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Scientific Management Review Board
National Institute of Health

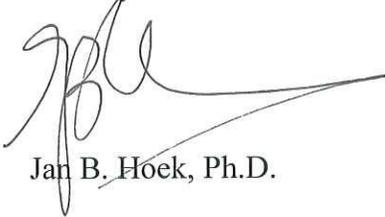
Dear Board Members,

Thank you for the opportunity to present my views on the issue of a merger between NIAAA and NIDA. My name is Jan Hoek. I am a Professor of Pathology, Anatomy and Cell Biology at Thomas Jefferson University in Philadelphia. I am a cell biologist with an interest in cellular metabolism, cell signaling, cellular stress response and cellular systems biology, so very much on the basic science end of the spectrum of people who are addressing you here today. I have been active in alcohol research for over 25 years and received continuous grant support from NIAAA through all those years. I have been a member of the NIAAA National Advisory Council and have been active in various other national organizations that stimulate alcohol research. However, I also receive funding from other NIH institutes, including NIGMS, I have been a member of the NIH Fatty Liver Disease working group and I am on the boards of a number of international Systems Biology research initiatives that are active in hepatology and cancer research.

From a health perspective, alcohol is truly remarkable and different from any other drug. Even with moderate drinking that is tolerated readily, our bodies accumulate alcohol in concentrations higher than almost any other compound (except for water). It is the chronic exposure to high concentrations of alcohol that is responsible for a lot of the organ pathology that is a predominant contributor to the disease burden of alcohol. This pathology is evident in liver, heart, skeletal muscle, pancreas, lung, the immune system, the gut, and even in the brain. None of these organs operates in isolation and the actions of alcohol on liver metabolism directly impact on its effects on the brain, the gut, the immune system and so on. Moreover alcohol affects the susceptibility to a variety of other severe diseases conditions. Very well known is, of course, the impact of chronic alcohol use on the disease progression with hepatitis B and hepatitis C infections. Alcohol is a risk factor for a variety of cancers, including breast cancer. We don't really understand the mechanisms underlying these actions of alcohol, but it is apparent that the public health burden of alcohol abuse is much broader than can be captured under its addictive effects. These systemic alcohol effects can only be understood with a broad based research approach. NIAAA has been a critical player in supporting research that has enabled us to appreciate the systemic nature of alcohol effects.

At Thomas Jefferson University and more broadly in the Delaware Valley region, we have been able to recruit, over the past 25 years, a very interactive group of basic researchers in cell biology, hepatology, biophysics and computational systems biology who have an active interest in studying the impact of alcohol on cell and tissue function. Similar groups exist around the country that have been able to come together almost entirely thanks to the tremendous support that NIAAA has given for the study of basic research into the health effects of alcohol. The goal of all these research efforts is to understand the causes of the functional disruptions, from the molecular and cellular level to the tissue and organism level, that can contribute to this multi-organ alcohol-related pathology. None of these studies could even remotely be captured under the heading of addiction research. If the NIAAA were to be merged with NIDA to form a new institute with a focus on addiction, research support for these critical health effects of alcohol would dwindle. Without grant support for alcohol research the number of researchers who can be recruited to study the cellular and molecular basis of this important health problem will dwindle. This will be a tremendous loss to our nation. For these reasons, I urge you not to support the merger of NIDA and NIAAA.

Thank you.

A handwritten signature in black ink, appearing to read 'J. Hoek', with a long horizontal flourish extending to the right.

Jan B. Hoek, Ph.D.