

ASBC Annual Meeting

June 4–7 ■ Fort Myers, Florida

See what SCIENCE can brew for you

REGISTRATION MATERIALS

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A Message from the Program Committee

Hello! I am happy to invite you to the 2017 ASBC Annual Meeting on Sanibel Island in Fort Myers, Florida. My team and I have been busy over the last six months assembling the structure of a great meeting. From yeast genetics to hop aroma and technical barrel aging, this year's program is filled to the brim with outstanding topics and great speakers!

We hope you can join us this June in sunny Fort Myers for four days of engaging discussions, interactive technical workshops, and cutting-edge research presentations. We have invited speakers from outside of the industry to share their perspective on challenges and opportunities for the brewing community. Nine technical sessions are lined up, with topics including microbiology, sensory, stability, hops, quality assurance, and more. Don't miss Pearls of Wisdom, an off-the-cuff debate among brewing science experts where anything goes, and get your burning questions answered in our Beer Abby session. All this and more is waiting for you in Fort Myers this June!

Dan Vollmer

ASBC Program Committee Chair

Program Committee

Daniel Vollmer, AB InBev

Scott Britton, Duvel Moortgat, NV

Patricia Aron, Rahr Malting

Kimberly Bacigalupo, Sierra Nevada Brewing Co.

Lindsay Barr, New Belgium Brewing Co.

Cecil E. Giarratano, MillerCoors

Aaron Golston, Lagunitas Brewing Co.

Christine E. Hansen, E. & J. Gallo Winery

Rebecca Jennings, Rahr Malting

Rebecca Newman, Summit Brewing Co.

Cindy-Lou Lakenburg, AB InBev

Tiffany Pitra, Hopsteiner

Lauren Torres, Bell's Brewery

Sylvie M. Van Zandycke, Lallemand

Lauren Zeidler, Ballast Point

Register by
May 1 and
SAVE!



Preliminary Schedule

(Schedule is subject to change.)

Friday, June 2

8:00 a.m.–5:00 p.m. Pre-Meeting Course: Sensory (Day 1)

Saturday, June 3

8:00 a.m.–5:00 p.m. Pre-Meeting Course: Sensory (Day 2)

7:00–7:30 p.m. First-Timers Mixer

7:30–9:00 p.m. Trivia Night

Sunday, June 4

7:30–8:30 a.m. Speaker Breakfast

8:30–10:00 a.m. Opening Session and Keynote

10:15 a.m.–4:00 p.m. Technical Sessions, Workshops, and Special Sessions

4:00–6:00 p.m. Exhibits and Posters Opening Happy Hour

Monday, June 5

8:30 a.m.–12:30 p.m. Technical Sessions, Workshops, and Special Sessions

12:30 a.m.–2:30 p.m. Exhibits, Posters, and Lunch

2:30–5:00 p.m. Technical Sessions, Workshops, and Special Sessions

3:30–4:45 p.m. Workshop: Craft Distilling II

Tuesday, June 6

8:00–10:30 a.m. Technical Sessions, Workshops, and Special Sessions

10:30–11:30 a.m. Guest Speaker Session

11:45 a.m.–1:45 p.m. Exhibits, Posters, and Lunch

1:45–4:30 p.m. Technical Sessions, Workshops, and Special Sessions

7:00–9:30 p.m. Suds & Sand Beach Party

Wednesday, June 7

8:15–11:30 a.m. Technical Sessions, Workshops, and Special Sessions

11:30 a.m.–1:00 p.m. Beer-lympics

Plenary Speakers

Opening Keynote Speaker

Barbara Dunn, Stanford University



What's Brewing in Yeast Genetics?

Brewing yeasts are notoriously difficult to work with genetically, due to their complex genomes which are often polyploid, aneuploid, and/or derived from interspecific hybridization events. However, new techniques, as well as the repurposing of more traditional techniques, hold promise for genetic manipulations of brewing yeasts as a way to combine or enhance beneficial traits already present in such yeasts, or to possibly identify and introduce novel traits from non-brewing yeasts. Some of these new or repurposed techniques can result in non-genetically-modified (non-GM) yeasts, but other “minimally invasive” GM techniques now exist that may eventually be deemed acceptable by consumers and the brewing industry as a way to obtain brewing yeasts with desired traits. Overall, a wide variety of tools are now available for the genetic manipulation of brewing yeasts to alter or enhance any of a number of characteristics, from fermentation behavior to sensory profile.

Guest Speaker

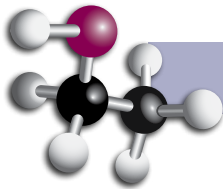
Kevin Verstrepen, KU Leuven



Studying the Yeasts of Yesterday to Generate the Beer Yeasts of Tomorrow

The common brewer's yeast, *Saccharomyces cerevisiae*, is used in a broad range of industrial applications, from the production of beer, wine, and bread to biofuels and pharmaceuticals. Interestingly, there are hundreds of different industrial yeast strains, but their origins and specific characteristics are largely unknown. Join presenter Kevin Verstrepen, who combined large-scale phenotyping with genome sequencing to track the genealogy and evolution of today's industrial yeasts. Using this knowledge allowed him to set up large-scale breeding programs to generate superior variants that increase production efficiency and expand the range of yeast-derived products and aromas, allowing more efficient beer fermentation, the production of superior beers, and the creation of novel products.





Pre-Meeting Course

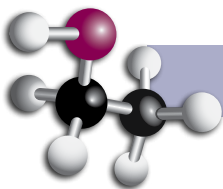
Sensory Course

Friday, June 2 • 8:00 a.m.–5:00 p.m

Saturday, June 3 • 8:00 a.m.–5:00 p.m

Fee: \$275

This two-day course brings in experts representing raw materials and quality programs from across the brewing industry. Follow the path of ingredients through the brewing process to finished beer and learn how sensory science is applied with a focus on appropriate sensory evaluation methods at each step. Your instructors will provide up-to-date and effective methods of sensory evaluation, from assessing off-flavors to deciphering bitterness as an element of taste. Whether you are vetting a new ingredient or process in your brewery or directing product development, this course provides the tools for executing a sound sensory program.



Workshops

Application of Chromatography to Brewing Analysis

Liquid chromatography (LC) and gas chromatography (GC) instrumentation have become common tools found in brewing laboratories with applications ranging from quality assurance to advancing brewing science. This workshop will provide a basic introduction into chromatography, including the fundamentals of liquid and gas chromatography. Example applications from the *ASBC Methods of Analysis* along with other commonly used methods will be reviewed. In addition, advanced applications of GCMS including statistical data processing will be covered. A question and answer session will be held at the end of the workshop.

Beyond Spoilers and Media

Microbiology for brewers has typically been about chasing spoilers, aseptic sampling, and various media for growth. Breweries are now using multiple flora for flavor development: wood, fruit, and mixed culture “spontaneous” fermentation. How is quality poised for these challenges and what is the long tale of a “bug’s life?”

Craft Distilling I and II

Craft breweries are enjoying a period of explosive growth, and in the wake of such creative prosperity many are delving into the world of distilling. Though analogous to brewing, distilling can involve a specific set of regulatory, QA/QC, and process requirements. What are the hurdles involved with adding spirits to a brewery’s portfolio, and how can a brewery environment be adapted to build and grow a distillery? Hear from industry experts as they share their experiences on such matters as quality assurance/control, barrel aging, and industry supply chain, as well as taste* some of the great craft spirits that have emerged from this burgeoning industry.

***Craft Distilling II will include a tasting component, which will require a \$12 fee paid during meeting registration.**

Cross-Brewing Quality Assurance

As the brewing industry grows, maintaining beer quality and consistency across multiple brewing locations is a growing challenge for many brewers, small and large. This interactive course will highlight quality programs directed at achieving this goal. We will address all avenues of quality, including sensory and flavor matching, quality measurements throughout the brewing process, and water quality. This workshop should leave you with the fundamental tools needed to maintain quality across multiple brewing locations. There will be ample time at the end to ask questions of both the panel of speakers as well as other workshop attendees.

Hop Quality

This workshop will cover everything and anything hops. The session will kick off with an introductory overview on hop chemistry with emphasis on topics important to the brewer. Given the tremendous emphasis on hop-forward beers—it is important for brewers and quality managers to understand the perspective of hop farmers and suppliers. Presenters will share their experiences on how best to interface with their portion of the business in such a way that maximizes benefits. A hop supplier will provide guidance around purchasing hops, evaluating hops, and using hops efficiently. A hop farmer will discuss issues pertaining to hop quality from a growing perspective as well as how to maximize the efficacy of the relationship between farmer and brewer. Don't miss out on this workshop—go into the 2017 harvest with more knowledge to sniff out the best hops!

Sensory Thresholds

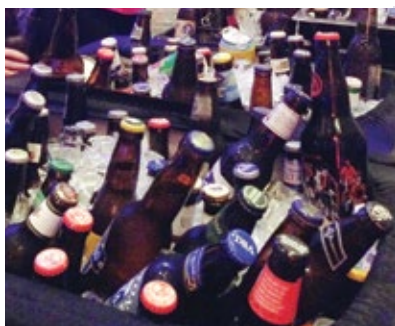
Sensory threshold measurements are carried out either to test the sensitivity of panelists to a certain compound or to understand the magnitude of impact an individual compound may have on beer flavor. This workshop will guide participants through the steps to carry out sensory threshold measurements using Sensory Analysis-9: Threshold of Added Substances—Ascending Method of Limits Test from the *ASBC Methods of Analysis*. Participants will learn about considerations in designing and executing the study and work through the statistical analyses of threshold data. We'll compare this approach to others, such as the ASTM E-1432, Standard Practice for Defining and Calculating Individual and Group Sensory Thresholds from Forced-Choice Data Sets of Intermediate Size. Participants will perform threshold measurements on diacetyl and acetaldehyde in beer and will leave the workshop knowing their own personal threshold concentrations for these two compounds.

Technical Barrel Aging

How do barrel toasting and coopering impact oak flavor? What do I need to think about as I increase the volume of my barrel-aged beers? Can I predict how oak aging will affect my beer? What do I need to know about oxygen ingress? Are there benefits to using different types of barrels and oak? As beer barrel aging continues to grow in popularity, there is increased attention to oak flavor and aroma impact. This workshop brings together experts from the wine, coopering, and brewing industries to discuss oak chemistry and sensory qualities, blending decisions, and quality considerations when using barrels. Get all your oak questions answered, put your taste buds to work, and start thinking about barrel-aged beers in a different way.

The U.S. Malt Scene: Hot Topics and Hip Approaches

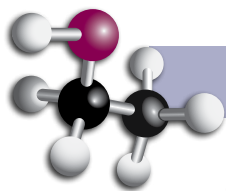
This workshop will cover the current state of the U.S. malting industry, featuring speakers embedded in the brewing and malting industries. The panel will address the growing divergence between adjunct and non-adjunct brewer needs in terms of malt quality parameters and overall usage. Hot topics to be discussed include malt innovation; emerging technical issues in barley growing and malting operations; progress in malt sensory analysis; and the state, struggles, and approaches of the craft malting industry.



Donate beer and have your beer tasted by your fellow brewing professionals!

Beer donors are featured during events and hospitality times throughout the 2017 ASBC Annual Meeting. If you would like to donate, please contact Emma Nygren at enygren@scisoc.org.





Networking Opportunities

The 2017 ASBC Annual Meeting is the premier opportunity to meet and connect with colleagues from around the world.

First-Timers Mixer

Saturday, June 3 • 7:00–7:30 p.m.

Are you a first-time attendee, student, or returning attendee looking to meet new faces? Then this event is for you! Join ASBC leaders and seasoned meeting attendees as they give you tips and suggestions on how to make the most of your meeting experience. Mix and mingle while you enjoy a pint on us, then don't forget to join us for Trivia Night. This event is free, but please indicate your attendance when registering.

Trivia Night

Saturday, June 3 • 7:30–9:00 p.m. • Fee: \$10

You bring the brains; we'll bring the beer! Fire up your synapses and dominate the competition at the Saturday night pre-meeting trivia bash! This after-dinner activity is a perfect way to network prior to the Annual Meeting kick-off on Sunday morning. Make connections, lounge around, and blow your own horn—sing your own praises—and lay it on thick to the competition how much better your team truly is. In this spirited game of twisted trivia, may the beer be ever in your favor.

Hospitality Room

Every evening

Stop by the hospitality room and join fellow attendees for one-on-one conversations and refreshments. The hospitality room is the perfect place to wind down and share the day's learnings.

Exhibit and Poster Opening Happy Hour

Sunday, June 4 • 4:00–6:00 p.m. • One ticket included with all registrations except Guest. Additional tickets: \$49

Join us for Happy Hour to toast your first day at the meeting. This will be your opportunity to spend valuable time with industry suppliers and poster presenters to exchange ideas, expand your knowledge, and, most importantly, make rewarding connections. Enjoy beer and light snacks while you meet your fellow attendees and talk brewing science. We will see you there!

Lunch

Monday, June 5, and Tuesday, June 6

Join us for lunch in the exhibit hall on Monday and Tuesday. Take this time to also visit the exhibits, connect with suppliers, and talk with poster presenters about their latest scientific discoveries.

Suds & Sand Beach Party

Tuesday, June 6 • 7:00–9:30 p.m.

One ticket included with all registrations except Single Day and Guest. Additional tickets: \$99

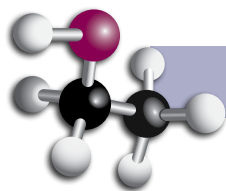
Surf's up at the Suds and Sand Beach Party! We know you're dying to wear that Hawaiian shirt you've been hiding in the bottom drawer. Bring it to Florida, hang loose, and grab some tasty munchies and refreshing libations. It will be our last call for fun as we wrap up Tuesday.

Beer-lympics

Wednesday, June 7 • 11:30 a.m.–1:00 p.m.

Close out the meeting with this ASBC-style networking event, where you will make connections while engaging in friendly competition! Build your network, scout for talent, and lead your team to victory. Come see what's in store at the Beer-lympics!

Registration for the Annual Meeting is now open at asbcnet.org/meeting. Register by May 1, 2017, and receive a significantly reduced rate.



Exhibits

Visit the Exhibits for discovery, solutions, opportunities, and refreshments. Check out the latest products and services advancing the work of the brewing industry—including suppliers of lab equipment, analytical instruments, and raw materials. Don't miss the initial opening during Happy Hour on Sunday at 4:00–6:00 p.m.

Exhibiting Companies as of March 8, 2017:

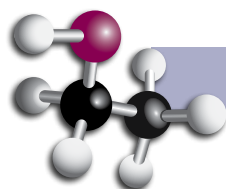
Amoretti	Lallemand Brewing/AB Vickers
Analytical Flavor Systems	Leco Corporation
Anton Paar USA	LGC Standards
Astoria-Pacific	Nexcelom Bioscience
ATPGroup	optek-Danulat, Inc.
BMT USA LLC	Pall Corporation
Bruker BioSpin	Pentair
Charm Sciences Inc.	Profamo Inc.
DSM Food Specialties USA Inc.	Rheonix Food & Beverage
Gerstel Inc.	Sealed Air
Gusmer Enterprises	Siebel Institute/World Brewing Academy
Hach	Skalar Inc.
Hygiena	Thermo Fisher Scientific
InnovaPrep	TUV Rheinland of North America
Invisible Sentinel Inc.	Weber Scientific
K&G Data Solutions	

Interested in Exhibiting?

Visit the website (asbcnet.org/meeting) or reach out to one of the following contacts:

Eric Otero: eric_otero@afassanoco.com
or +1.856.302.0894

Debi Maines: debra_maines@afassanoco.com
or +1.856.302.0890.



Hotel Accommodations

Sanibel Harbour Marriott

17260 Harbour Pointe Drive, Fort Myers, FL 33908

Rate: \$159

Resort Fee: \$10/day

Reservations

Online: asbcnet.org/meeting

Telephone: +1.800.767.7777

Inform the reservationist that you are attending the 2017 ASBC Annual Meeting or refer to the group “American Society of Brewing Chemists.” Indicate any special needs you may have when making your reservation. All reservation inquiries should be made directly to the hotel.

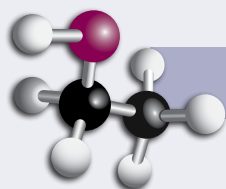
Deadline

Discounted meeting rate will last through **May 12, 2017**, or until the group block is sold out, whichever comes first.



Sanibel Harbour Marriott

See what SCIENCE can brew for you.



Registration

Registration for the Annual Meeting is now open. **Register by May 1, 2017, and receive a significantly reduced rate.**

Registration options:

Online: asbcnet.org/meeting

By fax or mail:

Download the PDF at asbcnet.org/meeting and send to:

Fax: +1.651.454.0766

Mail: ASBC Annual Meeting Registration

3340 Pilot Knob Road

St. Paul, MN 55121, U.S.A.

ASBC Members **SAVE!**

ASBC Members receive member pricing—a \$130 savings! Not a member? Sign up for Meeting Registration + 1 Year Membership and take advantage of the discounted member price.

Cancellation/Refund Policy

Registration cancellations must be made in writing and received by ASBC no later than April 28, 2017. Cancellations received by this date are subject to a \$100 processing fee; ticketed events will be fully refunded. Ticketed events and meeting registration cancellations received after April 28, 2017, are not subject to a refund.



American Society for Brewing Chemists
3340 Pilot Knob Road
St. Paul, MN 55121
United States of America

Registration
is now
OPEN

**Register by May 1, 2017,
and receive a discount!**