Tools and Applications of Sensory and Consumer Science

WHO SHOULD ATTEND
This course has been developed for technical and supervisory personnel involved in all aspects of sensory and consumer research. The concepts covered have valuable applications to product development, quality assurance, marketing, and advertising claims substantiation in consumer product companies.

WHY ATTEND
- Taught by respected leaders in product and concept testing, this course will help you make more efficient, informed and profitable decisions.
- This course has evolved continually over the past two decades and presents the most recent advances in testing methods and models.
- By attending this course, you will learn novel approaches to product and market research that you can easily apply to your own professional challenges.
Difference testing and rating methodologies have helped guide companies through ingredient and process changes for decades. Yet there is no clear consistency in their implementation. For instance…

… Some companies use small internal panels of 10-15 individuals (sometimes trained, sometimes semi-trained), while others use consumers with larger samples sizes.

… Some programs use replicated evaluations while others don’t.

… The triangle and duo-trio methods are the most broadly used discrimination methodologies, but these methods can result in important differences being missed 80% to 90% of the time!

Is there a “correct” approach, and if so, which one is it? Are these methodologies all equivalent in their abilities to provide accurate and actionable information? And most importantly, is there an underlying science that helps us optimize our decision-making process?

By attending this 3-day course, you will:

● Understand why different sensory methodologies can yield different decisions
● Recognize the importance of test instructions
● Explore the tetrad test as a powerful alternative to the triangle test
● Learn to assess and manage risks in product testing decisions
● Develop standards for consumer-relevant sensory differences
● Connect results of internal panel testing to consumer response
● Establish your experiment’s optimal sample size, including potential replications

The course is enhanced by using a corporate scenario in which researchers and management grapple with issues involving test methodology. You will experience, along with the characters in the scenario, how experimental procedures are selected that will best fit your budget and research objectives.

TUESDAY (NOV 3, 8am - 4pm)

Corporate Scenario - Day 1: The story begins with a proposed ingredient change. We follow the product study process starting with conflicting difference tests and then continue as the tetrad test and replicated testing are used.

Topics

♦ Difference and similarity testing: m-AFC, triangle, duo-trio, same-different, degree of difference, and tetrads
♦ Discussion of a theory underlying all sensory evaluation methods
♦ Estimating a measure of sensory difference, d’, from discrimination tests
♦ Proportion of discriminators in the population
♦ Establishing sample sizes for accurate measurements
♦ The tetrad test: A cost-saving alternative to the triangle test
♦ How to correctly analyze data from replicated tests: Beta-binomial models

WEDNESDAY (NOV 4, 8am - 4pm)

Corporate Scenario - Day 2: The story continues as management requests a decision risk analysis of the entire product testing system. See how the team links external data to consumer data to establish consumer relevance.

Topics

♦ The 5 cornerstones of product testing: α, power, sample size, size of the difference and protocol
♦ How a risk management program is implemented at a major food company
♦ Measuring the effect of training
♦ Differential scale usage and getting d’ values from intensity ratings data
♦ Generating a dose response relationship using scale ratings
♦ Establishing an internal sensory program based on a consumer relevant action standard
♦ Memory and sequence effects
♦ Improving discrimination by allowing retasting
♦ Relating trained panel and consumer sensitivities

Register for this course online at www.ifpress.com/short-courses
On Thursday, we explore an area of active research to uncover the drivers of liking of a product category in order to understand consumer needs and expectations. We begin by providing a user-friendly overview of several commonly available analytic techniques (just-about-right scaling, factor analysis, internal and external preference mapping) and compare them in terms of their strengths and weaknesses.

Companies use internal testing for product development and routine quality control, but there is always a need to obtain consumer input to improve the likelihood of product success in the marketplace. There are many methodologies that can be used, but their conclusions will rarely converge. This fact is linked to differences in their respective underlying assumptions.

Landscape Segmentation Analysis® (LSA) will be introduced as a technique that takes into account each consumer’s ideal product profile. We will contrast LSA with the previously mentioned analytical methodologies. Many applications will be discussed such as uncovering a product category’s drivers of liking, finding optimal product portfolios and their sensory profiles, measuring the effect of branding, and accounting for usage occasions. The techniques will be compared using a variety of research and market-based examples.

Corporate Scenario - Day 3: Management continues pressing for greater understanding of how consumers perceive their own and their competitors’ products. Issues of sensory segmentation and portfolio optimization arise and the team is challenged to understand and communicate the benefits of alternative methodologies.

**Topics**
- Mapping hedonic data
- Factor analysis, external preference mapping (EPM)
- Introduction to Landscape Segmentation Analysis® (LSA)
- How to identify Drivers of Liking®
- LSA and internal preference mapping (IPM): the issue of satiety
- Portfolio optimization, product optimal profile predictions
- Segmentation and demographic map ellipses
- EPM on consumer hedonics of low fat cookies
- Using a market appraisal study to find the optimal sensory profile
- Product portfolio optimization and blind-branded LSA
- Applications of Graph Theoretic Analysis (GTA) to find best combinations of items

We interweave an unfolding story with theoretical and applied material to provide participants with a sense of discovery regarding the various tools they encounter. This dual teaching approach has shown itself to be extremely effective at providing participants with a thorough and long-lasting understanding of the course material.

*IFPrograms*™ software will be used to perform analyses demonstrated in the course. You will be introduced to its capabilities and, upon completion of the course, you will receive a complimentary 3-month trial version of *IFPrograms* which is accessible through the internet. For a detailed listing of the software capabilities, please visit [www.ifpress.com/software](http://www.ifpress.com/software). (Note that *IFPrograms* is not required to apply course principles.)
MEET THE INSTRUCTORS

**Dr. Daniel M. Ennis** is the President of The Institute for Perception. Danny has more than 35 years of experience working on product testing theory and applications for consumer products. He has doctorates in food science and mathematical & statistical psychology. He has published extensively on mathematical models for human decision-making and was the first to show that humans possess a transducer in the chemical senses. Danny is a recipient of the *Sensory and Consumer Sciences Achievement Award* from IFT and also the ASTM *David R. Peryam Award* in recognition of “outstanding contributions to the field of basic and applied sensory science.” Danny consults globally and has served as an expert witness in a wide variety of advertising cases.

**Dr. Benoît Rousseau** is Senior Vice President at The Institute for Perception. Benoît received his food engineering degree from AgroParisTech in Paris, France and holds a PhD in sensory science and psychophysics from the University of California, Davis. He has more than 20 years of experience in managing projects in the field of sensory and consumer science, actively working with clients in the US, Asia, Latin America, and Europe. His theoretical and experimental research has led to numerous journal articles as well as several book chapters. Benoît is also well known for his advanced presentation skills, where his use of sophisticated visual tools greatly contribute to the success of The Institute for Perception communications, short courses, and webinars.

**Dr. John M. Ennis** is Vice President of Research Operations at The Institute for Perception. John received his PhD in mathematics and also conducted post-doctoral research in cognitive neuroscience at the University of California, Santa Barbara. He is the winner of the 2013 *Food Quality and Preference Award* for “Contributions by a Young Researcher.” John has published in statistics, mathematics, psychology, and sensory science. He has a strong interest in the widespread adoption of best practices throughout sensory science, serves on the editorial boards of the Journal of Sensory Studies and Food Quality and Preference, and is chair of the ASTM subcommittee E18.04 - “Fundamentals of Sensory.”

**Anthony (Manny) Manuele** is Director of Technical Insights and Product Development for MillerCoors where he has responsibility for all technical innovation related to products, packaging, and dispense for MillerCoors, as well as for technical competitive intelligence and consumer science. He also has an active role in MillerCoors and SABMiller international product development and innovation efforts. Manny holds a Bachelor of Science degree in pure science and his graduate degrees include a Master of Business Administration and a Master of Science in organizational leadership and quality.

**Frank Rossi** is Associate Director of Statistics at Kraft Foods Group in Glenview, Illinois, where he leads Kraft’s Statistics Center of Excellence. He supports product development efforts for Kraft’s divisions and consults internally with the Operations, Quality and Marketing Research organizations. Frank has also held statistical consulting positions with General Foods Corporation and Campbell Soup Company. He has authored publications on the statistical aspects of product testing. He obtained a BS in mathematics and an MA in statistics from The Pennsylvania State University.

INVITED SPEAKERS

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ONLINE REGISTRATION and COURSE FEES

**TOOLS AND APPLICATIONS OF SENSORY AND CONSUMER SCIENCE**

November 3 - 5, 2015 (3 days) ...................... $1975

* A 20% discount will be applied to each additional registration when registered at the same time, from the same company

* Academic discount available on request

Course fee includes:

• all course materials and a copy of our latest book, *Tools and Applications of Sensory and Consumer Science*

• daily continental breakfast, lunch, and break refreshments

• a group dinner on Tuesday and Wednesday evenings

• three-month free trial of IFPPrograms® software

• complimentary attendance at a quarterly IFP webinar

Register online at [www.ifpress.com/short-courses](http://www.ifpress.com/short-courses) or call 804-675-2980. Limited enrollment, register early.

**LOCATION:** This course will be held at The Greenbrier* in White Sulphur Springs, WV. Renowned for its standard of hospitality and service, this hotel is an ideal location for executive meetings and consistently receives a AAA 5-Diamond rating.

**LODGING:** Lodging is not included in the course fee and participants must make their own hotel reservations. A block of rooms is being held at The Greenbrier at a special rate of $195 (plus resort fees & taxes). To make a reservation, please call 1-877-661-0839 and mention you are attending the *Institute for Perception* course. (Note: the special rate is not available through online reservations.) To learn more about The Greenbrier, visit their website at [www.greenbrier.com](http://www.greenbrier.com).

**TRANSPORTATION:** Nearby airports include the Greenbrier Valley Airport (LWB, 15 min.), Roanoke, VA (ROA, 1 hr: 15 min.), Beckley, WV (BKW, 1 hr), and Charleston, WV (CRW, 2 hrs.).

**CANCELLATION POLICY:** Registrants who have not cancelled two working days prior to the course will be charged the entire fee. Substitutions are allowed for any reason.