



CONTENTS

The features marked with a star (*) are based entirely on material taken straight from standard research (and other Official and Therefore Always Correct) literature. Many of the other articles are genuine, too, but we don't know which ones.



SPECIAL SECTION: THE 2011 IG NOBEL PRIZES

- 6 The 21st First Annual Ig Nobel Prize Ceremony* — *Stephen Drew*
- 9 The 2011 Ig Nobel Prize Winners*
- 14 The Acceptance Speeches*
- 18 The 24-7 Lectures*
- 20 LIBRETTO: Chemist in a Coffee Shop — *Marc Abrahams et al.*
- 26 Harold Camping, Ig Nobel Prize Winning Mathematician, Explains His Mistake*— *Alice Shirrell Kaswell*

IMPROBABLE RESEARCH REVIEWS*

- IFC May We Recommend: Do Women Spend More Time in the Restroom Than Men?* — *Stephen Drew*
- 4 Improbable Research Review* — *Dirk Manley*
- 5 Improbable Medical Review* — *Bertha Vanatian*

NEWS & NOTES

- 2 AIR Vents (letters from our readers)
- 3 AIR Books
- 6 Editorial Board
- 26 Back Issues
- 28 KIM CARTOON: “Empty Galleries” — *Nick Kim*
- 28 Teachers’ Guide
- IBC Unclassified Ads



On the Front Cover

Arturas Zuokas, the mayor of Vilnius, Lithuania, accepts the Ig Nobel Peace Prize for demonstrating that the problem of illegally parked luxury cars can be solved by running them over with an armored tank. Photo: Mike Benveniste.



On the Back Cover

Performing chemist Daniel Rosenberg mucks with the optical properties of the contents of a glass globe. Photo: Biyeun Buczyk.

Coming Events

See WWW.IMPROBABLE.COM for details of these and other events:

- November 25, 2011 Annual Ig Nobel broadcast on NPR’s “Science Friday”
- January 2011 ARISIA, Boston
- February 2012 AAAS Annual Meeting, Vancouver
- March 2012 Ig Nobel Tour of the UK

Every Day Read something new and improbable every day on the Improbable Research blog, on our web site:

WWW.IMPROBABLE.COM

LIBRETTO: CHEMIST IN A COFFEE SHOP

Words: Marc Abrahams (acts 1-4), Tom Lehrer (Act 5)

Music: Johannes Brahms, Georges Bizet, Jacques Offenbach, Luigi Denza, and Arthur Sullivan

Chemist in a Coffee Shop premiered as part of the 21st First Annual Ig Nobel Prize Ceremony, at Sanders Theater, Harvard University, Cambridge, Massachusetts, on September 29, 2011. Video of the performance can be seen at www.improbable.com.

Special thanks to Tom Lehrer for letting us use and slightly mangle his classic song “The Elements” in Act 5.

Original Cast

Stage manager and conductor:
David Stockton

Barista: Maria Ferrante

Baroasta: Roberta Gilbert

The Chemist: Daniel Rosenberg

Dr. Thomas Michel: himself

A customer: Marc Andelman

Other customers: Nobel laureates Dudley Herschbach, Rich Roberts, Roy Glauber, Peter Diamond, Eric Maskin, Lou Lou Ignarro; performer Amanda Palmer; and all the 2011 Ig Nobel Prize winners and 24/7 Lecturers.

Pianist: Branden Grimmett

The story: A CHEMIST comes into the coffee shop, gets a cup of coffee, then chats briefly and insultingly with the two baristas—named BARISTA and BAROASTA—who work in the shop. He sits down with a cup of coffee. Mostly he stays in that seat throughout the opera. BARISTA and BAROASTA turn out to know quite a bit of chemistry. In act 2 and thereafter, BARISTA and BAROASTA keep feeding THE CHEMIST free coffee, to which the chemist responds physically, more and more, as the opera goes on. He becomes devoted to the baristas, taking notes about what they say and helping them, becoming their increasingly admiring assistant.

ACT 1: “A Chemist Comes Into a Coffee Shop...”

[WE SEE THE TWO BARISTAS ALREADY IN THE SHOP, WORKING AWAY.]

NARRATOR [WHO IS ALWAYS SIPPING COFFEE]: Tonight’s opera is about a coffee shop. It’s also about chemistry.

[THE CHEMIST WALKS INTO THE SHOP, AND THE BARISTAS QUICKLY, EFFICIENTLY SERVE HIM A CUP.]

NARRATOR: The shop has two baristas, who are really knowledgeable about coffee. It looks like they have a new customer. It looks like that customer is a chemist. It looks like the baristas are giving him a nice, fresh cup of coffee. And it looks like it’s time for me to shut up and see what happens.

[MUSIC: “Hungarian Dance #5,” Johannes Brahms]

[CHEMIST takes a big sip of coffee]
CHEMIST [SPOKEN:] Hey, this cup of chemicals tastes pretty good! Tastes like coffee, ha ha ha ha ha! That’s because it IS coffee, ha ha ha ha ha! Heh—I know you work in a coffee shop, but I bet you don’t know the secret of WHAT’S IN COFFEE, chemically speaking.

CHEMIST:

[SINGS A BIT TAUNTINGLY, A CAPELLA AND NOT TOO SKILLFULLY, TO THE TUNE OF BRAHMS’ 5TH HUNGARIAN DANCE:]

Coffee isn’t what you think—
Coffee’s a...
Very simple drink.
Mostly good old H-two-O!
Hydrogen and oxygen!
That’s WATER, don’t you know!

[SPOKEN:] Ha ha ha ha ha ha ha ha ha ha ha ha!

[SITS DOWN WITH THE COFFEE, AND POINTEDLY STOPS PAYING ATTENTION TO THE BARISTAS.]

[THE TWO BARISTAS NOW SING THIS SONG, BEGINNING WITH THE START OF THE ORIGINAL TUNE. THEY PRETEND THAT THEY DON’T KNOW THE CHEMIST CAN HEAR THEM. THE CHEMIST PRETENDS THAT HE ISN’T PAYING ATTENTION TO THEM. AS THE SONG PROGRESSES, THE CHEMIST PRETENDS HE IS NOT EMBARRASSED AT HAVING ACTED LIKE AN ASS.]

BARISTA:
Coffee is a simple drink.
Common stuff.
Hardly worth a think.

BAROASTA:
They make coffee everywhere,
Making coffee takes no brains,
And hardly any care.

BARISTA:
Put some water into a cup.
Coffee, too.
Then just stir it up.

BAROASTA:
Lots-a sugar! Lots-a cream!
Simply put: The more you add,
The better it will seem!
BOTH: HA!

BAROASTA: Beans might matter—just Arabica!... Please!
My bean pref’rence is... well, just a little Viennese...
Though Robusta beans—have a... little extra manganese!
BARISTA: Ah, the subtle sweetness of manganese!

BAROASTA: I like beans that have lots of... P-xyleneol.
BARISTA: I like beans just bursting... with isoeugenol.
BAROASTA: I like beans with... low dihydrostosterol.
BARISTA: That’s what you say! You, you’re a know-it-all.



BAROASTA:
 Maybe I should be like Harry Potter.
 [GESTURES, HALF-MOCKINGLY TOWARD
 THE CHEMIST]
 Use a spell to purify the water.

BARISTA:
 You, you'd never conjure any danger.
 You're a scholar, like Hermione
 Granger!

BAROASTA:
 Chemistry can... show you if there's
 something wrong.
 Spot some sourness... or a batch that's
 wayyyyyyyyyyy too strong.
 T'see if you have... got a crappy
 coffee bean,
 Monitor the... 2-hydroxy-pyradine.

BARISTA:
 Brewing methods! Which one is best?
 Choose THAT one—then ignore the
 rest.
 Study up! Apportion your time
 To the many aspects of your coffee
 paradigm.

BAROASTA:
 Percolator? That work okay?
 Or perhaps, a filter, s'il vous plait?
 Do a drip? Or use a French press?
 Contemplating all the options causes
 great distress!

*TOP: The two baristas, Roberta
 Gilbert (left) and Ferrante, confront
 their haughty new customer (Daniel
 Rosenberg). Photo: Mike Benveniste.*

BARISTA:
 Try some physics?... Use a vacuum
 under glass —
 Exploit certain... properties of gas.
 Or just boil it in water—be traditional
 like that.
 Mess that up, though, and you will taste
 a rat.

BAROASTA:
 Choose your method! Oh, you can
 really screw it up!
 Un-delicious... desolation in a cup!

BOTH:
 Ruination... will happen right away if
 you are wrong.
 Coffee-making calls for... an intellect
 that's strong!
 Strong, strong, strong!

ACT 2: Something About Coffee...

NARRATOR [SIPPING COFFEE]: In Act
 Two of our opera, we are still in the
 coffee shop. Of course we are! Why
 would we go anywhere else? The two
 baristas look like they want to talk
 about coffee. Nothing new there. Let's
 see what they have to say....

[MUSIC: "Habanera," Georges Bizet,
 from "Carmen"]

BARISTA:
 Some crave coffee that's steamy hot.
 Some crave coffee that's chilly cool.
 I don't care if it's hot or not.

I care about one special molecule.
 Certain molecules have allure.
 —Hey, I LIKE carbon, but I LOVE
 graphene!—
 But always, ALWAYS, my chem
 du jour's
 That little molecule they call...
 CAFFEINE!
 Caffeine! Caffeine! Caffeine! Caffeine!
 The very name is very nice.
 Caffeine, caffeine! Caaa-ffeine!
 Woo-hoo!
 Perhaps I should be more precise:
 C-eight H-ten N-four O-two.

[OTHERS:] Caffeine! Caffeine!
 Yes, there are pedants who prefer to say
 a diff'rent name—
 Caffeine! Caffeine!!
 TRIMETHYLXANTHINE... Yes,
 PEDANTIC'LY, it's the same.
 Caffeine! Caffeine!
 It acts in diff'rent ways on diff'rent
 people's body clocks.
 Caffeine! Caffeine!
 It helps makes coffee so delicious
 a paradox.

BARISTA:
 In most countries most people think
 That coffee makes you fly, and makes
 you leap.
 In Japan, though, this dreamy drink
 Is what folks use to help them get
 to sleep.
 In our neighborhood coffee shop
 We brew the coffee so it's quite dilute.
 But Turks and Greeks serve it thick
 as glop.
 And if it's not, you'll hear a loud
 dispute.
 Caffeine! Caffeine! Caffeine! Caffeine!
 The very name is very nice.
 Caffeine, caffeine! Caaa-ffeine!
 Woo-hoo!
 Perhaps I should be more precise:
 C-eight H-ten N-four O-two.

[OTHERS:] Caffeine! Caffeine!
 C-eight H-ten N-four O-two.
 Caffeine! Caffeine!
 Caffeine! Caffeine!
 Caffeine! Caffeine! Caffeeeeeeeeine!
 The secret of the coffee bean!

continued >



[MUSIC: “The Toreador Song,”
Georges Bizet, from “Carmen”]

BAROASTA:
Well-made coffee
Is a bit like toffee —
Its delicious taste
Has many elements.
Furans and pyrroles,
Proteins and thiazoles,
Protocatechuic acid. All packed in
one bean!
Who can measure
All the simple pleasure
From this simple food
Which needs no supplements.
This simple fluid
Somehow accru-ed
Lots of simple compounds—Let me
mention just a few!
Aliphatic acids,
Chlorogenic acids,
And a slew of polysaccharides.
Tryptophan! Obtusifoliol!
And I tell you that’s not all!
My favorite... (You knew
it! You knew it!) is
cafeeeeeeeeeeeeeeeeeiiiiiiiiiiiiine!
Caffeine? I like it!
You! You like it, too!
Hey, buckaroo—What does it do?
When... you drink coffee,
Well, need I explain
That it acts on your brain!
Your heart and kidneys and
Your sphincter, too!
Yes, on your sphincter, too!

ALL:
Caffeine? I like it!
You! You like it, too!
Hey, buckaroo—What does it do?

BAROASTA:
When... you drink coffee,
Well, need I explain
That it acts on your brain!

ALL:
Your heart and kidneys and
Your sphincter, too!
Yes, on your sphincter, too!

[ALL RUSH OFF, PRESUMABLY TO THE LOO.]

ACT 3: The Coffee Diet

NARRATOR: It’s Street Performer Day
at the coffee shop. Street performers
get a free cup of coffee if they come to
the shop and perform something about
coffee. Here comes one now! And he’s
a doctor, too. It’s Dr. Thomas Michel
of Harvard Medical School. Dr. Michel
has been doing some research on the
health effects of coffee. Maybe he’ll tell
us about that...

[DR. MICHEL AND HIS ACCORDION COME
IN. THE CHEMIST (AND/OR OTHERS? THE
BARISTAS, TOO?) CANNOT HELP BUT DO A
ONE-PERSON KICKLINE TO ACCOMPANY HIM.]

TOP: The baristas extol the virtue of disaccharides. Photo: Alexey Eliseev.

[MUSIC: “Can-Can,” Jacques
Offenbach]

DR. MICHEL:
Do you know the coffee diet?
Though it seems a bit obscure,
There’s no reason not to try it.
It’s so simple and so pure.
Coffee’s good at elevating
Your base metabolic rate --
Gets your brainstem oscillating,
You feel vibrant! You feel great!
All you drink is coffee, coffee, co-o-
ffee!
Lunch and dinner—coffee, coffee, co-
o-ffee!
You’ll get thinner—coffee, coffee, co-
o-ffee!
Saint or sinner, everyone drinks
Coffee, coffee, coffee, coffee, coffee,
coffee, coffee, coffee,
Cooooooo-ffeeeeeeeeee !

[CHORUS:]
Oh! As an appetite suppressant
Coffee is incessant.
Yet it makes you effervescent!
Coffee is just so fab! It
Turns into a habit.
Keeps you hopping like a rabbit.
Here’s why it’s dietetic:
It’s a diuretic—
Makes you GO, GO, GO! GO, GO, GO,
GO! GO,
COFFEE!
You cannot sleep
Because you want to keep
On drinking, ‘cause it’s cheap.
Record-keeping for this diet.
Is so simple to keep up.
All you do to quantify it
Is to count each coffee cup.
Grandé, venti, more than twenty
Cups a day a habit makes...
Habit makes... habit makes... habit
makes... habit makes...
habit makes... habit makes... habit
makes...
Habit habit habit habit habit habit habit
habit.

[REPEAT THE CHORUS]



And it has no cholesterol!
 It has no nutrients at all!
 Coffee, coffee, coffee, coffee,
 coffee, coffee,
 Coooooo--
 ffeeeeeeeeeeeeeeeeeeeeeeeeeeee

[NOTE: THIS SONG WAS ORIGINALLY PART OF ONE OF OUR EARLIER OPERAS—“THE ATKINS DIET OPERA,” IN 2004.]

ACT 4: In the Coffee

NARRATOR [SIPPING COFFEE]: Well, we’re still here in the coffee shop. I’m having my my fourth cup. This must be Act Four! I’m anxious to see what’s going to happen. But first, I have to pee. I’ve just had four cups of coffee. Excuse me, will you? I’ll be back. Meanwhile, you listen to the music.

[MUSIC: “Funiculi Funicula,” Luigi Denza]

BARISTA:
 Just WHAT should you put in a cup of coffee?
 I’ll tell you WHAT.
 [OTHERS:] I’ll tell you WHAT.

BAROASTA:
 The way that I respond to perfect coffee...
 Well, I’m a nut.
 [OTHERS:] A coffee nut.

BARISTA:
 The way that I react is so PAVLOV-y—
 Right from my gut!
 [OTHERS:] Right from my gut! —
 When certain SPECIAL THINGS are in my coffee —
 And nothing but.
 [OTHERS:] And nothing but.

ALL:
 Sugar! Sugar! Sugar and some cream,
 In proportion, working as a team!
 When I put sugar in my coffee with the right amount of cream,
 Verily, oh verily, oh life is but a dream!
 [REPEAT the “sugar! sugar!” segment]

BARISTA:
 The chemistry of sugar is so simple.
 Disaccharide.
 [OTHERS:] Disaccharide.
 Each molecule has got a sort of dimple.
 On either side.
 [OTHERS:] On either side.

There’s an ether bond between the one part—
 The fructosyl.
 [OTHERS:] The fructosyl.
 And its attractive isomeric sweetheart—
 The glucosyl.
 [OTHERS:] The glucosyl.

ALL:
 Sucrose! Sucrose! So completely sweet!
 Fructose, glucose—nothing indiscreet.
 Good old C-twelve H-twenty-two
 Oh-(ho!)-eleven! What a treat!
 Glycosidic linkage keeps the bonding nice and neat.

BAROASTA:
 Cream caresses coffee in a cuppa,
 Consider this.
 [OTHERS:] Consider this.
 A drink drunk after lunch or after suppah
 Was simple bliss.
 [OTHERS:] Was simple bliss.

continued >

TOP: Maria Ferrante, Daniel Rosenberg, Thomas Michel, Roberta Gilbert and Marc Andelman exhibit certain effects of the coffee diet. Photo: Mike Benveniste.



That bliss was quite contingent
on the texture—
Not like a paste.
[OTHERS:] Not like a paste.
Nothing so astringent that it vexed your
Exquisite taste.
[OTHERS:] Exquisite taste. —

ALL:
Cream is smooth and rich, and
mixes well!
Cream enhances coffee taste and smell,
With phospholipids and some proteins
as emulsifiers that
Fortify the globules of delicious
butterfat!

ALL:
Sugar! Sugar! Sugar and some cream,
In proportion, working as a team!
When I put sugar in my coffee with the
right amount of cream,
Verily, oh verily, oh life is but a dream!

[REPEAT the “sugar! sugar!” segment]

In the opera's finale, each of the Nobel laureates sings the name of his favorite element. LEFT TOP: Peter Diamond (photo by Mike Benveniste). LEFT BOTTOM: Dudley Herschbach (photo by David Holzman). RIGHT TOP: Roy Glauber (photo by David Holzman).

ACT 5: The Ingredients

NARRATOR [SIPPING COFFEE]: I'm back. Just in time for the thrilling conclusion to tonight's opera. Oh, look! The coffee shop is FILLED with customers. And they look excited! That's because the baristas have JUST invented a new flavor of coffee. Everyone is about to have their VERY FIRST SIP. Let's see if it's good!

[EVERYONE ON STAGE, OTHER THAN THE BARISTAS, IS A CUSTOMER IN THE COFFEE SHOP, AND HAS A CUP IN HAND.

THREE OR FOUR CUSTOMERS EACH TAKE A SIP OF COFFEE AND ASK THIS QUESTION—ASK IT SEVERAL TIMES SO THAT THE AUDIENCE CANNOT POSSIBLY MISS THIS SETUP TO THE JOKE—BEFORE THE SONG BEGINS:]

[SPOKEN:] “Wow! This is the BEST cup of coffee I've ever tasted! What's IN it?”

[BARISTA and BAROASTA DIVIDE THE LYRICS BETWEEN THEM. AT CERTAIN POINTS ONE OR ANOTHER CUSTOMER EACH SINGS ONE LINE.]

[MUSIC: “Modern Major General” by Arthur Sullivan, words by Tom Lehrer (“The Elements,” slightly modified)]

There's antimony, arsenic, aluminum,
selenium,
And hydrogen and oxygen and nitrogen
and rhenium,

And nickel, neodymium, neptunium,
germanium,
And iron, americium, ruthenium,
uranium,
Europium, zirconium, lutetium,
vanadium,
And lanthanum and osmium and
astatine and radium,
And gold and protactinium and indium
and gallium,
And iodine and thorium and thulium
and thallium.
There's yttrium, ytterbium, actinium,
rubidium,
And boron, gadolinium, niobium,
iridium,
And strontium and silicon and silver
and samarium,
And bismuth, bromine, lithium,
beryllium, and barium.

BARISTA [SPOKEN, AS PIANO FILLS SOFTLY UNDER]:
Isn't that interesting?
There's no need to write it down!
Because we now sell BOXES of this
coffee, in stores everywhere!
You can buy this beautiful coffee—in
this BEAUTIFUL BOX.

[SOMEONE HOLDS UP A GIANT BOX]
Isn't it a beautiful box? All the
ingredients are listed ON THE BOX!!

[MUSIC RESUMES]



There's holmium and helium and
hafnium and erbium,
And phosphorus and francium and
fluorine and terbium,
And manganese and mercury,
molybdenum, magnesium,
Dysprosium and scandium and cerium
and cesium.
And lead, praseodymium, and
platinum, plutonium,

Palladium, promethium, potassium,
polonium,
And tantalum, technetium, titanium,
tellurium,
And cadmium and calcium and
chromium and curium.
There's sulfur, californium, and
fermium, berkelium,
And also mendelevium, einsteinium,
nobelium,

And argon, krypton, neon, radon,
xenon, zinc, and rhodium,
And Chlorine, carbon, cobalt, copper,
tungsten, tin, and sodium.

BAROASTA:

These are the coffee flavors listed on
the side of OUR BOX. . . .
We like to think that some of them you
will not see at STARBUCKS.

Roberta Gilbert leads everyone in the rousing, coffee-buzzed opera finale. Photo: Mike Benveniste.

ANNALS OF IMPROBABLE RESEARCH EDITORIAL BOARD

Anthropology
Jonathan Marks, U. North Carolina

Archaeology
Angela E. Close, U. Washington

Astrochemistry
Scott Sandford, NASA/Ames

Astronomy
Robert Kirshner, Harvard U.
Jay M. Pasachoff, Williams Coll.
Eric Schulman, Alexandria, Virginia
David Slavsky, Loyola U., Chicago

Biology
Dany Adams, Tufts U.
Lawrence Dill*****, Simon Fraser U.

Biomaterials
Alan S. Litsky, Ohio State U.

Biophysics
Leonard X. Finegold, Drexel U.

Biotechnology
A. Stephen Dahms, Alfred E. Mann
Foundation

Bureaucracy
Miriam Bloom, SciWrite, Jackson, MS

Cardiology
Thomas Michel*****, Harvard Med. School

Chemistry
Dudley Herschbach*, Harvard U.
William Lipscomb*, Harvard U.

Computer Science
Dennis Frailey, Texas Instruments, Plano, TX
Robert T. Morris***, MIT
Margo Seltzer, Harvard U.

Economics
Ernst W. Stromsdorfer, Washington St. U.

Engineering
Dean Kamen, DEKA Research

Food Research
Massimo Marcone, U. of Guelph

Forensic Biology & Criminalistics
Mark Benecke, Int'l Forensic Res., Köln

Functional Biology & Morphology
Frank Fish, West Chester U.
Rebecca German, Johns Hopkins U.
Richard Wassersug*****, Dalhousie U.

Genetics
Michael Hengartner, U. of Zürich

Geology
John C. Holden, Omak, WA
John Spletstoesser, Waconia, MN

History of Science & Medicine
Tim Healey, Barnsley, England

Immunology
Falk Fish, Orgenics, Ltd., Yavne, Israel

Infectious Diseases
James Michel*****, Harvard U.

Intelligence
Marilyn Vos Savant**, New York, NY

Law
William J. Maloney, New York, NY
Ronald A. May, Little Rock, AR

Library & Info Sciences
Regina Reynolds, Library of Congress
George Valas, Budapest, Hungary
Norman D. Stevens, U. of Connecticut

Marine Biology
Magnus Wahlberg*****, U. of
Southern Denmark

Materials Science
Robert M. Rose, MIT

Medical Ethics
Erwin J.O. Kompanje, Erasmus MC
University, Rotterdam

Methodology
Rod Levine, National Insts of Health

Molecular Biology
Walter Gilbert*, Harvard U.

Richard Roberts*, New England Biolabs

Molecular Pharmacology
Lloyd Fricker, Einstein Coll. of Medicine

Neuroengineering
Jerome Lettvin, MIT

Neurology
Thomas D. Sabin, Tufts U.

Nutrition
Brian Wansink*****, Cornell U.

Ornithology
Kees Moeliker*****, Natuurhistorisch
Museum Rotterdam

Obstetrics & Gynecology
Pek van Andel*****, Medical Faculty
Groningen, The Netherlands

Eberhard W. Lisse, Swakopmund State
Hospital, Namibia

Orthopedic Surgery
Glenn R. Johnson, Bemidji, MN

Paleontology
Sally Shelton, Museum of Geology, South
Dakota School of Mines and Technology

Earle Spamer, American Philosophical Society,
Philadelphia, PA

Parasitology
Wendy Cooper, Australian Pest &
Vet. Med. Auth.

Pediatrics
Ronald M. Mack, Bowman Gray
School of Med.

Pharmacology
Stanton G. Kimmel, Normal, OK

Philosophy
George Englebretson, Bishop's U., Quebec

Physics
Len Fisher*****,
Bristol U., UK
Jerome Friedman*, MIT
Sheldon Glashow*, Boston U.
Karl Kruszelnicki*****,
U. Sydney
Harry Lipkin, Weizmann Inst.
Douglas Osheroff*, Stanford U.
Frank Wilczek*, MIT

Political Science
Richard G. Neimi****, Rochester, NY

Psychiatry and Neurology
Robert Hoffman, Daly City, CA

Psychology
Dan Arieli*****, Duke U
Louis G. Lippman, Western Wash. U.
G. Neil Martin, Middlesex U., UK
Chris McManus*****, University Coll.
London
Neil J. Salkind, U. of Kansas
Richard Wiseman, U of Hertfordshire

Pulmonary Medicine
Traian Mihaescu, Iasi, Romania

Science Policy
Al Teich, American Assn for the Advancement
of Science

Stochastic Processes
(selected at random from amongst
our subscribers)
Minna Ranfelt Wittbom, Täby, Sweden

Swordswallowing
Dan Meyer *****, Cutting Edge
Innertainment

Women's Health
Andrea Dunaf, Northwestern U.
JoAnn Manson, Brigham & Women's Hosp.

A Guide to the Stars
* Nobel Laureate
** world's highest IQ
*** convicted felon
**** misspelled
***** sibling rivalry
***** six stars
***** Ig Nobel Winner