

# Science Café Guide for Museums and Science Centers



Produced by:

**NOVA**  
science**NOW**

A supplement to the resources at:

sciencecafes.org

Above: A moderator helps direct conversation.

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In pubs, coffeehouses, and other casual public venues across America, the science café movement is growing rapidly. Today, science centers, museums, and nature centers from Florida to Washington are joining in as well—reaching new audiences and energizing them about science. The science café format is easily adapted for a wide range of participants—from inner-city families to twenty-somethings in rural areas. Science cafés are also being used as one component of larger celebrations, such as the International Year of Astronomy.

As a leading force in the science café movement, NOVA scienceNOW has designed this guide to help science centers and museums start their own cafés or partner with an existing science café series in their area. Other science café resources are available at [www.sciencecafes.org](http://www.sciencecafes.org).

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# On a snowy Monday night...

...in November, scores of people brave the cold and head to the Thirsty Scholar Pub in Somerville, MA. What lures them out in the uninviting weather? The surprising answer is science, or more precisely, a science café: an informal public event at which people from all walks of life gather to discuss science.

The Thirsty Scholar is nestled among tightly packed multifamily homes. Despite the name, there are no professors here. The patrons are a mix of hourly-wage earners and young professionals. The space is simple but welcoming, with low lighting and comfortable tables and chairs. As in most pubs, televisions are scattered around the room for the ever-present sports fans.

By 6 p.m., all of the pub's 80 seats are occupied. The atmosphere is festive; food and drinks abound. The crowd includes pub regulars and people who have come specifically for the science café event.

The café organizer, acting as moderator, welcomes the group, explains what the evening is about, and introduces a video clip from NOVA scienceNOW. The room quiets down and all eyes focus on the television screens to watch a story about mass extinction. The entertaining three-minute video equips everyone with shared background knowledge and serves as a springboard for discussion.

Next up is a paleontologist from a local university. Sitting on a bar stool, he offers a 7-minute general talk that connects the video clip to his work on extinction and global climate change. When he opens the floor for discussion, the café organizer helps moderate the assortment of comments and questions—scientific, philosophical, practical, and irreverent.

After a lively half-hour conversation, the moderator invites audience members to continue chatting with each other as he escorts the paleontologist from table to table. As the hour nears 8 p.m., the moderator brings the science café to a close with a prize drawing using the evaluation forms that the audience has completed.

The owner of the Thirsty Scholar is thrilled to see new faces in his pub on a normally slow night. For the paleontologist, this was a unique opportunity to share his research with the public—an experience he says he will enthusiastically recommend to his colleagues.

And for the organizer of the café and the institution he represents, the event was an excellent way of engaging a diverse group of young community members with a real scientist and current, authentic scientific research. Ultimately, the science café furnished an opportunity to reach deep into the community and introduce a new audience to their local science institution.





# What Is a Science Café?

## The Basic Idea

Science café events involve lively conversations with scientists about current science topics. They are open to everyone, and they take place in relaxed settings like pubs, coffeehouses, and other informal venues. A science café's casual meeting place, plain language, and inclusive discussion creates a welcoming and comfortable atmosphere for people who may have no science background.

## Key Principles

While the science café format is flexible, there are two key principles pertinent to every café event:

- Science cafés actively engage every participant. They go beyond the typical question-and-answer format. As any good conversation does, a successful café fosters an energetic, unscripted dialogue. In this case, the conversation is controlled as much by the audience as it is by the scientist. A moderator often plays an important role in encouraging the free flow of conversation.
- Science cafés reach out to new audiences. They avoid technical jargon and prolonged lectures, and provide opportunities for people who don't typically engage in science discussions to do so.

## Scope

Science café events are usually simple and straightforward, rarely involving more than 100 people. In fact, large, complicated, or high-profile events can detract from the spontaneous, intimate café atmosphere. Despite the small scale of individual events, cafés can have a powerful impact: in a national survey, 83% of café attendees reported discussing the experience with family, friends, or colleagues.

## Content

Each meeting is organized around a science topic of general interest. A scientist gives a brief presentation, often preceded by a short video clip (dozens are available from NOVA scienceNOW). A moderator or host then helps facilitate a group conversation. Science topics vary, and some cafés even explore connections between science and other disciplines, such as art or music.

## Organization

For several years, NOVA scienceNOW has supported and encouraged the growth of science cafés in the United States; however, each café series operates independently. (Even the names of science cafés vary, including *Science on Tap*, *Science Pub*, *Ask a Scientist*, and *Café Sci*.) The café format is easily adapted for different cultures, audiences, and goals, but the focus on open, public conversation is the consistent feature in all science cafés.



# The Benefits

## Educational Impact

A science café series is a proven way of increasing public understanding of and engagement in science and technology issues. For more on the impact of science cafés, visit: [www.sciencecafes.org/cafe\\_impacts.html](http://www.sciencecafes.org/cafe_impacts.html).

## Reach New Audiences

Because they are generally held in nontraditional venues, science cafés introduce new audiences to science and to local museums and science centers. Research has shown that science cafés are particularly popular with the 18 to 35 year-old demographic.

## Build Relationships

Robust partnerships often grow out of community connections sparked by a science café, including relationships with the local research community (and even with potential funders!).

## Good Press

Science cafés tend to garner media recognition, and not only in regional press. Recent features have included stories in *The New York Times* Style Section and *Wired* Magazine. The idea was even deemed "in" by *People* Magazine (right along with matte lipstick!).

## Promote Existing Science Center/Museum Programs

Science centers and museums can build community interest in existing exhibits and programs by organizing science cafés that explore the same or related topics.

"This is one of the few opportunities that adults have to ask scientists questions."  
— café organizer



# The Costs

## Time

There is an economy of scale with establishing an ongoing café series rather than a single isolated event. Starting a series may take a staff member a few hours a week for a couple of months. But once a café series is established, preparing for each new occasion should only require a few hours per event.

Café series don't have to be held according to a rigid schedule. Individual events can be planned around other museum or science center activities (some veteran café organizers plan each event only a few weeks ahead of time).


To get a sense of the initial time commitment, see the sample time line on pages 10 and 11 of this guide.

## Money

Science cafés are inexpensive to plan and run, often with little, if any, direct expenses. The most common café expenses are related to promotion. Cafés typically do not pay speaker or venue fees.

NOVA scienceNOW provides a limited number of small start-up grants for science cafés.

To find out more about this opportunity, check out the resources funding section on page 7.



*"I am amazed  
by how many people  
want to come and learn  
about science."  
— presenting scientist*



# How to Get Involved

## To partner with an existing science café in your region:

Partnerships can take many forms. Some partners can help you select café topics (contact us at [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org) for suggestions of NOVA scienceNOW clips that have been popular.) Other partners can help promote café events, assist with staffing, help plan events, or provide hosts to serve as moderators. You can get more information by:

- Checking the “Find a Café” map at [www.sciencecafes.org](http://www.sciencecafes.org) to see if there is an active café in your area. If possible, go to the café’s next event to check it out.
- Contacting NOVA scienceNOW ([getinvolved@wgbh.org](mailto:getinvolved@wgbh.org)) for the resources listed on page 7, and to put you in touch with the organizer of your local café.

## To start a new science café series:

- Science cafés are local events. Even if an active café exists in your area, it is likely that there is room for another.
- Determine your goals and target audience.
- Contact NOVA scienceNOW ([getinvolved@wgbh.org](mailto:getinvolved@wgbh.org)) for the resources listed on page 7.
- Choose someone to serve as the café organizer. Some cafés are run completely by one organizer; others have a point person and a network of partners.
- The main tasks required for developing a science café are:
  - understanding and establishing a connection with the target audience;
  - finding and working with presenting scientists;
  - moderating the café or finding a moderator;
  - attending to logistics such as booking a venue and managing an e-mail list; and
  - promoting events in creative ways.
- For help with each of these tasks, check out the many tips for starting a science café at [www.sciencecafes.org/start.html](http://www.sciencecafes.org/start.html)





# Choosing a Venue

It can be tempting for museums and science centers to hold science café events in the organization's facility. While there aren't many "rules" that govern running a successful café, to the decision to hold café events in your facility means that many of the great opportunities inherent in the café format are lost.

Here are some reasons to hold your science café somewhere other than your museum or science center:

- A science café at a casual public venue allows you to reach people who do not normally come to your facility. After a café meeting, these new faces will feel more comfortable coming to events held at your institution (especially if you offer incentives at the café event).
- A nontraditional venue is an important part of the overall atmosphere of the event. It makes the occasion fresh and exciting for everyone involved.
- A casual public venue helps people feel more inclined to participate in the conversation that is at the heart of café gatherings.
- An unusual venue is newsworthy and attracts media attention.
- Pubs, restaurants, and coffeehouses are ideally suited for these events because people are free to order and pay for whatever they want to eat and drink—this serves as an important icebreaker that helps attendees feel more comfortable and companionable.
- A good venue has an appeal that can reflect positively on your organization as well as get the attention of the audience you are trying to reach.
- Outreach programming demonstrates a special commitment to extending your services to people in your community.
- The "unofficial" setting can make it easier to persuade scientists to participate (it doesn't seem like work).
- Promoting events at a separate venue opens up new marketing opportunities (when else do you get to post flyers in a local microbrewery?).
- Working with an outside venue is an opportunity to build a relationship with a new community partner by involving a business owner in the important work of your organization.



*"I enjoy the talks, the setting, and the beer."  
— café attendee*



# Resources

*NOVA scienceNOW is a clearinghouse for science café activities nationwide. We want to hear from you. For information, assistance, and support, please e-mail us at [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org).*

## Advice

- NOVA scienceNOW is in daily contact with café organizers and partners. We're accustomed to helping people start new café series.
- We'll help you brainstorm ways to move beyond the typical lecture style and inspire stimulating, inclusive conversations.
- Find out how other café organizers have handled challenges similar to your own.

## Partners

- NOVA scienceNOW regularly hears from people eager to participate in getting a café going in their area—we may already be in touch with local groups that want to work with you.
- We can connect you to other national organizations that support science cafés.
- We keep track of scientists involved in research related to NOVA scienceNOW segments, and we may be able to help you find a scientist to present at a café.

## Video *Please remember... we'd love to hear about your experience if you use our video!*

- NOVA scienceNOW videos have proven to be an ideal fit for science café events.
- Check out the PDF catalog of NOVA scienceNOW segments currently online at [www.sciencecafes.org/nsn\\_catalog.pdf](http://www.sciencecafes.org/nsn_catalog.pdf).
- NOVA scienceNOW is in the process of making all videos downloadable. If the segment you're interested in is not yet available for download, or if downloading is not an ideal method for you, you can receive a free DVD of any episode for use in a café by contacting us at [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org)

## Web site

- Check out [www.sciencecafes.org](http://www.sciencecafes.org) for tips on starting a café, including: choosing a venue, finding a moderator, identifying a presenting scientist, and promoting a café.
- Put your café on the sciencecafes.org map. We will even create a customized event page for you. Find out more at [www.sciencecafes.org/put\\_on\\_map.html](http://www.sciencecafes.org/put_on_map.html).

## Funding

- NOVA scienceNOW offers a limited number of grants to help you start a café.
- Grants cannot be used for alcohol, administrative overhead, or general operating expenses.
- To request a grant application, contact us at [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org).

## Giveaways

- For free stuff to hand out at a science café, contact us at [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org).

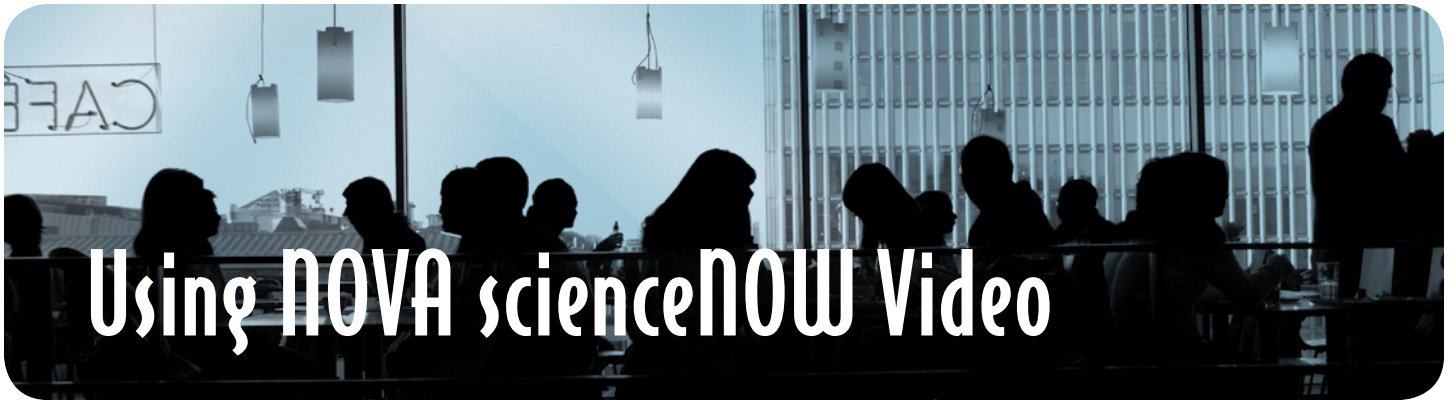
# Science Café Guide: Tips and Samples

The preceding sections of this guide are designed to familiarize you with the concept of science cafés, and encourage you to get involved in one. After reading the guide, you may have a vision for a science café series in your area. The science café format is flexible, so feel free to pursue your vision however you see fit.

This 'tips and samples' section includes specific examples and advice. Some of this information may not apply to every science café, so use only the sections that you find helpful.

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# Using NOVA scienceNOW Video

## Video and the Café Format

- Face-to-face interaction is central to each science café event. Video is used to stimulate dialogue. Keep the video presentation short (less than five minutes is ideal).
- Use video to kick off a café event. It's a powerful way of getting people's attention and bringing them into a discussion.
- Video quickly introduces an audience to a topic by presenting a visual model of a difficult concept, transporting the room to another place, or putting a human face on an issue.
- Video succinctly provides background information and an overall context, allowing the presenting scientist to focus on specific issues.

## Choosing a NOVA scienceNOW Segment

- Use the catalog of segments located at [www.sciencecafes.org/nsn\\_catalog.pdf](http://www.sciencecafes.org/nsn_catalog.pdf) to scan available topics.
- If you are starting from scratch, choose topics that will make a good café conversation for your target audience. Before choosing your topics, you might ask prospective audience members about what interests them.
- A video's connection to an event's speaker can be loose and still work. For example, the last four minutes of the *Obesity* segment from Season 2 were used to set up a café on genetic testing, even though the segment is not explicitly about this.
- Watch the segments online. Keep in mind that you are looking for a three-to-five minute video clip. One segment usually contains more than one story.
- Once you have picked a segment to use, either download it or contact NOVA scienceNOW at [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org) for a free DVD.

## A Few Technical Details:

- Before using a segment in a café event, take note of beginning and ending time signatures or visual cues.
- If you are starting a segment in the middle of a story, quickly orient your audience by saying something like, "At this point in the video...", and then begin.
- Before people arrive for the café meeting, set the volume and pause the DVD where you want it to start.

NOVA scienceNOW is here to help you. Contact us at [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org) and we can suggest topics based on segments and/or short clips from segments you're interested in.



### Before You Start

- Settle on your main goals and consider why a science café is the appropriate format for achieving those goals.
- Consider the audience your café will serve. Talk with potential café attendees about the concept, suitable venues, good topics, and effective ways of spreading the word about events.
- Familiarize yourself with the resources at [www.sciencecafes.org/start.html](http://www.sciencecafes.org/start.html).
- Commit to starting a science café. Contact NOVA scienceNOW at [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org).

### 9 weeks before your first event

- Develop a simple budget of expected expenses.
- Consider applying for start-up funding from NOVA scienceNOW. Visit [www.sciencecafes.org/grant\\_guidelines.html](http://www.sciencecafes.org/grant_guidelines.html).
- Begin contacting partners if you need assistance.

### 8 weeks before

- If you are not going to moderate the café, begin the search for a moderator.
- Investigate potential venues that could provide the appropriate atmosphere and spirit of camaraderie.

### 7 weeks before

- Choose a venue, and set a date and time for the first two meetings. (You will want to promote the second café at the first.)
- Select NOVA scienceNOW topics using the suggestions on page 7 of this guide. Download video, or contact NOVA scienceNOW to obtain a free DVD (thanks for letting us know when you are using NOVA scienceNOW).

### 6 weeks before

- Search for potential guest scientists for the first two cafés (see tips on choosing a presenting scientist on page 14).
- Choose a moderator and confirm his or her participation (see moderator tips on page 13).

### 5 weeks before

- Select guest scientists for the first two cafés and invite them to participate.
- Consider how you would like to evaluate the cafés (see evaluation tips on pages 19–20).

### 4 weeks before

- Plan on securing any necessary audio-visual equipment.
- Plan how you will promote the café. Focus on reaching out to people who are not already science enthusiasts (see promotion tips on page 15).

### 3 weeks before

- Confirm the event date and time with the venue.
- Confirm guest scientist's availability and participation. Make sure you have his or her cell phone number in case of any last-minute changes.
- Further discuss the science café format with the guest scientist:
  - make sure the speaker's presentation will be an informal conversation starter;
  - work out a short description that accurately describes the topic.
- Draft promotional materials such as the content of e-mails, flyers (see sample flyer on page 16), and calendar listings.
- Ask the guest scientist to review the promotional e-mail before it is sent out.

### 2 weeks before

- Send out calendar listings.
- Have flyers printed.

### 1 week before

- Send out e-mails promoting the event, and share event information with groups online.
- Post promotional flyers in places frequented by your target audience.
- Prepare any information to be handed out at the event, including the evaluation forms.
- Visit the venue to see the layout, and consider how the café will run.
- Review the NOVA scienceNOW segment, and write down the start and end time signatures.

### 3 days before

- Check in with the guest scientist to be sure he or she is prepared, and help with any of the scientist's last-minute requirements or questions.
- Gather supplies needed for the café, including:
  - audio-visual equipment you are supplying
  - sign-in sheet with space for e-mail addresses
  - evaluation forms and pencils
  - NOVA scienceNOW DVD.
- Make sure the moderator has a clear timeline for the event.

### 1 day before

- Send out a reminder e-mail promoting the café.

### 1–2 hours before

- Arrive at the venue; arrange the furniture; and set up any equipment.
- Check the sound levels and cue up the DVD.
- Relax, and introduce yourself to people already at the venue.

### 30 minutes before

- Get the moderator and guest scientist together for a warm-up conversation.
- Greet early arrivals. Make sure the venue provides drinks and/or food as arranged.

### 2 minutes before

- The informality of the setting means you don't always have to start exactly on time. Begin when it feels right. Enjoy!



# Sample Event Agenda

## 6:00 • Optional Trivia Contest

- As people arrive and get settled, warm up the audience with a trivia contest (see pages 17–18).
- Don't start the event until the audience is ready.

## 6:12 • Brief Introduction by Moderator

- Encourage the audience to support the venue by ordering food and drink (and tipping generously!).
- Quickly say a few words about the café's focus on open discussion and audience involvement.
- Introduce the scientist, if possible with some fun personal information.
- Introduce the video.

## 6:15 • NOVA scienceNOW Video Presentation

- The video will capture the audience's attention, and provide background on the topic.

## 6:20 • Scientist's Presentation

- This presentation is meant as a conversation starter, not a comprehensive topic overview—there should be no podium, PowerPoint, or technical jargon.
- The best presentations include questions for the audience that serve to segue into an engaging dialogue.

## 6:25 • Group Discussion

- The moderator should help keep the event lively, clear, and inclusive.
- Like any genuine conversation, the dialogue is unscripted and will meander through whatever tangential topics interest people most.
- When the moderator senses that the group discussion is starting to lose people's attention, he or she can end the event with a simple "Thank you."
- Some cafés take a 10-minute break and reconvene for a second round of group conversation.

## 6:45 • Social Time

- While the planned parts (see above) of the event are typically over quickly, some of the most significant conversations happen after the main discussion has concluded.
- Escort the presenter to seating areas around the room, allowing everyone in the audience some face-to-face time with the scientist.

## 8:00 • Official End of the Event

- Holding a drawing using completed evaluation forms encourages people to stay for conversation.
- Publicly thank the scientist, and give him or her the option of leaving.



# Tips for the Moderator

Inclusive group conversations rarely happen naturally—it is up to the moderator to involve as many people as possible in a discussion. The science café moderator plays the role of host and master of ceremonies and has several important responsibilities:

- Arrive early to establish rapport and a plan of action with the presenting scientist.
- Ensure that no one (including the scientist) dominates the group conversation.
- Pay attention to the entire audience. You'll sense when an idea has grabbed the group's interest, or when few people are engaged.
- Facilitate clear, nontechnical communication.
- Help shape the conversation. For example, moderators aren't required to call on audience members in the order their hands were raised—when a compelling point is made, keep the group focused on it.
- Let the audience know their thoughts and ideas are appreciated. Comments are as welcome as questions.
- Encourage audience members to talk among themselves. For example, when a particularly good question comes up, try having the audience respond to it.
- It's a sure sign of an engaging science café experience if audience members begin interrupting the moderator.



*"A relaxed atmosphere  
and a chance to interact...  
in an informal setting  
lets people respond  
more directly to ideas."  
—presenting scientist*



# Choosing a Presenting Scientist

Most scientists are happy to have the opportunity to share their work at a science café. Common places to find presenting scientists include universities, government research institutions, professional associations, museums, research and development firms, and local publications (e.g., the science editor of a local paper).

Check the specific links to national partners at [www.sciencecafes.org/start.html](http://www.sciencecafes.org/start.html), and contact NOVA scienceNOW if you have difficulty finding scientists to participate. We keep track of scientists involved in research related to NOVA scienceNOW segments, so we may be able to help you find a scientist to present at a café.

An ideal presenting scientist will be:

- a good conversationalist;
- broadly knowledgeable about the topic;
- personable, friendly, and happy to speak with the café's audience;
- able to discuss research without using jargon;
- enthusiastic, and able to make the subject engaging.

Before extending an invitation to speak at an event, have a discussion with the scientist to see if he or she has the above qualities. And don't be shy about coaching the scientist regarding the audience and the goals of your café.

Get the scientist to preview the NOVA scienceNOW video you plan to use by sending him or her a link to the topic's Web site. Also direct potential presenters to [www.sciencecafes.org/presenters.html](http://www.sciencecafes.org/presenters.html) to encourage them to participate in and prepare for your café event.



*"It's a lot of fun,  
and it's important to be  
able to communicate  
your research to those  
outside your field."  
—presenting scientist*



# Promoting a Science Café

Word of mouth and e-mail are the most effective ways to draw people to an event. To capitalize on this, choose a catchy name, come up with intriguing descriptions for topics, and pick a venue that people are eager to visit and invite their friends to.

- Be sure to put your science café on the sciencecafes.org map ([www.sciencecafes.org/put\\_on\\_map.html](http://www.sciencecafes.org/put_on_map.html)).
- Send notices to local calendar listings (in printed publications and on Internet sites like craigslist.org and meetup.com). Many local newspapers will list events for free.
- Choose promotional partners who will help you reach your audience. For example, if you are trying to reach people who are not already science enthusiasts, you may not want to advertise at other science events.
- Certain topics let you reach out to groups who are not used to talking about science. For example, a science café on fuel cells may be an opportunity to attract an audience of car enthusiasts.
- Post flyers in areas that are popular with your audience. And flyers posted at your venue will remind regular patrons (and staff!) of the upcoming event.
- If you're not a graphic designer, you can integrate design into flyers using a word-processing program.
- The sample flyer on page 16 of this toolkit was made using Microsoft Word. The green circles and connecting lines were created with Word's standard drawing tools, and the text was added using text boxes.
- The benefit of this flyer design is that photos and text can be quickly changed for new café events.
- Online stock photo services (such as [www.istockphoto.com](http://www.istockphoto.com)) are very inexpensive (\$1 to \$3 per image). Ensure that any image you use has proper rights clearances.

*"Find a neighborhood venue with staff who can support you; advertise by word of mouth."  
—café organizer*

# café sci

beer  
+ science

= good conversation



What goes on  
while you sleep?

featuring

NOVA  
scienceNOW

with  
John Doe  
from MIT

**FREE FOOD!  
DRINK SPECIALS**

Tuesday, July 10  
starts @ 6:30pm

The Thirsty Scholar Pub  
Inman Square  
70 Beacon St

info: [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org)

NOVA scienceNOW is a registered trademark  
of WGBH Educational Foundation.

Is sleep just a  
**WASTE OF TIME?**

Then why do almost  
**ALL ANIMALS DO IT...**

Join us for a conversation  
in plain English about  
sleep, memory, and  
the dreams of  
lab rats.



# Using Trivia in a Science Café

A trivia game is a good way to get people thinking and talking together while the crowd is still assembling. Prizes, such as NOVA scienceNOW giveaways or a gift certificate for the venue, make a trivia competition even more appealing.

## Two ways to run a trivia competition:

- Individual: Distribute simple answer sheets and pencils. Call out a series of questions, and ask attendees to write down answers on their own. When you're ready to reveal the answers, have audience members exchange answer sheets with someone else and score their neighbor's results.
- Team: Distribute pencils and small sets of blank sheets of paper. Ask attendees to form teams. Call out a series of questions. After each question, teams have a set amount of time to turn in their answer (with their team name included on the paper they turn in). The results are scored and announced either before the café starts or at the end of the event.

Trivia that mixes popular-culture references with science questions can contribute to the lighthearted and inclusive café spirit. Below are trivia examples from a café on fuel cells.

Q: What's the atomic symbol for hydrogen?

A: H

Q: Your Ipod runs on a lithium-ion battery. What kind of battery does your conventional (nonhybrid) car run on?

A: LEAD ACID

Q: Some people tout the fuel cell as the "wave of the future." In the movie, *Back to the Future*, what fictional device powers the time-traveling DeLorean?

A: FLUX CAPACITOR

Q: Who first isolated hydrogen?

A: HENRY CAVENDISH (ONLY NEED "CAVENDISH")

Q: One potential use for hydrogen fuel cells is to power cars. In the original show *Knightrider*, what was the name of David Hasselhoff's car? Bonus point if you can give us the full name.

A: KITT/KNIGHT INDUSTRIES TWO THOUSAND

Q: The typical efficiency of an internal combustion engine is 20%. What is the efficiency of a hydrogen fuel cell?

A: 50%

Q: What famous hydrogen-filled blimp caught fire and crashed in 1937?

A: HINDENBURG

Q: How many people in the world currently have no access to electricity?

A: 2 BILLION

Q: After being run for 24 hours, what common household appliance will typically have used the most electricity?

A: AIR CONDITIONER

Q: Where is the world's biggest hydroelectric power plant?

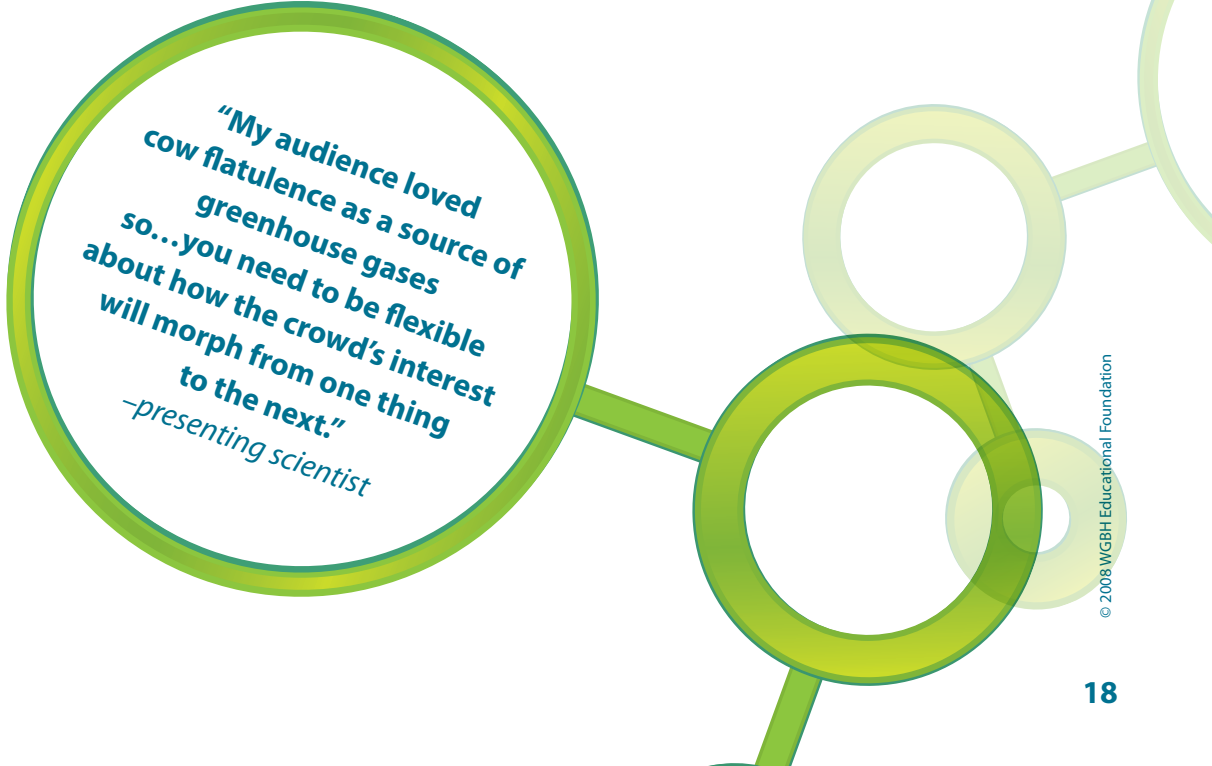
A: ITAIPÚ DAM, ON THE PARANÁ RIVER BETWEEN BRAZIL AND PARAGUAY.

Q: What major international environmental agreement (related to global warming) has the US refused to sign?

A: KYOTO PROTOCOL (OR KYOTO ACCORD)

Q: What was the name of the '70s PBS show in which Rita Moreno created her tagline, "Hey You Guys!"?

A: ELECTRIC COMPANY



**"My audience loved  
cow flatulence as a source of  
greenhouse gases  
so...you need to be flexible  
about how the crowd's interest  
will morph from one thing  
to the next."  
—presenting scientist**



Science cafés increase their audiences' interest in science. For more information about the positive impact of science cafés, go to [www.sciencecafes.org/cafe\\_impacts.html](http://www.sciencecafes.org/cafe_impacts.html). Use the *Science Café Impacts* page to help you develop your own evaluation. Below are some additional tips for gauging the success of a café.

- Have someone pay close attention to the audience during a café event and answer the questions below.
  - What aspects of the event seem to actively engage everyone?
  - Are people relaxed and comfortable, squirming in their seats, or barely awake?
  - Are there prolonged stretches with just one voice speaking?
  - How many people have a chance to speak during the event?
  - Is there a moment when everyone becomes very animated?
- Observe someone else's café, asking yourself the above questions, to learn more about your own through comparison.
- Use a survey, but keep in mind that written evaluations can influence an audience's perception of the event. For example, a survey that focuses on what the audience learned could feel like a test, making the café seem like a formal education event and defeating the point of the experience.
- Keep the survey short (8–12 questions) so that most people will complete it.
- Use the survey as an opportunity to obtain e-mail addresses so that you can promote future cafés. Be clear about your reasons for requesting the addresses, and explain that you will not share them or use them for any other purpose. A prize drawing using the completed surveys encourages greater participation in evaluation.

## Some sample evaluation survey questions:

### Demographics:

- Are you currently working in or studying a science-related field? (Yes or No)
- Are you female or male?
- How old are you?
- (You might want to add a question or two about the respondent's museum/science center attendance or interests)

### Café organization:

- What was the best part of tonight's event?
- What would you change to improve future events?
- How did you find out about this event?

- Have you been to science café events before? (Yes or No)
  - If yes: Why have you continued to attend science cafés?
  - If no: Why did you choose to attend this science café event?

### Impact of the event:

- Please list two things you learned today about science.
- Please rate your interest in (*from a low of 1 to a high of 5, both “before tonight’s event,” and “after tonight’s event”*):
  - Science
  - Attending future science cafés
  - Recommending that others attend
- Or a shorter version of the question above: Please rate the café’s effectiveness in increasing your interest in science (from a low of 1 to a high of 5).
- After attending this café, do you expect to do any of the following? (*Check all that apply*)
  - Discuss the café topic with family, friends, or colleagues
  - Try to stay more up to date on cutting-edge science topics in general
  - Read news articles about the café’s topic
  - Visit the NOVA scienceNOW Web site to learn more about the café’s topic
  - Visit other Web sites to learn more about the café’s topic
  - Read a book about the café’s topic

### Follow-up:

- Name
- E-mail
- I am interested in receiving (*Check all that apply*):
  - Information about future cafés
  - Weekly updates about programming on your station

We want to know the results of your café evaluations. Share them with us so we can share them with others. Please contact us at [getinvolved@wgbh.org](mailto:getinvolved@wgbh.org). Thank-you!