Who We Are

The Human Emotions Laboratory at Rutgers, The State University of New Jersey, engages in the scientific study of human emotions. Professor Jeannette Haviland-Jones, Ph.D., founded the Lab in 1992. Dr. Haviland-Jones has been studying human emotions for more than 30 years. She is a charter member of the International Society for Research on Emotion and the author of several books and numerous research articles on emotional processes. Her recent books include *The Genius of Emotion* and the award-winning *Handbook of Emotion, 3rd Ed.*

Over several decades, the Human Emotions Laboratory has produced seminal research on how basic emotions develop across the lifespan. The research includes work on emotion’s role in communication within the family and social groups; what emotions may reveal about personality and motivation; how emotion relates to attention and cognition. Recently, the lab has been working in an exciting new area of research: the ecology of emotion. The ecology of emotion investigates how human emotions and motivation are supported by sensory and environmental events. Our most recent publications focus on human chemo-signals and their ability to induce mood changes in humans.

Research associates and collaborators of the Human Emotions Laboratory include Professor Judith Hudson, Ph.D., Professor Terry McGuire, Ph.D., Professor Patricia Wilson, Ph.D. and John Ackroff, Ph.D. Working together, this team brings expertise in the areas of memory, narrative analysis, sensory perception, cognitive processing, psychophysiology, and behavioral genetics. Presently, there are four doctoral students associated with the lab.

Laboratory investigators in the Human Emotions Laboratory possess the requisite certifications for studying human emotions. These certifications include systems of coding facial expression including both FACS (Facial Affect Coding System) and MAX (Maximal Facial Expression). We utilize standard and internally-developed scales of measurement for subjective self-report of emotion. The lab also employs standard and internally-developed behavioral, projective and cognitive measures, including narrative/content analyses. All laboratory members possess the Human Subject Compliance Certifications. All human research is reviewed by the Institutional Review Board for Human Subjects maintained by Rutgers University.

What We Study

While the Human Emotions Laboratory’s long-term research continues in basic emotion and motivation, we have a new research focus related to the ecology of emotion. We are at the forefront of research related to motivation and environmental odors, fragrances, and human chemo-signals.
Environmental Signals. While the study of fear and its ecology has a long history in psychology, the study of happiness and its ecology is a relatively new phenomenon. With regard to emotions, the Human Emotions Laboratory has discovered that flowers make people happy, just as snakes or looming objects make them afraid. Flowers promote social connections, increasing smiling and proximity even with strangers for men as well as for women. We suggest that flowers and people have co-evolved, with flowers filling a socio-emotional niche that is exploited by people. Floral odors alone support many of these same behaviors. This recent research has implications for the business environment in areas such as contract negotiations and marketing presentations. What is in the air increases attention and focus on positive and creative solutions. This could be a factor for companies that want to be more competitive and have the reputation for being a “top 10” work environment.

Fragrance. One aspect of our recent work concerns the emotional, social, physiological, and cognitive effects of odors. These dynamic processes – aspects of biological systems – may operate beneath consciousness but still affect behavior. Odor/fragrance can be “active,” that is, can function as a biological “search engine.” If the fragrance of happiness is in the air, even if one does not “know” the scent of happy, one will search for happy events and people. If there is nothing that satisfies, then the scent becomes one of many that are automatically screened. If there are matches, the emotional fragrance has primed the search engine that began to organize one’s attention.

Human Chemosignals. The Human Emotions Laboratory developed procedures for collecting and detecting human mood odors for fear, happy, and angry moods. This intriguing line of work shows that humans do emit emotion chemo-signals detectable by other humans. Another interesting aspect of human chemo-signals is that they are below the level of awareness, meaning that although the odor may have no particular, identifiable smell, there are physiological and behavioral changes that take place within the human organism in response to these chemo-signals. This is an exciting area targeted for extensive future research.

The Human Emotions Laboratory recently developed measures for assessing human behavioral reactions to a putative pheromone, androstadienone (AND). Several laboratories have verified AND’s ability to influence women’s mood reports. Our laboratory has demonstrated the behavioral effects of exposure of AND. We infer from these effects that odors and human pheromones are likely to have subtle, broad influences on sensory attention.

Industry Partners

The Human Emotions Laboratory partners with industry. Many of the laboratory’s findings are relevant to applications in education, healthcare, and consumer product development. Acknowledging the importance of good project design and following scientific measurements to achieve meaningful and relevant results, The Human Emotions Laboratory welcomes new partnering opportunities.
Services for Your Projects

The Human Emotions Laboratory has particular expertise in developing highly-specialized tests and measures for emotion and motivation. We are able to provide project management, research study design, data collections, statistical analyses, and presentation of data and findings to academic and commercial audiences. For example, statistical data analyses include, but are not limited to, Z-scores, means and standard deviations, t-tests, independent and dependent samples tests, multiple response analyses, reliability analysis, regression analysis, univariate, bivariate and multivariate correlations, discriminate analysis, factor analysis, cluster analysis, binomial, non-parametric and runs tests, curve and best-fit estimations, and structural equation modeling.

Laboratory associates have relevant experience in academia and industry. With the diverse backgrounds of its associates, it has the intellectual and technical abilities to develop new methods for special projects. The Human Emotions Laboratory provides rigorous research that yields meaningful and tangible results.