

## **WNY Center for Research on Flavored Tobacco Products (CRoFT)**

Institution: Roswell Park Comprehensive Cancer Center

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### **Research Project 2: Human thresholds for characterizing flavors and impact on behavior**

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#### Project 2 Abstract:

Flavors play an important role in shaping consumer perceptions of tobacco products. Flavors are extremely common among electronic nicotine delivery system (ENDS) users and are often named as a primary reason for their use. A concern about flavorings in e-liquids is that they could serve to mask negative sensory experiences, but to properly evaluate this hypothesis, objective, reliable, and valid measures of both the sensory effects and the perception of flavor are needed. The *experience* of flavor among users is a combination of olfactory, gustatory, and trigeminal effects. Flavors may also influence expectancies (that is, cognitive representations of likely effects) around tobacco products and expectancies of positive sensory effects of smoking (e.g., look, feel, and taste) are predictive of smoking behavior and willingness to try. However, this integration is difficult to measure and/or quantify. The ***premise*** of this study is that flavors might be related to the phenomenon of 'indirect' toxicity. That is, regardless of whether flavorings show evidence of toxicity in a biological sense, they may nonetheless increase harm by other means, such as increasing appeal, decreasing risk perceptions, or masking harshness or irritation that might lead users to discontinue use. We seek to 1) **Develop expert (trained per industry best practices) and consumer (untrained) sensory panels to identify and assess characterizing flavors in e-liquids;** and 2) **Examine the effects of flavorings on use topography, subjective effects of vaping, and sensory experience** among current ENDS users. FDA has a number of tools at its disposal with regard to flavors, ranging from product standards to extending the ban on characterizing flavors in cigarettes to other products. The decision whether to ban certain flavorants and where to set such maximal levels must be evidence-based and can be informed by both toxicological and behavioral research, such as proposed herein.