translational research. Although Ultrasonic Vocalizations (USV) of rodents have been measured since 1954 and studied in detail over the last 25 years, proper applications in new animal models have been hampered by short recoding durations, manual analysis of the recordings and a lack of proper definitions. Metris developed the first software that enables fully automatic classification of Ultrasonic Vocalizations of mice in 15 distinct categories based on spectral properties of the sound. In addition, the software calculates a large number of bio acoustic parameters that can be used to further profile each call and its syllables. Automatic call classification enables detailed analysis of very long recordings and also enables integration with other high throughput systems, allowing true phenotyping. Automatic analysis of Ultrasonic Vocalizations (USV) of rodents is also expected to lead to more standardized and better definitions of the vocalizations. Based on this, larger databases can be built up which are crucial in developing new animal models for investigating complex social behavior and emotional parameters such as pain, stress, anxiety, fear and social defeat.

ETHANOL COMPENSATES THE DECREASE OF SOCIAL INTERACTIONS IN RATS CAUSED BY LEVODOPA+CARBIDOPA. EO Kutcher, AY Egorov and EV Filatova, Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, Department of Psychiatry and Addictions, St. Petersburg State University, St. Petersburg, Russia. **INTRODUCTION:** Alcohol abuse complicate the treatment of patients with mental disorders. Numerous studies using different methods and designs have not clarify the effect of alcohol on emotional-volition disorders and cognitive deficit. This experiment is a continuation of our research of comorbid experimental schizophrenia and alcohol abuse. Administration of Levodopa + Carbidopa (LC) has been shown earlier as a possible pharmacological model of experimental schizophrenia. The effects of ethanol (E) and LC on social interactions, research and drinking behavior in rats we studied. **METHODS:** 80 adult Wistar male rats were included into the study. All animals were divided into four groups: 1) receiving LC, 2) receiving LC and E, 3) receiving E, and 4) receiving water (controls). During three months LC-rats were administered a dose of 300 mg/kg for 5 days followed a 25-day LC-free period. E-rats obtained a 15-% solution of ethanol in the mode of intermittent soldering for three months. LC+E-rats got LC and E like first two groups. After three months, the behavior of rats was estimated in Social interactions test and in the novel object recognition (NOR) test. The alcohol preference was evaluated in the two-bottle-test every two weeks throughout the experiment. **RESULTS AND DISCUSSION:** Isolated administration of LC did not induce the increase of the alcohol preference in rats. The increase of the alcohol preference occurred in LC+E and E groups of animals. The increase of alcohol consumption in the two-bottle-test was demonstrated after the start of soldering. The rats treated with LC sniffed their partner significantly less and did not differ in the number of aggressive interactions from animals of other groups. In LC+E and E-rat social activity was lower than in control animals, but higher than in rats received LC. In NOR test, the animals in all groups did not demonstrate more interest to the new object. However, a research interest was significantly higher in control animals and E-rats. The control and E-animals showed higher locomotor and exploratory activity. Thus, the isolated administration of LC did not increase the ethanol preference in rats, and ethanol preference increased only after the start of alcoholization. While LC administration reduced social activity, ethanol compensated this decrease. LC administration alone or with E reduced motor and exploratory activity of rats vs. E- and control animals. Moreover, these activities did not increase with the co-administration of LC and E, as observed for social interactions. **RESEARCH SUPPORT:** Budget Financing project AAAA-A18-118012290142-9.

ISBS SYMPOSIUM 2: ZUKOWSKA STRESS NEUROSCIENCE SYMPOSIUM

Chairs: VM Klimenko (Russia), BH Harvey (South Africa)

INTRODUCTION: PROFESSOR ZOFIA ZUKOWSKA. Prof. ZOFIA M. ZUKOWSKA (1949-2012) received her M.D. and Ph.D., trained in cardiovascular medicine at the Warsaw Medical Academy (Poland). She pursued post-doctoral training at the NIH, working with such renowned scientists as Irwin Kopin, Scientific Director of NINDS, and Julius Axelrod, a Nobel Laureate. During this research period, her interest in stress and neuropeptides became galvanized. For the 25 years, she was a professor (and, later Chair) of the Department of Physiology and Biophysics at Georgetown University, before moving to the University of Minnesota as the Director of Stress Physiology Center. Her research examined how stress affects cardiovascular and metabolic health and diseases, and the role of peptides, in particular neuropeptide Y (NPY), a sympathetic neurotransmitter and stress mediator. She was the first to determine that NPY mediates stress-induced prolonged vasoconstriction and vascular mitogenic and pro-atherosclerotic effects (via Y1 receptors) and potent angiogenic actions (via Y2 receptors), establishing the role of NPY in ischemia, retinopathy, tumors and obesity. Professor Zukowska (or Zosia, as she was known and admired by many) was a good friend and a strong supporter of the ISBS, serving as a regular plenary speaker at our conferences. Her scientific vision, extraordinary creativity, kindness to colleagues, and the talent to be daring, continue to inspire all her ISBS colleagues and their research. This regular ISBS symposium continues Zofia's scientific legacy in the field of biological psychiatry of stress.

THE DEER MOUSE MODEL OF OBSESSIVE-COMPULSIVE DISORDER (OCD): A PLATFORM FOR RESEARCH IN NEUROBIOLOGY, BEHAVIOR AND DRUG DISCOVERY. BH Harvey, Centre of Excellence for Pharmaceutical Sciences, School of Pharmacy, North-West University, Potchefstroom, North-West Province, South Africa. **INTRODUCTION:** Obsessive-compulsive disorder (OCD) affects 2% of the adult population, inflicting considerable psychosocial morbidity. It is characterized by recurrent thoughts, anxiety and/or purposeless repetitive