

UNTHSC Newsroom – Research:

UNT System honors scientist who conducts drug studies By Jan Jarvis

One drug treats hospital-acquired bacterial pneumonia. Another treats complicated intra-abdominal infections. And a third treats skin infections. These are among the many drugs that Jerry Simecka, PhD, has evaluated as part of the discovery process since establishing the Pre-Clinical Services group at UNT Health Science Center a decade ago. The successful [Read More »](#)

Understanding why and when young people drink alcohol By Sally Crocker

Two UNT Health Science Center researchers plan to get inside the minds of teens and young adults to learn what influences them to drink and when they are most apt to use alcohol. Melissa A. Lewis, PhD, Professor, Health Behavior and Health Systems, is leading the study, along with Dana M. Litt, PhD, [Read More »](#)

The doctors and the dancers By Jan Jarvis

During a break from rehearsals for “Cinderella,” Celeste Gaiera stood still as 37 reflective markers were taped to her torso, legs and head. Then, looking more like a sci-fi character than a ballet dancer, she practiced plies – a familiar ballet step – as six motion capture cameras recorded her every move. [Read More »](#)

Study: Private hospital rooms lower risk of infections By Sally Crocker

Private hospital rooms may save lives by reducing the risk of a dangerous type of hospital-acquired infection, according to UNT Health Science Center researchers in a new study published in PLOS ONE. Liam O’Neill, PhD, Associate Professor of Health Behavior and Health Systems at the UNTHSC School of Public Health, [Read More »](#)

Research for the long haul By Jan Jarvis

Scientific breakthroughs once belonged to the young. Or at least that’s what Einstein must have thought when he said that unless a scientist has made a great contribution before the age of 30, he never will. Time, however, has proven him wrong. [Read More »](#)

Researchers will use smartphone app to improve alcohol treatment By Sally Crocker

Researchers from UNT Health Science Center and the University of Oklahoma Health Sciences Center (OUHSC) have been awarded a two-year, \$650,000 National Institutes of Health (NIH) grant to develop and test a novel smartphone-based alcohol treatment for homeless adults. Scott Walters, PhD, Professor and Chair of Health Behavior and Health Systems [Read More »](#)

Relieving the pain of peripheral arterial disease By Jan Jarvis

For someone with peripheral arterial disease – a condition that causes narrowing of arteries in the limbs – pain is a big problem. “The treatment for it is exercise,” said Eric Gonzales, PhD, Associate Professor in the Department of Medical Education in the TCU and UNTHSC School of Medicine, [Read More »](#)

A blood test that IDs Alzheimer’s earlier, easier and cheaper By Jan Jarvis

The first study of a blood test to detect Alzheimer’s disease within a primary care setting soon will be conducted at UNT Health Science Center. The simple test could be a game-changer in the diagnosis of early Alzheimer’s. [Read More »](#)

Notable Collaborations:

Investigators Conduct a National Study of Non-Drug Therapies to Prevent Chronic Back Pain conceived at UNTHSC. The concept for this 14 million NIH funded study was originally developed by Dr. John C. Licciardone as an extension of the OSTEOPATHIC Trial, which was previously funded by NIH and conducted at UNTHSC to assess the efficacy of spinal manipulation in treating chronic low back pain. Research collaborators include leading experts in the field of low back pain research at the University of Minnesota, University of Pittsburgh, University of Washington, Duke University, and Oregon Health and Sciences University.

Lewis Rudin Glaucoma Prize by the New York Academy of Medicine. A [PNAS manuscript](#) published last year (attached) as part of a collaboration between the University of Iowa (UI) and NTERI was selected to receive the Lewis Rudin Glaucoma Prize by the New York Academy of Medicine. This \$50,000 prize is awarded for the most outstanding scholarly article on glaucoma published in a peer-reviewed journal during the previous calendar year. This collaboration involved UNTHSC alum, Ankur Jain (1st author and current postdoc at UI), Drs. Gulab Zode and Abe Clark (UNTHSC) and a close colleague Val Sheffield (UI, senior author). The Lewis Rudin Glaucoma Prize of The New York Academy of Medicine was established in 1995 in honor of Lewis Rudin, the New York City real estate developer, and is funded by the May and Samuel Rudin Family Foundation with additional support provided by Mr. Jack Rudin.

- Ankur Jain, Gulab Zode, et al. [CRISPR-Cas9–based treatment of myocilin-associated glaucoma](#). PNAS October 2, 2017. 201706193; published ahead of print October 2, 2017. <https://doi.org/10.1073/pnas.1706193114>

Recent Publications:

1. Gatchel RJ et al. [Research Agenda for the Prevention of Pain and Its Impact: Report of the Work Group on the Prevention of Acute and Chronic Pain of the Federal Pain Research Strategy](#). J Pain. 2018 Aug;19(8):837-851. doi: 10.1016/j.jpain.2018.02.015.
2. Borejdo J et al. [Surface plasmon-assisted microscope](#). Biomed Opt. 2018 Jun;23(6):1-4. doi: 10.1117/1.JBO.23.6.060502.
3. Kasetti RB et al. [Transforming growth factor \$\beta\$ 2 \(TGF \$\beta\$ 2\) signaling plays a key role in glucocorticoid-induced ocular hypertension](#). J Biol Chem. 2018 Jun 22;293(25):9854-9868. doi: 10.1074/jbc.RA118.002540. Epub 2018 May 9.
4. Hodges, S.L., Reynolds, C.D., Smith, G.D., Jefferson, T.S., Gao, N., Morrison, J.B., White, J., Nolan, S.O., Lugo, J.N. [Neuronal subset-specific deletion of Pten results in aberrant Wnt signaling and memory impairments](#). (2018) Brain Research, 1699, pp. 100-106. DOI: 10.1016/j.brainres.2018.08.007
5. Liu, Y., Patel, G.C., Mao, W., Clark, A.F. [Establishment of a conditionally immortalized mouse optic nerve astrocyte line](#). (2018) Experimental Eye Research, 176, pp. 188-195. DOI: 10.1016/j.exer.2018.07.011
6. Butler, J.M., Kline, M.C., Coble, M.D. [NIST interlaboratory studies involving DNA mixtures \(MIX05 and MIX13\): Variation observed and lessons learned](#). (2018) Forensic Science International: Genetics, 37, pp. 81-94. DOI: 10.1016/j.fsigen.2018.07.024
7. Joshi, C.R., Raghavan, V., Vijayaraghavalu, S., Gao, Y., Saraswathy, M., Labhasetwar, V., Ghorpade, A. [Reaching for the Stars in the Brain: Polymer-Mediated Gene Delivery to Human Astrocytes](#)(2018) Molecular Therapy - Nucleic Acids, 12, pp. 645-657. DOI: 10.1016/j.omtn.2018.06.009
8. Hodges, S.L., Reynolds, C.D., Smith, G.D., Jefferson, T.S., Nolan, S.O., Lugo, J.N. [Molecular interplay between hyperactive mammalian target of rapamycin signaling and Alzheimer's disease neuropathology in the NS-Pten knockout mouse model](#). (2018) NeuroReport, 29 (13), pp. 1109-1113. DOI: 10.1097/WNR.0000000000001081
9. Fan, Y., Zhang, W., Ni, A., Mahato, B., Chavala, S.H. [Inhibition of Noncanonical Murine Double Minute 2 Homolog Abrogates Ocular Inflammation through NF- \$\kappa\$ B Suppression](#).(2018) American Journal of Pathology, 188 (9), pp. 2087-2096. DOI: 10.1016/j.ajpath.2018.05.017

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11. Mallet, R.T., Manukhina, E.B., Ruelas, S.S., Caffrey, J.L., Downey, H.F. Cardioprotection by intermittent hypoxia conditioning: Evidence, mechanisms, and therapeutic potential. (2018) *American Journal of Physiology - Heart and Circulatory Physiology*, 315 (2), pp. H216-H232. DOI:10.1152/ajpheart.00060.2018
12. Bailey, J., Brock, R., George-Williams, S., Johnson, L.F., Holmes, R., Scaff, C.H. Career progression for librarians and archivists without faculty status: A new model. (2018) *Library Leadership and Management*, 32 (4), .
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16. Tao, M.-H., Chen, S., Freudenheim, J.L., Cauley, J.A., Johnson, K.C., Mai, X., Sarto, G.E., Wakelee, H., Boffetta, P., Wactawski-Wende, J. Oral bisphosphonate use and lung cancer incidence among postmenopausal women. (2018) *Annals of Oncology*, 29 (6), pp. 1476-1485. DOI: 10.1093/annonc/mdy097
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18. Jacobson, M.K., Jacobson, E.L. Vitamin B3 in health and disease: Toward the second century of discovery. (2018) *Methods in Molecular Biology*, 1813, pp. 3-8. DOI: 10.1007/978-1-4939-8588-3_1
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23. Gouloupoulou, S. Calpain a novel mediator of MPO (myeloperoxidase)-induced endothelial dysfunction. (2018) Hypertension, 71 (4), pp. 574-576. DOI: 10.1161/HYPERTENSIONAHA.118.10441

Articles In press:

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25. Ann-Yi, S., Bruera, E., Wu, J., Liu, D.D., Agosta, M., Williams, J.L., Balankari, V.R., Carmack, C.L. Characteristics and Outcomes of Psychology Referrals in Palliative Care Department. (2018) Journal of Pain and Symptom Management, . Article in Press. DOI: 10.1016/j.jpainsymman.2018.05.022
26. Hamby, T., Kunnel, N., Dallas, J.S., Wilson, D.P. Maternal iodine excess: An uncommon cause of acquired neonatal hypothyroidism. (2018) Journal of Pediatric Endocrinology and Metabolism, . Article in Press. DOI: 10.1515/jpem-2018-0138
27. Salvatore, M.F., McInnis, T.R., Cantu, M.A., Apple, D.M., Pruett, B.S. Tyrosine Hydroxylase Inhibition in Substantia Nigra Decreases Movement Frequency. (2018) Molecular Neurobiology, . Article in Press. DOI: 10.1007/s12035-018-1256-9
28. Ramsey, J., Driver, S., Swank, C., Bennett, M., Dubiel, R. Physical activity intensity of patient's with traumatic brain injury during inpatient rehabilitation. (2018) Brain Injury, . Article in Press. DOI: 10.1080/02699052.2018.1500715
29. Ramanathan, M.R., Howell, C.K., Sanders, J.M. Drugs in Tuberculosis and Leprosy. (2018) Side Effects of Drugs Annual, . Article in Press. DOI: 10.1016/bs.seda.2018.06.014

Notable Honors:

Dr. Yu-Chieh (Jack) Wang, Assistant Professor in the department of pharmaceutical sciences was invited to present a brief talk and highlight his exciting research in the developmental abnormalities and pathogenesis caused by the dysregulation of protein deglycosylation at the 2018 NIH FDA Glycoscience Research Day Conference at the Natcher Conference Center, NIH campus, Bethesda, MD. The participants of this research conference include several well-known senior investigators in glycobiology fields, the FDA and program officials of the National Institute of General Medical Sciences who manage the relevant research. This invited talk demonstrates the value and excellence of research activities in Dr. Wang's at the Department of Pharmaceutical Sciences.

National distinguished service award honors outstanding leadership in research administration

Robyn Remotigue has spent more than 20 years in the field of research administration, using her background, talents and enthusiasm since 2013 to develop the Office of Research Services for the UNTHSC School of Public Health (SPH).

The items compiled to celebrate research achievements and promote collaboration are compiled from responses to the last VPR letter, Daily News & email requests and Scopus. If you have anything that to be celebrated please email ResearchRelations@unthsc.edu.