**

(1) **Tannu NS**, Gajwani P, Green C, Herrera J, Khader KM, Lane SD, Ponnada PA, Schmitz JM. Society of Biological Psychiatry's 69th annual scientific meeting, May 8-10, 2014 in New York, NY **Poster Presentation:** Proteomics and DTI Tractography Analyses for Evaluation PPAR-Gamma Agonist Treatment for Cocaine Dependence.

(2) Tannu NS, Gajwani P, Green C, Herrera J, Khader KM, Lane SD, Ponnada PA, Schmitz JM. American Psychiatric Association Annual Meeting, May 3-8, 2014 in New York, NY Poster Presentation: Proteomics and DTI Tractography Analyses for Evaulating PPARγ Agonist Treatment for Cocaine Dependence.

(3) **Tannu NS** and Okusaga O. Texas Society of Psychiatric Physicians 57th Annual Convention & Scientific Program. November 8-10, 2013; Houston, TX.

**Poster Presentation:** De Novo Catatonia: Response to Combination of Lorazepam and Risperidone: A Case Report.

(4) **Tannu NS** and Okusaga O. American Psychiatric Association Annual Meeting 2013. May 18-22, 2013; San Francisco, CA.

**Poster Presentation:** De Novo Catatonia: Response to Combination of Lorazepam and Risperidone: A Case Report.

(5) Pattison L P, **Tannu NS**, McIntosh S, Grigg AL, Hemby SE. US HUPO. March 4-7, 2012; San Francisco, CA. **Oral Presentation:** Membrane Proteomic Analysis of Rat Nucleus Accumbens following Self-administration of Cocaine, Heroin and Cocaine/Heroin, "Speedball," Combinations.

(6) Pattison L P, **Tannu NS**, McIntosh S, Grigg AL, Hemby SE. The Society of Neuroscience. Nov 12 - 16, 2011; Washington, DC.

**Poster Presentation:** Membrane proteomics of rat nucleus accumbens following chronic self-administration of cocaine, heroin and cocaine/heroin combinations.

(7) **Tannu NS**, Sun S, Pintal R; Arnold SE, Hemby SE. The Society of Neuroscience. Nov 13 - 17, 2010; San Diego, CA.

Nano Symposium: Membrane proteomics of superior temporal gyrus in schizophrenia.

(8) Tannu NS, **Hemby SE**, Borgmann-Winter K. The Society of Neuroscience. Nov 13 - 17, 2010; San Diego, CA. **Nano Symposium:** Membrane proteomics of superior temporal gyrus in schizophrenia.

(9) **Tannu NS**, Sun S, Pintal R; Arnold SE, Hemby SE. The Society of Neuroscience.Oct 17 - 21, 2009; Chicago, IL. **Poster Presentation:** Analysis of membrane proteome in superior temporal gyrus of schizophrenics and antipsychotic treated non-human primates.

(10) Tannu NS, **Sun S**, Pintal R; Arnold SE, Hemby SE. HUPO 8th Annual World Congress. Sep26 – 30, 2009; Toronto, Canada.

**Poster Presentation:** Proteome signature of superior temporal gyrusand effects of anti-psychotic drug treatment in non-human primates.

 (11) Tannu NS, Sun S, Pintal R; Arnold SE, Hemby SE. 57th American Society for Mass Spectrometry Conference. May 31 - June 4, 2009; Pennsylvania Convention Center, Philadelphia, PA.
 Poster Presentation: Proteome analysis of superior temporal gyrus in schizophrenics and non-human primates treated with anti-psychotics demonstrate disease and drug specific changes.

(12) **Tannu NS**, Hemby SE. The Society of Neuroscience Nov' 15-19, 2008; Washington, DC. **Poster Presentation:** Synaptic proteome of entorhinal cortex in rhesus monkeys.

(13) **Tannu NS.** 9th Annual Wake Forest / Emory Lab Exchange, September 19, 2008. **Oral Presentation:** Proteomics insight into the neuro-pathology of cocaine addiction.

(14) **S.E. Hemby**, **NS. Tannu**, D.C. Mash, L.L. Howell. Quantitative proteomic profiling of cocaine's effect in the primate brain. American College of Neuropsychopharmacology, Dec' 3-7 2006, Hollywood, FL.

(15) **Tannu NS**, Leonard Howell, Deborah Mash and Scott Hemby. The Society of Neuroscience, Oct' 14-18, 2006, Atlanta, GA.

**Poster Presentation:** Proteome and phospho-proteome of cocaine abuse in human and non-human primates.

(16)**Tannu NS,** Leonard Howell, Deborah Mash and Scott Hemby. The College on Problems of Drug Dependence, June 17-22 2006; Scottsdale, AZ.

**Oral Presentation:** Proteomics based analysis of cocaine addiction.

Attend: 2006 NIDA Grant Writing Workshop at CPDD.

(17) **Tannu NS**. Attend. Applications workshop series for chromatography professionals; Life science applications for pharmaceutical and biotechnology.Dionex Corporation. September 2005, Greensboro, NC.

(18) **Tannu NS**, Brambila G, Kirby P, Andacht T. Association of Biomolecular Resources Facilities, Feb' 5-8 2005; Savannah, GA.

**Poster Presentation:** Effect of staining reagent on peptide mass fingerprinting from in-gel trypsin digestions: A comparison of SYPRO Ruby and Deep Purple.

(19) Brambila G, **Tannu NS**, Kirby P, Andacht T. Association of Biomolecular Resources Facilities, Feb' 5-8 2005; Savannah, GA.

**Poster Presentation:** Factors influencing the quality of peptide mass fingerprints.

(20) Tannu NS and **Raghow R.** Cellular and Molecular Basis of Regeneration. 18 - 23 September 2004; San Feliu de Guixols, Spain

**Oral Presentation:** Comparative proteomes of the proliferating C2C12 myoblasts and fully differentiated myotubes reveal the complexity of the skeletal muscle differentiation program.

(21) **Tannu NS.**52th ASMS Conference on Mass Spectrometry. 22-27 May 2004. Nashville, TN. Attend Short Course: Practical applications of LC-MS/MS.

(22) **Tannu NS**, Rao VK, Chaudhary RM, Raghow R. FASEB summer research conferences, skeletal muscle satellite and stem cells at Tucson, AZ (July 2003).

**Poster Presentation:** A comprehensive proteomic analysis of C2C12 cells undergoing myogenic differentiation *in vitro*.

(23) **Tannu NS**, Rao VK, Chaudhary RM, **Raghow R.** University of Tennessee-Oak Ridge National Lab. Bioinformatics summit, at Fall Creek Falls State Park, TN (March 2003). **Oral and Poster Presentation:** Comparative proteomes of C2C12 myoblasts and myotubes.

(24) **Tannu NS**, Rao VK, Chaudhary RM, Raghow R. The 3<sup>rd</sup> International symposium on Current Technologies for Gene Expression Analysis, at Vanderbilt Nashville, TN (Oct'2002) **Poster Presentation:** Proteomics analysis of C2C12 cells undergoing myogenesis.

(25) **Tannu NS**, Chaudhary RM, Rao VK, Raghow R. 5<sup>th</sup> Tennessee Conference on Biomedical Engineering in conjunction with the 3<sup>rd</sup> Western Region Conference of the Tennessee Biotechnology Association, at St. Jude Children's Research Hospital (Apr'2002)

**Oral Presentation:** Evaluating quantitation of proteins from 2D-PAGE as analyzed by PDQuest.