

 The Institute for Perception

# SYMPOSIA Master & Class

## 2021 October Program

Join us at The Greenbrier in White Sulphur Springs, WV  
or attend via Zoom

October 26 - 29  
TUESDAY - FRIDAY



### SYMPOSIA

#### CURRENT TOPICS IN SENSORY AND CONSUMER SCIENCE

TUESDAY, OCT 26, 8:00 AM - 4:00 PM Eastern Time (ET)

##### Symposium 1:

#### Approaches to Equivalence Measurement in Sensory Research

SPEAKERS: Benoît Rousseau, Stephen McIngvale, Daniel Ennis

##### Symposium 2:

#### Controls in Claims Substantiation Testing

SPEAKERS: Daniel Ennis, Annie Ugurlayan, Lauren Aronson

##### Symposium 3:

#### Invention and Innovation

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

### Master Class

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

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

WEDNESDAY & THURSDAY, OCT 27 & 28, 9:00 AM - 5:00 PM ET

FRIDAY, OCT 29, 9:00 AM - Noon ET

# SYMPOSIA AGENDA

8AM - 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®** 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 9AM-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 the Zoom video meeting platform. If you plan to attend virtually, 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.