

IN THIS ISSUE

■ Technical Report

**Compared to What?  
Controls in Advertising Claims  
Substantiation**

*(pages 3-4)*

■ President's Message .....1

■ **Webinar: September 16th** .....2  
*Introduction to TURF*

■ 2021 Student Award .....2

■ **OCTOBER 2021 Program** .....5-7  
**Symposia & Master Class**

	PAGE #
■ News & Events.....	1,2
■ Technical Report.....	3,4
■ 2021 OCT Program .....	5,6
■ Program Registration .....	7

**TECHNICAL REPORTS:****2021**

24(2) *Compared to What?*  
Controls in Advertising Claims  
Substantiation

24(1) Generating Optimal Sample  
Presentation Orders

**2020**

23(4) Unfolding Financial Markets

23(3) Can Larger Sample Sizes Result in  
Missed Opportunities?

23(2) Unfolding Conjoint Utilities

23(1) Predicting New Segment Opportunities

**2019**

22(3) Text Analysis of Open-Ends

22(2) Action Standards for Machines and  
Humans in Quality Assurance

22(1) Making Count-Based Claims from  
Sample Data

**2018**

21(4) Characterizing Sensory Segmentation  
using Machine Learning

21(3) Derived Preference from  
Applicability Scoring

To download previously published technical reports and papers from our website, become a colleague at [www.ifpress.com](http://www.ifpress.com)



*The Institute for Perception, founded in 1992, is a full-service research consulting firm offering comprehensive client services to assist in the development process of new and improved products and marketing concepts.*

**President's Message****Returning to The Greenbrier**

On October 26-29 we will be returning to the timeless autumnal hills of White Sulphur Springs, West Virginia to present our Symposia and Master Class at The Greenbrier. The program begins with three symposia on the topics of equivalence, invention and innovation, and controls in advertising claims substantiation which will be discussed by our staff and invited speakers. The one-day Symposia will be followed by a two-and-a-half-day Master Class on machine learning, unfolding, and predictive analytics. Registration details and information about this upcoming event are given on pages 5-7 of this newsletter.

The technical report in this issue stresses the importance of using controls to account for bias. Including controls in the design of a test will improve data quality and lead to more competent and reliable results.

After our diminished social interactions over the past year, it will be a relief to gather with our colleagues again for some mental rejuvenation. We hope that you can come out to The Greenbrier and participate with us or, if not, you can attend virtually via Zoom.

Best regards,  
Daniel M. Ennis  
President, The Institute for Perception

**WHAT WE DO:**

- **Client Services:** Provide full-service product and concept testing for product development, market research, and claims support
- **Education:** Conduct internal training, external courses, and online webinars on product testing, advanced analytics, and advertising claims support
- **IFPrograms®:** License proprietary software to provide access to new modeling tools
- **Research:** Conduct and publish basic research on human perception in the areas of methodology, measurement, modeling, and prediction

**WEBINAR CALENDAR:**

- SEPTEMBER 16, 2021** ..... Thursday at 2:00 PM ET, 75 minutes  
■ **Introduction to TURF**
- DECEMBER 16, 2021** ..... Thursday at 2:00 PM ET, 75 minutes  
■ **Discrimination Testing: Linking Internal Panelists and Consumers**

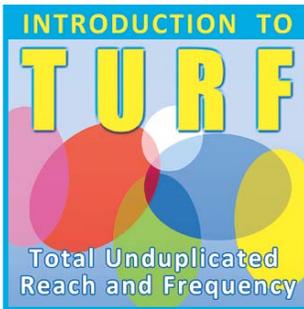
**EVENT CALENDAR:**

- OCTOBER 26-29, 2021** ..... at The Greenbrier, White Sulphur Springs, WV and live streamed via Zoom
- (Oct. 26) **SYMPOSIA: Current Topics in Sensory and Consumer Science**
- (Oct. 27 - 29) **MASTER CLASS: Machine Learning, Unfolding, and Predictive Analytics in Sensory and Consumer Science**

Detailed information and registration for all courses and webinars are available at [www.ifpress.com](http://www.ifpress.com)

To Contact Us... ✉ [mail@ifpress.com](mailto:mail@ifpress.com) 🌐 [www.ifpress.com](http://www.ifpress.com) ☎ 804-675-2980

📍 7629 Hull Street Road • Richmond, VA 23235

**WEBINAR: September 16th at 2:00 ET****Introduction to TURF**

*Taught by: William J. Russ and Dr. Daniel M. Ennis*

In this webinar, we offer an introduction to “**Total Unduplicated Reach and Frequency**” (TURF) analysis. This technique can be used to solve a wide variety of problems in portfolio and product line optimization, marketing coverage, and product development. We will begin with a brief history of the technique and its applications before delving into more recent advances. Modern computational methods have largely eliminated previous limitations of TURF analysis, while greatly increasing the flexibility of questions that can be addressed. Attendees at this webinar will gain familiarity with the types of problems appropriate for TURF analysis and how to approach them by working through examples based on real-world datasets.

This webinar is intended for a general audience of sensory professionals, market researchers, and product developers.

Attendance only (\$269)    Recording only (\$289)    Attendance & Recording (\$359)

► **REGISTER ONLINE** at [www.ifpress.com/webinars](http://www.ifpress.com/webinars)



All entries must be postmarked or emailed by **Saturday, JANUARY 22, 2022**  
For complete details and application form, go to: [www.ifpress.com/student-award](http://www.ifpress.com/student-award)

*(We invite you to visit our website, [www.ifpress.com](http://www.ifpress.com), to see all of our full-service consulting capabilities.)*

**ADVERTISING CLAIMS SUPPORT**

We have supported our clients' advertising claims for more than 25 years. Our services include consulting, defensible product tests, and consumer perception surveys. We provide expert witnessing in National Advertising Division (NAD) and litigated cases for many product categories.

**Design and Execution of Research**

Advertising Claims Support research has characteristics that make it different from traditional market and survey research.

We have experience in designing and executing research that considers these characteristics in the event of a challenge.

**Expert Witnessing**

We also support our clients if they need to appear before the NAD, in arbitrations, or in court. We have experience as the subject of depositions and in-court appearances in bench and jury trials. We have appeared in USA and Canadian courts.

**Comparative and Non-comparative Claims**

Advertising claims can be comparative or non-comparative. Comparative claims include superiority, unsurpassed and equivalence. Each type requires a different testing and analysis approach.

**Consumer Perception Surveys**

Consumer perception surveys are designed to evaluate the consumer takeaway of an ad message and we have experience designing and analyzing them.

**WEBINAR LIBRARY**

► **ORDER RECORDINGS AT**  
[www.ifpress.com/webinars](http://www.ifpress.com/webinars)

**Sensory Difference Tests**

Replicated Preference Testing to Diagnose Consumer Segmentation

Introduction to Thurstonian Modeling – 1 & 2

Advances in Tetrad Testing

Precision of Measurement in Sensory Difference Testing

How to Calculate Consumer Relevant Risk using Sensory Difference Tests

Preference without a Significant Sensory Difference? A Solution

Developing Consumer Relevant Action Standards for Sensory Difference Testing

Discrimination Testing with Batch-to-Batch Variability

Derived Preference and Difference from Applicability Scoring

Predicting Future Product Success: Capitalizing on Historical Consumer Data

Developments in Discrimination Testing for Sensory Equivalence

**Advertising Claims Support**

Supporting Numerical Superiority Claims

Claiming Equivalence, Unsurpassed, and Superiority Simultaneously

Issues in Supporting “Up-to” Claims

Supporting Count-Based Sensory Advertising Claims

**Drivers of Liking® and Landscape Segmentation Analysis®**

Mapping Techniques to Link Consumer & Expert Data

Understanding the Consumer: Preference Mapping vs. LSA

Maximizing Consumer Insights by Contrasting Blind and Branded Test Findings

Predicting Future Product Success: Capitalizing on Historical Consumer Data

**Combinatorial Tools**

Hiding in Plain Sight: Finding New Opportunities using Graph Theory

Introduction to Graph Theoretic Tools

eTURF 2.0: A Cutting Edge TURF Solution for Datasets of All Sizes

Large TURF Problems: Finding Custom Solutions

**Design Issues in Product Tests and Surveys**

The Science of Answering Questions

Developments in Applicability & CATA Scoring

Removing Experimental Biases in Sensory and Consumer Research Data

**Innovation**

Invention and Innovation

**Machine Learning**

A Three-Step Approach to Characterizing Consumer Segmentation via Machine Learning

Action Standards for Machines and Humans in Quality Assurance

Text Analysis of Open-Ends

Synergistic Analytics: Turbo-Charging Consumer Analytics – 1 & 2

Daniel M. Ennis and Benoît Rousseau

**Background:** Monadic product efficacy claims occur quite frequently in claims support. Some of these claims may be termed ‘puffery’ among the legal community because the basis for the claim defies substantiation, such as “a natural fit” for an infant diaper<sup>1</sup>. Other claims may afford an opportunity for substantiation or refutation, especially if they include a quantification of the performance. For example, “80% of consumers report that our toothpaste whitens your teeth” or “60% of consumers report that our product reduces the appearance of wrinkles.” In previous reports<sup>2</sup> we discussed how to substantiate comparative count-based and proportion-based claims. Similar statistical methods could be applied to monadic quantitative claims. In non-comparative tests, an issue arises concerning the meaning of the count and the meaning of the statement if a count is not used, such as “reduces wrinkles.” These types of claims beg the question: **Compared to what?**

In this technical report we consider when it is important to answer that question and provide support for claims that could be challenged in litigation brought by competitors, by the FTC, or challenged before the NAD, which is the self-regulatory body that adjudicates advertising in the USA.

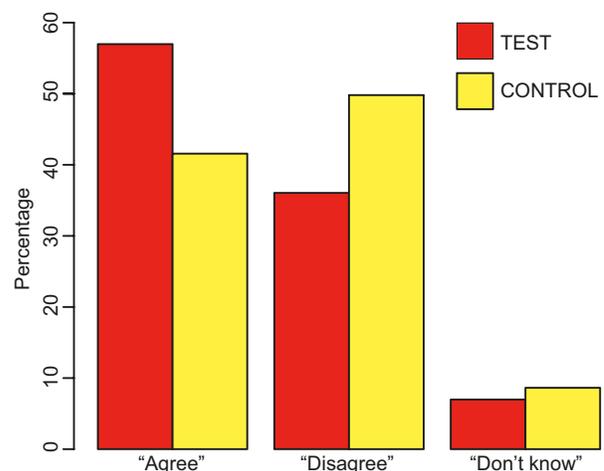
The ASTM’s Standard Guide for Sensory Claim Substantiation<sup>3</sup> contains general recommendations for collecting evidence to support a claim, from the data collection to the analytical approach and data interpretation. The Guide is primarily focused on comparative claims. One area not currently covered in depth in the Guide involves monadic efficacy claims with or without quantification of the claims. In this technical report, we describe a situation in which a control condition is necessary to provide proper evidentiary support for claims of this type.

**Scenario:** As brand manager in a personal care product company, your development team shares with you that they finalized the use of a new ingredient in your body cream. This ingredient, based on its chemistry and its known skin interactions, may prolong the moisturizing perception of the product over a full day of use. Your marketing team would like to design an advertising campaign that describes this benefit because it would resonate strongly with consumers according to claim concept work that they have completed. Your consumer product testing group recommends a home use product test to evaluate the veracity of this claim, while your internal sensory group have already found supportive evidence based on experienced panel testing. The consumer testing plan is to conduct the research among consumers broadly distributed throughout the USA and to recruit enough respondents to end with a sample size of at least 250 responses following expected attrition. About half the respondents are current users of body cream products, while the other half are prospective users of this type of product. The respondents will use the blinded body cream each day for a week. At the end of the 7-day period, respondents will go online to answer a single agree/disagree/don’t know question about whether the body cream provided moisturization for

the entire duration of each day. To support the claim, your decision standard is that a statistically significant majority of the respondents (excluding the “Don’t know” responses) will report that they agree with the statement at the 95% level.

**Response Bias and the Need for a Control:** While it is tempting to rely on direct answers to survey questions, any question asked of a respondent has inherent bias. For instance, it is known that subjects will report smelling a fragrance about 15% of the time even when no fragrance is present. This could be due to noise in the olfactory system but also because respondents in product tests have expectations. This bias weakens the meaningfulness of any monadic measure and is especially important in an advertising claims context. Uncontrolled bias may confound an appropriate interpretation of the findings. Response bias can occur when the psychological criterion used by the respondent to report a perception is not accounted for. For instance, how much difference is required for a respondent to report that two samples are different?

In a 2-Alternative Forced Choice (2-AFC) experiment where the instruction is to choose one of two samples that is stronger, bias is controlled within the test and does not play a role in the outcome. When using a monadic design, response bias can strongly influence the test outcome. This is when a control is needed. Optimally, the control will be identical to the test product but without the active ingredient that drives the effect of interest. For tooth whitening, that would be a product without hydrogen peroxide or, for a fragranced product, the same product without the fragrance, such as distilled water for a plug-in product. But sometimes a control is very difficult to create. For example, suppose that the test product is nicotine gum with a flavor, where the interest is in the long-lasting effect of the flavor. The control gum without flavor is quite unpleasant and this introduces new sensory variables that can make it difficult to interpret the results. Fortunately, it is generally possible to find an appropriate control with neutral properties.



**Figure 1.** Results showing consumer evaluation of the “Moisturizes all day” statement.

**Rethinking the Design:** Concerned about the possibility of bias in which respondents may provide support for your claim based on factors unconnected with your product’s sensory efficacy, your team rethinks the product testing plan. In this case it is not difficult to remove the active ingredient that promotes the longevity of your product. The development team prepares the control sample, and it is included in the protocol. For marketing to make the claim, two criteria must be met: a) The test product must perform so that a majority of respondents agree with the claim proposition, and b) the test product must exceed the performance of the control product in the agreement count concerning moisturization longevity. Based on the criteria, the hypotheses to be tested are:

a) Do a majority of respondents indicate that they agree with the claim statement?

- Null Hypothesis,  $H_0$ :  $\mu_{test} \leq 1/2$
- Alternative Hypothesis,  $H_a$ :  $\mu_{test} > 1/2$

b) Is the probability of agreeing with the claim statement ( $\mu$ ) for the test product greater than the corresponding probability for the control product?

- Null Hypothesis,  $H_0$ :  $\mu_{test} \leq \mu_{control}$
- Alternative Hypothesis,  $H_a$ :  $\mu_{test} > \mu_{control}$

where  $\mu$  is the probability of agreeing with the claim statement.

**Results:** Two identically recruited double blind cells, each involving about 250 consumers, are recruited. One cell contains the test product and the second cell contains the same product without the active ingredient. After over-recruit and attrition, your ending sample for the test product is 258 and the control product is 255. Your consumer test results are illustrated in Figure 1 and summarized in Tables 1 and 2.

Based on these results, you conclude that a significant majority of respondents reported that they agreed that your newly formulated body cream provides all-day moisturization. It is also necessary to show that your new product provides significantly greater moisturization longevity than the control. Figure 1 and Table 2 provide those findings.

You also notice that even without the active ingredient, some respondents report that the body cream provides all-day moisturization. However, they do so to a significantly lower degree than your new product. You share these results with the marketing team and confirm that you have the evidence to support the claim that your new product provides all-day moisturization for the majority of consumers.

**Conclusion:** Controls are always needed when a cognitive bias may influence the outcome of an experiment. This situation arises frequently in consumer product testing and survey research. Examples include most monadic tests conducted in advertising claims support where a closed-ended question is asked. To interpret this type of data it is necessary to know what the experimental results would be in the absence of the experimental variable of interest. Participants in tests have expectations about how to answer questions and these expectations, and other sources of bias, need to be considered in the test design and analyzing the results. Including controls in the test design will considerably improve the quality of the data and lead to more competent and reliable results that will be less likely to mislead consumers.

**References**

1. Procter & Gamble Company, Plaintiff, v. Kimberly-Clark Corp., et al. 569 F. Supp. 2d 796 (E.D. Wis. 2008).
2. Ennis, D. M. and Rousseau, B. (Eds.). (2020). *Tools and Applications of Sensory and Consumer Science* (pp.70-71,76-77). Richmond,VA: The Institute for Perception.
3. ASTM E1958-18, *Standard Guide for Sensory Claim Substantiation*, ASTM International, West Conshohocken, PA, 2018, www.astm.org

Statement	Completes	“Agree”	“Disagree”	“Don’t know”	p-value
<i>Moisturizes all day</i>	N=258	147 (57%)	93 (36%)	18 (7%)	< 0.001

**Table 1.** Data summary and statistical results of the *Moisturizes all day* statement. The p-value refers to the probability of obtaining the results under the null hypothesis of 50%. The analyses were conducted ignoring the “Don’t know” responses.

Condition	Completes	“Agree”	“Disagree”	“Don’t know”	p-value
<b>TEST</b>	N=258	147 (57%)	93 (36%)	18 (7%)	< 0.001
<b>CONTROL</b>	N=255	106 (42%)	127 (50%)	22 (9%)	

**Table 2.** Data summary and statistical results of the *Moisturizes all day* statement for the control and test cells. The statistics comparing the data from each cell were conducted ignoring the “Don’t know” responses. The p-value refers to the one-tailed probability of obtaining the results under the null hypothesis that the probability of an “Agree” response for the test product is less than or equal to the control.

# SYMPOSIA AGENDA

8 AM - 4 PM (ET) on **TUESDAY, OCT 26**, with an hour and a half break for lunch

## CURRENT TOPICS IN SENSORY AND CONSUMER SCIENCE

**General Introduction** | 8:00 AM - 8:15 AM (ET)

### Symposium 1: **Approaches to Equivalence Measurement in Sensory Research** 8:15 AM - 10:15 AM (ET)

**SPEAKERS\***: Benoît Rousseau, Stephen McIngvale, Daniel Ennis

- Equivalence Testing for binomial data and continuous (ratings) data
- The TOST (two one-sided tests) vs. more powerful methods
- Establishing a consumer relevant bound and linking it to internal panel data
- Testing for sensory matching to avoid missed opportunities

### Symposium 2: **Controls in Claims Substantiation Testing** 10:30 AM - 12:30 PM (ET)

**SPEAKERS\***: Daniel Ennis, Annie Ugurlayan, Lauren Aronson

- When controls are needed, and not needed, for advertising claims substantiation
- Internal controls, external controls
- How to design controls for consumer perception surveys
- Examples of control tests in claims support, NAD and litigated cases

----- **LUNCH BREAK** | 12:30 PM - 2:00 PM (ET) -----

### Symposium 3: **Invention and Innovation** 2:00 PM - 4:00 PM (ET)

**SPEAKERS\***: Daniel Ennis, Anthony (Manny) Manuele, Dulce Paredes

- Innovation in the beer industry
- Eyeing Innovation – Ideation, Inspiration, and Implementation
  - Case Study: The rise of botanicals
- Dual roles in invention and innovation - major historical success cases from 1765 to today
- Consumer-perceived benefits of new and/or improved products

\*For biographical information about each speaker, please visit [www.ifpress.com](http://www.ifpress.com)

## INTENDED AUDIENCE

Sensory and consumer scientists, product developers, market research managers, package/product testing specialists, and attorneys specializing in advertising law.

## FOR YOUR CONTINUED STUDY...



To enhance your continued study, you will receive a printed manual with all presented slides and a copy of our current books: *Tools and Applications of Sensory and Consumer Science*, *Thurstonian Models: Categorical Decision Making in the Presence of Noise*, and *Readings in Advertising Claims Substantiation*.



## SOFTWARE FOR MASTER CLASS

**IFPrograms**<sup>®</sup> and RStudio software will be used to perform analyses demonstrated in the Master Class. You will be sent information to install R, RStudio, and **IFPrograms** prior to the course.

To introduce you to the capabilities of **IFPrograms**, you will also receive a complimentary 3-month trial of the Professional version used for LSA and other sensory and consumer data-related analyses. For a detailed listing of **IFPrograms** features and licensing, please visit [www.ifpress.com/software](http://www.ifpress.com/software). (Note: **IFPrograms** is not required to apply course principles.)

# MASTER CLASS AGENDA

9 AM - 5 PM on **WED & THUR, OCT 27 & 28**, with a one hour break for lunch, and 9 AM - Noon on **FRI, OCT 29**

## Machine Learning, Unfolding, and Predictive Analytics in Sensory and Consumer Science

Taught by Dr. Daniel M. Ennis, Dr. Benoît Rousseau, and William J. Russ



### WEDNESDAY, OCT 27

Morning  
Session

9:00 AM to  
1:00 PM (ET)

- ▶ **Introduction to Machine Learning and Data Science**
  - Overview of Machine Learning methodologies
  - Evaluating model performance, cross validation
- ▶ **Application: Sensory, analytic, and machine vision matching**
- ▶ **Introduction to Scripting using R**
  - Best practices for writing and maintaining scripts
  - The power of scripting libraries
- ▶ **Text Analysis**
- ▶ **Reproducible Research**
  - What is reproducible research and why should I use it?
- ▶ **Version Control and Decentralized Backups**
- ▶ **RStudio and GitHub**
- ▶ **Analyzing Social Media Data**

1:00 - 2:00

### LUNCH BREAK

Afternoon  
Session

2:00 PM to  
5:00 PM (ET)

- ▶ **Graph Theory Principles: Combining Graph Theory and Linear Programming for faster, more extensive analyses**
- ▶ **Application: Pizza Project - Menu Optimization**
  - Combinations and the concept of cliques
- ▶ **Application: Displaying Rating Means**
  - Compact letter displays of rating means using Graph Theory



### THURSDAY, OCT 28

Morning  
Session

9:00 AM to  
1:00 PM (ET)

- ▶ **Principles of Unfolding**
- ▶ **Unfolding using Landscape Segmentation Analysis® (LSA): A processed-based Machine Learning tool**
  - Uncovering Drivers of Liking® space and consumer ideal points
  - Identifying consumer-relevant sensory drivers
  - Predictive Analytics: Generating product portfolios and their optimal sensory profiles

1:00 - 2:00

### LUNCH BREAK

Afternoon  
Session

2:00 PM to  
5:00 PM (ET)

- ▶ **Review of Research Steps for Successful Category Appraisals**
- ▶ **Selection of Optimal Sample Sets for a Category Appraisal**
- ▶ **Application: Baked Goods Project**
  - Baked goods category Drivers of Liking® research
  - Unfolding using Landscape Segmentation Analysis® (LSA)



### FRIDAY, OCT 29

Morning  
Session

9:00 AM to  
Noon (ET)

- Hands-On Applications:**
- ▶ **Combining Graph Theory, Linear Programming, and eTURF 2.0**
    - Application to the **Pizza Project** and to the development of a **Fruit Juice Line**
  - ▶ **Combining LSA and Conjoint Analysis**
    - Application to a **Sour Cream Project**
  - ▶ **Combining Decision Trees and LSA**
    - Application to the **Baked Goods Project**

## REGISTRATION

Fee for **in-person attendance** at The Greenbrier:

<b>OCT 26-29, 2021</b> (Entire Program) .....	<b>\$1,890*</b>
<b>Symposia only</b> (OCT 26) .....	<b>\$495</b>
<b>Master Class</b> (OCT 27 - 29) .....	<b>\$1,495</b>

Fee for **live stream attendance** via Zoom:

<b>OCT 26-29, 2021</b> (Entire Program) .....	<b>\$1,570*</b>
<b>Symposia only</b> (OCT 26) .....	<b>\$495</b>
<b>Master Class</b> (OCT 27 - 29) .....	<b>\$1,175</b>

**\*SAVE \$100** by attending the entire program. For academic and multiple registration discounts, contact us before registering.

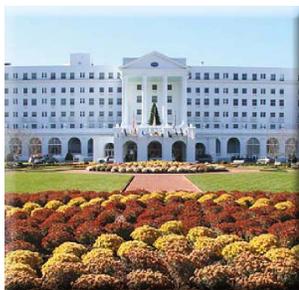
Fee includes:

- ▶ Printed manuals of slides and Master Class software exercises
- ▶ A copy of our current books: *Tools and Applications of Sensory and Consumer Science*, *Thurstonian Models: Categorical Decision Making in the Presence of Noise*, and *Readings in Advertising Claims Substantiation*
- ▶ Food and beverage refreshments each day, plus lunch and dinner on Tues. - Thurs. for attendees at The Greenbrier
- ▶ A 3-month free trial of **IFPrograms®** Professional version for Master Class attendees

Register online at [www.ifpress.com/courses](http://www.ifpress.com/courses) where payment can be made by credit card. A fee discount is available for students and multiple registrations. If you qualify for a discount or need information about payment by invoice, please contact **Susan Longest** at [mail@ifpress.com](mailto:mail@ifpress.com) or call 804-675-2980 before registering.

### LOCATION and ZOOM PARTICIPATION:

The course will be presented at The Greenbrier® in White Sulphur Springs, WV and it will also be live streamed via Zoom. If you plan to attend virtually, you will be sent a Zoom link by email and all supporting materials will be mailed to you before the event. Please register early to allow for sufficient shipping time.



**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 **\$205** (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, America's resort since 1778, visit their website at [www.greenbrier.com](http://www.greenbrier.com).

**TRANSPORTATION:** The Greenbrier Valley Airport (LWB) in Lewisburg is only a 15 min. shuttle ride from the hotel. Direct flights to LWB are available on United Airlines from Chicago O'Hare (ORD) and Washington Dulles (IAD). Other airports include Roanoke, VA (ROA, 1hr. 15 min.), Charleston, WV (CRW, 2 hrs.), and Charlottesville, VA (CHO, 2 hrs. 15 min.).

**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.

## SPEAKERS

For detailed biographical information, please visit [www.ifpress.com](http://www.ifpress.com)



### Dr. Daniel M. Ennis

The Institute for Perception  
- President



### Dr. Benoît Rousseau

The Institute for Perception  
- Senior Vice President



### William (Will) Russ

The Institute for Perception  
- Computational Market Researcher  
and Lead Programmer

(Invited speakers listed in alphabetical order.)



### Lauren Aronson

Crowell & Moring  
- Advertising and Media Partner



### Anthony (Manny) Manuele

Molson Coors Beverage Company  
- (retired) VP of Global Brewing,  
Quality, Innovation, & Technical  
Governance



### Stephen McIngvale

Molson Coors Beverage Company  
- Technical Consumer Insights and  
Sensory Specialist



### Dr. Dulce Paredes

Takasago International Corp., USA  
- Vice President, Global Consumer  
Insight and Market Research Flavor



### Annie M. Ugurlayan

National Advertising Division (NAD)®  
- Assistant Director

**CFS** Certified  
Food Scientist®

This program qualifies for Certified Food Scientist (CFS) recertification contact hours (CH).

Register online at [www.ifpress.com/courses](http://www.ifpress.com/courses) or call 804-675-2980.