

IgBILL



Ig® Nobel Prize Ceremony

2014

THIS YEAR'S THEME: **FOOD**

Twitter: #IgNobel

About the Ig Nobel Prizes

Ig Nobel Prizes are awarded for achievements that first make people LAUGH, and then make them THINK. The Igs are intended to spur public curiosity and interest in science and other fields of endeavor. Ten prizes are awarded each year. Winners travel to the ceremony at their own expense.

The Ig Nobel Prize winners are, despite possible appearances to the contrary, real. Their achievements are well documented.

What to expect tonight: Imagine every ceremony you have ever had to endure. Loop them all together, at high speed, upside down. Add ten Ig Nobel Prize winners. That's the Ig Nobel Prize ceremony.



Paper airplanes are a tradition at the Ig Nobel Prize Ceremony. Modern flight regulations apply. Listen for the Special Announcement just before the start of the ceremony.

There will be two (2) designated paper airplane deluge periods. Prior to each, please ready your aircraft – but do not yet launch them.

See page 5 for more details.

The Twenty-Fourth 1st Annual Ig® Nobel Prize Ceremony

Thursday, September 18, 2014, 6:00 pm
Sanders Theatre, Harvard University

Reluctantly inflicted on you by
the international science humor magazine
Annals of Improbable Research
(AIR)

and co-sponsored by
The Harvard-Radcliffe Science Fiction Association
The Harvard-Radcliffe Society of Physics Students

The theme of this year's ceremony is

FOOD

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SCHEDULE OF EVENTS

Pointless Preamble

- Pre-ceremony Lobby Accordion Concert (5:00, in the lobby)
- Pre-ceremony concert (5:40, in the theatre)
- Ceremony begins (**6:00, in the theatre**)
- Paper Airplane Deluge #1
- The Traditional Ig Nobel “Welcome, Welcome” Speech
- Entrance of the New Winners
- Introduction of the Nobel Laureates and other Ignitaries

Everything Else^{**}

- Awarding of the 2014 Ig Nobel Prizes* (weather permitting)
- *What’s Eating You*: A Mini-Opera in 3 Acts*
- The 24/7 Lectures
- Introduction of Past Winners*
- Paper Airplane Deluge #2
- The Win-a-Date-With-a-Nobel-Laureate Contest
- Other Things*
- The Traditional Ig Nobel “Goodbye, Goodbye” Speech
- Disappearance of the Audience

** scattered throughout the evening*

*** but maybe in some different order*

Paper Airplanes

In the interests of safety and recycling, there will be two (2) special paper-aeronautic moments tonight: one at the ceremony’s beginning, the other at the midpoint.

Please hold your paper airplanes in readiness. Then fly them only – and profusely, to the point of deluge – during those two special moments. Please AIM FOR SAFETY!

An authority figure will make it very clear when each of those moments arrives.



Roy Glauber, Ig Nobel paper airplane sweeper (though not this year, as he is traveling), and Nobel Laureate.

Pre-Ceremony: mini-Concerts

(One in the lobby, then another in the theatre)

Before the ceremony, watch for two special mini-concerts. At 5:00, in the lobby, the **Boston Squeezebox Ensemble (BSE)** will play a a Mozart-Foodie Concert, insinuating strangely familiar tunes into your consciousness.

At 5:40, in the theatre, the **BSE** will reassemble on stage in the theatre proper, there to delight you whilst things happen around, above, and behind them.

This Year's Theme

The theme of this year's ceremony is **FOOD**. The theme applies to various goings-on, though not necessarily (and not necessarily not) to any of the particular achievements being honored with an Ig Nobel Prize.

Live Webcast

Tonight we will be joined from afar, in spirit and electro-mechanically, by teeming hordes watching via the Internet. The Ig Nobel Prize Ceremony has been webcast annually, beginning in 1996, when webcasting was a thing barely dreamt of, and heroically accomplished. Very special thanks to **The Harvard Extension School** and to **CS-50** for helping make this year's webcast happen. Video highlights of many past ceremonies are online at www.improbable.com.

Celebrity Bacteria

The theme of the 2010 ceremony was Bacteria. Several trillion celebrity bacteria were seated in or on the audience. Many of them are still here. See if you can spot them.

The Ig Informal Lectures!

SATURDAY afternoon, Sept 20, 2014, 1:00 pm

MIT Building 26, Room 100
60 Vassar Street, Cambridge

FREE! (But seating is limited, so get there early)

A Saturday Treat...

At tonight's Ig Nobel Prize Ceremony, each winner is allowed just ONE MINUTE to deliver an acceptance speech. But of course you'll want to hear more juicy details, and ask them questions, and so....

You are invited to come enjoy a lazy, lively half-afternoon of brief (FIVE MINUTES each, plus questions & answers), high-spirited talks by **the 2014 Ig Nobel Prize winners**, and by **Dr. NakaMats**.

Produced by the *Annals of Improbable Research*
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(mitpress.mit.edu/bookstore)

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Improbable Research and we salute
The Ig Nobel Award honorees.*

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"What's Eating You"

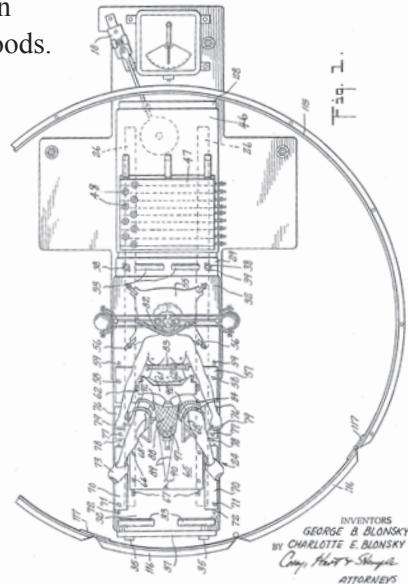
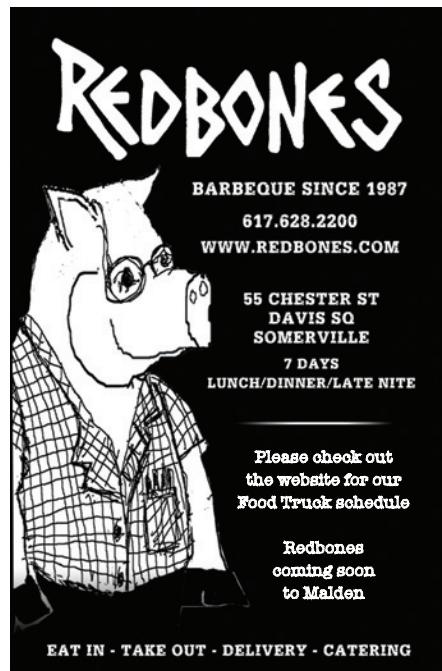
World Premiere mini-opera in three (3) acts

The story is about a couple who decide to stop eating traditional food — to instead get all their nutrients from pills, hundreds of pills per day. The trillions of microbes who live inside, on, and generally as part of them, also figure in the proceedings. Acts 2 and 3 happen, literally, several hundred years after Act 1. By special arrangement with Sanders Theatre, all three acts will be performed not only during the same century, but within the confines of this year's Ig Nobel Prize ceremony.

(Special thanks to Rich Losick, Sara Leiman, and Alicia DeFrancesco, for microbial insights and suggestions.)

The Words: Marc Abahams wrote the story and lyrics. This is his nineteenth Ig Nobel opera libretto.

The Music: The tunes were composed, in advance, by Wolfgang Amadeus Mozart, a German composer, and a consumer of traditional foods.



This technical drawing from the patent granted in 1965 to George and Charlotte Blonsky (who three decades later would be posthumously awarded an Ig Nobel Prize for managed health care) was part of the inspiration for last year (2013)'s Ig Nobel mini-opera, "The Blonsky Device." It has nothing to do with this year's opera.

Tonight's performance: Henry Akona arranged, orchestrated, and is directing *What's Eating You*.

The singers: *What's Eating You* stars **Maria Ferrante** (soprano) and **Scott Taylor** (baritone). The soloists will be accompanied by The **Microbe Choir:** Delphine Gabbay, Kelsey Calhoun, Ted Sharpe, Sylvia Rosenberg, Daniel Rosenberg, Andrew B. Jones, Paul Goodwin, Clia Goodwin, Erika Hutchinson, Patrick Yacono, Julia Lunetta. The Microbe Choir's ranks will be swelled by the **Nobel Laureates**.

The orchestra: The singers are backed by an all-star biomedical orchestra, "The Forces of Nature," composed of Harvard and MIT physicians and researchers, and one lawyer, and two other people.

Accordion: **Thomas Michel** (Harvard Medical School [HMS] Professor of Medicine)

Violin: **Ted Sharpe** (computational biologist at the Broad Institute)

Violin: **Marla Robinson**

Cello: **David Fisher** (HMS Professor and Chair of Dermatology)

Double bass: **Paul Glenn**

Flute: **Elizabeth Henske** (HMS Professor of Medicine)

Bassoon: **Ben Steinhorn** (HMS MD-PhD student)

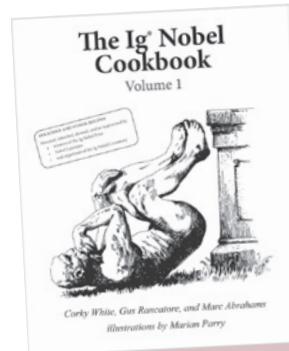
Clarinet: **Abby Schiff** (HMS MD-PhD student)

Trumpet: **Omar Arnouk** (lawyer)

Percussion: **David Gootenberg** (HMS MD-PhD student)

NEW from Improbable Research!

No matter how many cookbooks you've read, you've not seen one like this cookbook.



Available at select bookstores; e-book from WWW IMPROBABLE COM

Unique recipes from winners of the Ig Nobel Prize, Nobel Laureates, and organizers of the Ig Nobel Ceremony, including:

- Igduck, Fried in Butter
- The The Thé
- A Rollercoaster Martini
- "Testicles" on Toast
- CANBESMART Curry
- Breakfast for Diamond Makers and more...



Authority-Like Figures

As always, IgBill had incomplete information at press time. You may not be able to tell the players even with this scorecard.

(NOTE: ** indicates name is misspelled)

Producer/Director: Marc Abrahams

Co-Producer and Stage Manager: David Kessler

Ig Nobel Facilitator: Katherine Griffin

Opera Arranger/Orchestrator/Stage Director: Henry Akona

Assistant Stage Manager: Linda Brennan

Master Stagehand: Rob Sanders

Authoritative Presence: Roger Kautz

Opera Costumer: Catherine Quick Spangler

Opera Rehearsal Pianist: Patrick Yacono

Director of Improbable Engineering: Quentin Smith

Writers: Marc Abrahams, Alice Shirrell Kaswell, and friends

Ig House Band: Nicholas Carstoiu and the Ig Leaves

Boston Squeezebox Ensemble and

Forces of Nature Maestro: Thomas Michel

Lurking Presences: Roger Kautz, Robin Abrahams, Stanley Eigen

Lighting & Technology: Holly Gettings, Hunter Heinlen

Props and Scenery: Eric Workman

House Sound: David Nickerson, Bay State Sound

Sound Recording: Miles Smith, Frank "Barefoot" Cunningham

Slide Show: John Armstrong, Andrew Smiles, Geri Sullivan

Prize & Props Creation: Eric Workman

Sponsorships Coordinator: Heidi Clark

Provisionary Logisticians: Gus Rancatore and Corky Whiten

HRSFA Coordinator: Nameless Person

HRSPS Coordinators: Person Unnamed

Grand Panjandrum of the Delegations: Louise Sacco

Videography: Seven Generations Video, Bruce Petschek, Brian Galford, Don Schechter, Jon Shedler, Trevor Chamberlain

Lead Diplomats: Susan Kany, Dany Adams

Corps d'Esprit Diplomatique: Gus Rancatore, Corky White, Judith Fagin, Delphine Gabbay, Michelle Barmazel Steinberg, Zach Steinberg et al.

Liaison to the Ig Glorious Persons: Jason Kleinerman

Green Room Oracles: Maria Eliseeva, Heidi Clark

Press Wranglers: Tom Ulrich, Neil Gussman et al.

Photographers: Alexey Eliseev, David Holzman, Mike Benveniste

Ig Informal Lectures (Saturday) Coordinator: John Jenkins

Ig Nobel Webmaster: Julia Lunetta

Artwork & Logos: Geri Sullivan, Lois Malone

IgBill Design and Layout: Geri Sullivan



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People

Master of Ceremonies

Marc Abrahams, editor, *Annals of Improbable Research (AIR)*

Nobel Laureates

most of the following:

Martin Chalfie (Chemistry, 2008)

Carol Greider (Physiology or Medicine, 2009)

Dudley Herschbach (Chemistry 1986)

Eric Maskin (Economics, 2007)

Rich Roberts (Physiology or Medicine, 1993)

Jerome Friedman (Physics, 1990)

and perhaps some others

Welcome Welcome Speaker: Jean Berko Gleason

24/7 Lecturers: Corky White, Eric Maskin, Carol Greider, Martin Chalfie

Keynote Speaker: Dr. Yoshiro Nakamats, who was awarded the 2005

Ig Nobel Prize for nutrition, for photographing and retrospectively analyzing every meal he consumed during a period of 34 (now, in 2014, 43) years.

Opera Soloists: Maria Ferrante and Scott Taylor

Opera Orchestra: The Forces of Nature

Pre-Ceremony Band: The Boston Squeezebox Ensemble (Thomas Michel, Colin Ferguson, Patrick Yacono, Ted Sharpe, Betty Widersky)

Opera Narrator: Karen Hopkin

Opera Non-Soloists: The Microbe Choir, abetted by the Nobel Laureates

Pre-Ceremony Mozart Foodie Concert: Boston Squeezebox Ensemble

Mike Monkey: Edgar W. Herwick III

Parade and Opera Announcer: Karen Hopkin

Human Spotlights: Jim Bredt, Natasha Rosenberg

Human Curtain Rods: Maria Eliseeva, Debra Wise

Human Aerodrome: Eric Workman

Referee: Mr. John Barrett

Recipe Reciters: Corky White & Gus Rancatore, and Rich Roberts

V-Chip Monitor: Noted New York Attorney William J. Maloney

New York Attorney William J. Maloney: Himself

Majordomo: Gary Dryfoos

Minordomos: Julia Lunetta, Peaco Todd, Ben Biggs, Sylvia Rosenberg, Eliza Kosoy, Alex Nemirosky, Chris Deter

Performing Chemists: Joost Bonsen, Daniel Rosenberg, et al.

Performing Props Master: Eric Workman

Miss Sweetie Poo: Jasper Milstein

Official Sweeper: Sophie Haas

Hecklers: You, the audience

Goodbye Goodbye Speaker: Jean Berko Gleason

Special Thanks to...

Sid and Selma Abrahams, Jackie Baum, Bob Bartosch, Tina Bowen, The British Science Association, Brown/Rudnick, Thad Choelemtiarana, Mark Dionne, Tatiana Divens, Eric Engel, Jesse Eppers, Melissa Franklin and the Harvard Physics Department, Martin Gardner, Holly Gettings, Jason Govostes, Jeff Hermes, Holleb & Coff, Tom Lehrer, Maggie Lettvin, Ilya Luvish, Lois Malone, Milo, Kees Moeliker, Regular Noetzli, ** The Flying Petscheks, Ruth Polleys, Harriet Provine, Gus and Mimi Rancatore and Toscanini's Ice Cream, The Flying Rosenbergs, Jonathan Salz, Sanders Theatre, Jim Stoll, Geri Sullivan, Al Teich, Ray Traietti, Joe Wrinn and Howard Zaharoff.



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The 24/7 Lectures

Each 24/7 Lecture will be delivered by one of the world's great thinkers.
Each lecture has two parts:

**A complete technical description
in 24 SECONDS**

**A clear, accurate summary
that anyone can understand
in SEVEN WORDS**

The time limit and word limit will be **strictly enforced** by
Mr. John Barrett, the Ig Nobel Referee.

This year's 24/7 lecturers:

- **Corky White** (Professor of anthropology, Boston University, and co-author of *The Ig Nobel Cookbook*, volume 1)
TOPIC: FOOD
- **Eric Maskin** (Nobel Laureate, Economics, 2007)
TOPIC: ECONOMICS
- **Carol Greider** (Nobel Laureate, Physiology or Medicine, 2009)
Topic: TELOMERES
- **Martin Chalfie** (Nobel Laureate, Chemistry, 2008)
Topic: BIOLUMINESCENCE

...and perhaps one or two others.

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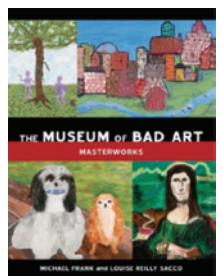
Visit our galleries in Somerville,
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**The Museum
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NPR Broadcast

On the day after Thanksgiving, listen to the traditional Ig Nobel Broadcast on National Public Radio (NPR)'s *Science Friday* with Ira Flatow. Many of the previous year's Ig broadcasts are at www.ScienceFriday.com. You can see video highlights of several past ceremonies at www.improbable.com.

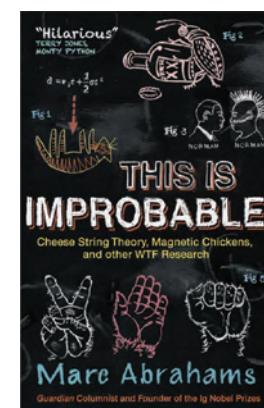
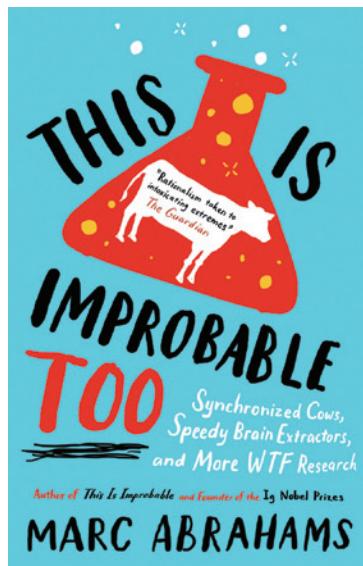
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*—Mary Roach, author of
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A list of the new Ig Nobel Prize winners will be posted at
WWW.IMPROBABLE.COM

Last Year's (2013) Ig Nobel Prize Winners

MEDICINE PRIZE: Masateru Uchiyama [JAPAN], Xiangyuan Jin [CHINA, JAPAN], Qi Zhang [JAPAN], Toshihito Hirai [JAPAN], Atsushi Amano [JAPAN], Hisashi Bashuda [JAPAN] and Masanori Niimi [JAPAN, UK], for assessing the effect of listening to opera, on heart transplant patients who are mice.

PSYCHOLOGY PRIZE: Laurent Bègue [FRANCE], Brad Bushman [USA, UK, the NETHERLANDS, POLAND], Oulmann Zerhouni [FRANCE], Baptiste Subra [FRANCE], and Medhi Ourabah [FRANCE], for confirming, by experiment, that people who think they are drunk also think they are attractive.

JOINT PRIZE IN BIOLOGY AND ASTRONOMY: Marie Dacke [SWEDEN, AUSTRALIA], Emily Baird [SWEDEN, AUSTRALIA, GERMANY], Marcus Byrne [SOUTH AFRICA, UK], Clarke Scholtz [SOUTH AFRICA], and Eric J. Warrant [SWEDEN, AUSTRALIA, GERMANY], for discovering that when dung beetles get lost, they can navigate their way home by looking at the Milky Way.

SAFETY ENGINEERING PRIZE: The late Gustano Pizzo [USA], for inventing an electro-mechanical system to trap airplane hijackers — the system drops a hijacker through trap doors, seals him into a package, then drops the encapsulated hijacker through the airplane's specially-installed bomb bay doors, whence he parachutes to earth, where police, having been alerted by radio, await his arrival.

PHYSICS PRIZE: Alberto Minetti [ITALY, UK, DENMARK, SWITZERLAND], Yuri Ivanenko [ITALY, RUSSIA, FRANCE], Germana Cappellini [ITALY], Nadia Dominici [ITALY, SWITZERLAND], and Francesco Lacquaniti [ITALY], for discovering that some people would be physically capable of running across the surface of a pond — if those people and that pond were on the moon.

CHEMISTRY PRIZE: Shinsuke Imai [JAPAN], Nobuaki Tsuge [JAPAN], Muneaki Tomotake [JAPAN], Yoshiaki Nagatome [JAPAN], H. Sawada [JAPAN], Toshiyuki Nagata [JAPAN, GERMANY], and Hidehiko Kumgai [JAPAN], for discovering that the biochemical process by which onions make people cry is even more complicated than scientists previously realized.

ARCHAEOLOGY PRIZE: Brian Crandall [USA] and Peter Stahl [CANADA, USA], for parboiling a dead shrew, and then swallowing the shrew without chewing, and then carefully examining everything excreted during subsequent days — all so they could see which bones would dissolve inside the human digestive system, and which bones would not.

PEACE PRIZE: Alexander Lukashenko, president of Belarus, for making it illegal to applaud in public, AND to the Belarus State Police, for arresting a one-armed man for applauding.

PROBABILITY PRIZE: Bert Tolkamp [UK, the NETHERLANDS], Marie Haskell [UK], Fritha Langford [UK, CANADA], David Roberts [UK], and Colin Morgan [UK], for making two related discoveries: First, that the longer a cow has been lying down, the more likely that cow will soon stand up; and Second, that once a cow stands up, you cannot easily predict how soon that cow will lie down again.

PUBLIC HEALTH PRIZE: Kasian Bhanganada, Tu Chayavatana, Chumporn Pongnumkul, Anunt Tommukayakul, Piyasakol Sakolsatayadorn, Krit Komarat, and Henry Wilde, for the medical techniques described in their report "Surgical Management of an Epidemic of Penile Amputations in Siam" — techniques which they recommend, except in cases where the amputated penis had been partially eaten by a duck. [THAILAND]

For a complete list of all Ig Nobel Prize winners (1991-now)
 see the Improbable Research web site
WWW.IMPROBABLE.COM

SANDERS THEATRE INFORMATION

Sanders Theatre is managed by
Memorial Hall/Lowell Hall Complex at Harvard University
45 Quincy Street, Room 027, Cambridge, MA 02138
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For history of the building, visit www.fas.harvard.edu/memhall

RESTROOMS are located on the lower level.

LATECOMERS will be seated at the discretion of management.

PHOTOGRAPHY AND RECORDING of any kind is not permitted in Sanders Theatre.
Equipment may be confiscated.

Lost and Found Call 617.496.4595 or visit Memorial Hall 027.
Harvard University is not responsible for lost or stolen property.

PARKING

There is no parking at Sanders Theatre.

Free parking for most events is available at Broadway Garage, corner of Broadway and Felton Street, from one hour pre-performance to one hour post. Parking for some student events will be at 52 Oxford Street Garage.

Access for Patrons with Disabilities

Accessible seating can be arranged through the Box Office. Sanders Theatre is equipped with Assistive Listening Devices, available 30 minutes prior to events.

Accessible parking for events: There is no parking at Sanders Theatre itself. Patrons may be dropped off in the circle on the Kirkland Street side of Sanders Theatre near the accessible entrance. We encourage patrons to park at either the Broadway Garage or 52 Oxford Street Lot. The Broadway Garage is fully accessible and there are curb cuts at all crosswalks between the garage and the Sanders Theatre.

If necessary, a limited number of accessible parking spaces may be available in nearby location by advance arrangement. It is extremely difficult to honor requests received less than 5 business days prior to an event. Please plan ahead.

To arrange for an Accessible Parking Space in a nearby parking lot, contact:

1. Harvard University Parking Office at 495-3772 AND/OR
2. University Disability Services at 495-1859, Mon-Fri 9am-5pm
or email: disabilityservices@harvard.edu

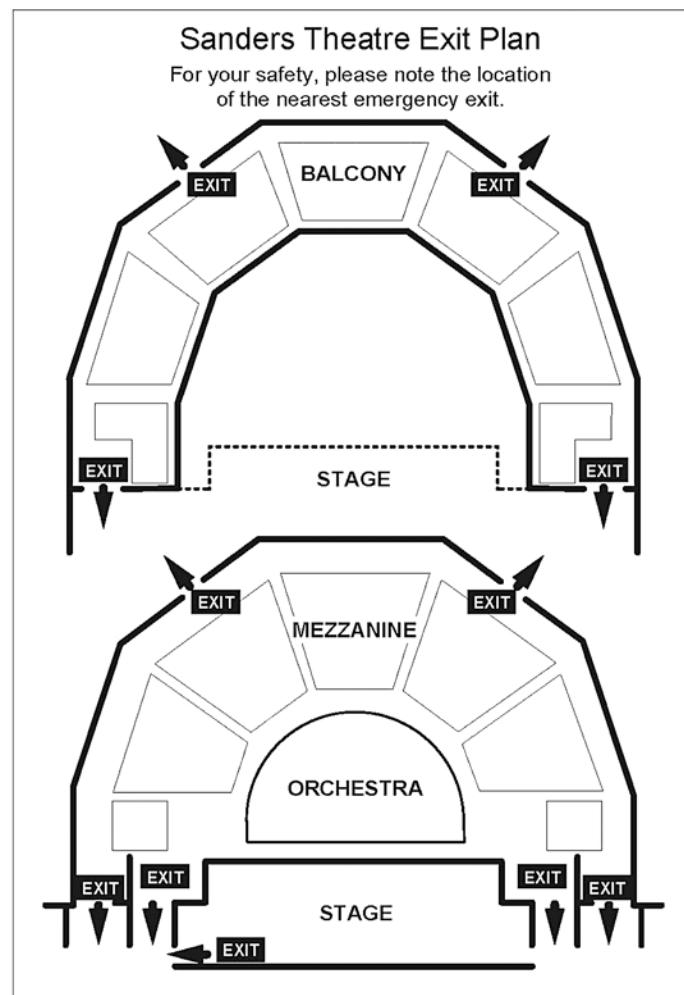
THE HARVARD BOX OFFICE

Advance Sales: Holyoke Center Arcade, Harvard Square
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Calendar of events, online sales and current hours: www.boxoffice.harvard.edu

Pre-Performance Sales: Sanders Theatre

On performance days: Opens at noon for matinees and 5pm for evening performances.
Closes 30 minutes after curtain.



Upcoming Ig/ Improbable Events!

For upcoming Ig Nobel / Improbable Research events (including the annual Improbable Research session at the Annual Meeting of the American Association for the Advancement of Science; the annual U.K Ig Nobel tours of the UK and Scandinavia, etc., see:

www.improbable.com

E-books are in the AIR (and vice versa)



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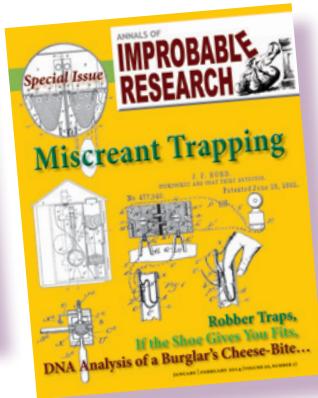
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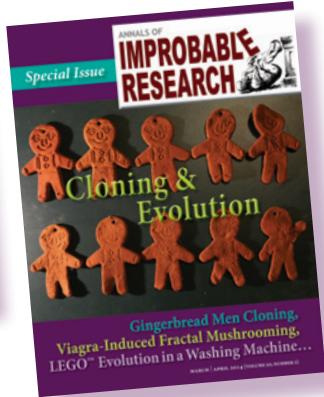
Mel says: "It's swell."



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