Our Mission
To develop solutions for the prevention and cure of alcoholism and related illnesses.

Graduate Students Develop Drug Education Outreach Program

Three Waggoner Center graduate students are going “back to school” with a drug education outreach program for local middle- and high-school students.

Roberto Cofresí (Gonzales Lab), Adam Gordon (Marinelli Lab) and Anna Warden (Harris Lab), with help from teachers Janaye Pierce, Ricki Harrell and Ati Wongsaroj at Webb Middle School, and Jon Smith and Jane Smythe from Travis High School, developed an interactive lesson that’s integrated into a science class unit.

The lesson “engages teens and pre-teens on the issue of addiction and other health risks associated with alcohol and drug use including unique risks in adolescence,” said Confresi. He and his colleagues hope that “education provided around the time drug use is often initiated will empower adolescents to make healthier alcohol and drug use-related choices including minimizing use or delaying use until adulthood.”

In contrast to previous failed drug outreach programs in public schools that employed scare tactics, this neuroscience program uses a harm reduction strategy, where students are presented with scientific evidence of drug-induced effects that lead to addictive behaviors. Students also learn about the environmental and genetic factors that contribute to drug addiction, including early onset exposure and how this can affect the developing adolescent brain. Students are introduced to the concept of drug-induced neuroadaptations and gain an understanding of how repeated drug use can specifically target the function of brain cells.

The interactive presentation generates lots of questions from students. “Typically, students ask personal questions, such as ‘my mom smokes a lot and she doesn’t think it’s addictive, how do I tell her that it is?’” said Warden. “We do tend to get a lot of questions about drug legality (i.e. why is this drug legal but you say it’s dangerous). This is a point we like to focus on, just because it’s legal doesn’t mean it’s safe. We emphasize that thinking about the mechanism of action of the drug and the short/long term consequences is a better way to gauge if you should take a drug.”

Read more on this innovative program at: https://waggonercenter.utexas.edu/news
HONORS & AWARDS

Dana Most (Harris/Mayfield Labs) received an Early Career Investigator Travel Award to attend the 22nd Society of Neuroimmune Pharmacology Scientific Conference, April 6-9, 2016, in Krakow, Poland. She presented a talk entitled “Manipulation of Synaptic MicroRNAs in-vivo Reduces Alcohol Consumption.”

The College of Pharmacy awarded “Best Poster, Graduate Student” to Shannon Zandy (Gonzales Lab) at the 12th Annual Louis C. Littlefield Celebrating Pharmacy Research Excellence Day on April 26, 2016. Her work was titled “Operant Ethanol Self-administration in Adolescence does not Influence Efficacy of Naltrexone to Reduce Ethanol Intake, Motivation or Relapse.”

Laura Ferguson (Harris Lab) won the Best Poster Award at the 4th Annual Big Data in Biology Symposium held May 11, 2016, in Austin. Ferguson’s poster, “Using LINCS to Find New Drugs for Alcohol Dependence Treatment,” won in the graduate student category.

Jon Pierce was one of six invited plenary session speakers at the 2016 Neuronal Development, Synaptic Function and Behavior C. elegans Topic Meeting in Nagoya, Japan, July 27-30. His keynote talk for the behavioral session was entitled “What Else Can Worms Do?”

FUNDING NEWS

Principal Investigator: Adela Ben-Yakar
Co-investigators: Robert O. Messing, R. Dayne Mayfield, Scott Hunicke-Smith
Project Title: “Single Cell Capture for Transcriptome Analysis of Behavior”
Award Total: $100,000 (one year), Sponsor: UT System Neuroscience and Neurotechnology Research Institute – UT BRAIN Seed Grant

Principal Investigators: Vishwanath Iyer and Jon Pierce
Project Title: “Transgenerational Influence of Alcohol”
Award Total: $50,000 (one year), Sponsor: College of Natural Sciences – Catalyst Grant

Principal Investigator: Igor Ponomarev, Co-investigator: Regina Mangieri (Morissett Lab)
Project Title: “Accumbal Plasticity in Excessive Alcohol Consumption”
Award Total: $155,626 (two years), Sponsor: National Institute on Alcohol Abuse and Alcoholism – R03

Ben Lovely (Eberhart Lab)
Project Title: “Analysis of an Ethanol-Sensitive Pathway Regulating Anterior Craniofacial Development”
Award Total: $192,236 (two years), Sponsor: National Institute on Alcohol Abuse and Alcoholism – K99

National Research Service Awards
Sponsor: National Institute on Alcohol Abuse and Alcoholism – F31:

Laura Ferguson (Harris Lab)
Project Title: “Molecular Mechanisms Underlying Reduction of Alcohol Consumption by PPAR Agonists”, Award Total: $66,240 (two years)

Gizelle Robinson (Harris Lab)
Project Title: “The Role of Microglia and Neuroimmune Signaling in Chronic Ethanol Consumption”, Award Total: $100,728 (three years)

Natasha Pflanz (Mihic Lab)
Project Title: “Molecular Characterization of Benzodiazepine Selectivity: Implications for Drug Discovery and Addiction”, Award Total: $120,481 (three years)

DOCTORAL DEGREES AWARDED

Neil McCarthy, Jul. 20, 2015 (Eberhart Lab)
“Gene-Ethanol Interactions Underlie Craniofacial Variability in a Zebrafish Model of FASD”

Rafael Renteria, Jul. 30, 2015 (Gonzales Lab)
“Synaptic Encoding of in vivo Ethanol Experience”

Jay Truitt, Aug, 12, 2015 (Harris/Mayfield Labs)
“Role of the IKKβ/NF-κB Pathway in Alcoholism”

Claire Stelly, Nov. 18, 2015 (Morikawa Lab)
“Repeated Social Stress Induces Metaplasticity in Ventral Tegmental Area Dopamine Neurons”

John Valenta, Nov. 19, 2015 (Gonzales Lab)
“The Role of Monocyte Chemoattractant Protein-1 on Operant Ethanol Self-Administration in Long-Evans Rats”

Ben Troutwine, Mar. 29, 2016 (Atkinson Lab)
“The Innate Immune System and Alcohol Responses in Drosophila”

Ryan Will, Apr. 13, 2016 (Dominguez Lab)
“The Role of the Preoptic Area in Response to Cocaine”

Dia N. Bagchi, Apr. 28, 2016 (Iyer Lab)
“The Interplay Between Transcription, Histone Variants, and Chromatin Structure in Eukaryotes”

Dana Most, Jun. 22, 2016 (Harris/Mayfield Labs)
“The Role of Synaptic microRNA in Chronic Alcohol Consumption and its Effects on Synaptic Composition”

James Reno, Jul. 18, 2016 (Duvauchelle Lab)
“Negative Affect as the Primary Emotional Component in Animal Models of Alcohol Abuse and Avoidance”
PUBLICATIONS


The Waggoner Center for Alcohol and Addiction Research was established in 1999 at The University of Texas at Austin. The center was made possible by a donation from M. June and J. Virgil Waggoner and matching funds from the university. The mission of the center is to create a premier research center for alcohol and addiction research, thereby developing solutions for the prevention and cure of these diseases.

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**PUBLICATIONS (continued)**


Thakore N, Reno JM, **Gonzales RA**, Schallert T, Bell RL, Maddox WT, **Duvauchelle CL** (2016) Alcohol enhances unprovoked 22-28kHz USVs and suppresses USV mean frequency in High Alcohol Drinking (HAD-1) male rats. Behav Brain Res 302:228-236.


