

1. This experiment does not violate Earnshaw's theorem because Earnshaw's theorem doesn't apply to the induced form of the phenomenon used in it. This experiment only works if the gradient of  $B^2$  is greater than  $2\mu_0 \text{ times small } g \text{ times density over } \chi$ . A justification for the specific subjects used in this experiment is that they conform well to the Bitter solenoid, have a high water content, and appeal to a popular audience. While a performer of this experiment is long overdue for a Nobel, the other performer kind of discovered the scotch tape method for producing graphene, making him the first person to win both an Ig Nobel and a Nobel. For 10 points, identify this Andre Geim and Michael Berry experiment in which diamagnetism driven by a high-temperature superconductor was used to make a certain animal "fly".

ANSWER: Andre Geim and Michael Berry's **frog levitation** experiment [or obvious equivalents]

2. The most common cause of inflammation of the glomeruli is the deposition of this molecule there; its deposition also causes Henoch–Schönlein purpura. Carl Charnetski and Francis Brennan, Jr. showed that Muzak's elevator music stimulated production of this molecule, thus making it an effective preventive measure for the common cold. Selective deficiency of this molecule complicates detection of celiac disease, which normally presents with an abnormally high concentration of this molecule. Both this molecule and IgM have their Fc regions linked by the J chain, which is required because it is secreted as a polymer. For 10 points, name this immunoglobulin produced mostly in mucosal linings, especially that of the intestines, and is the second-most prominent after IgG.

ANSWER: **sIgA** [or **immunoglobulin A**]

3. Victor Benno Meyer-Rochow and Jozsef Gal calculated the pressure behind the production of this substance, finding it's 4 times as high as in humans and can extend 40 centimeters. Probably the best-named NHL fan site is a .com website with this name registered by a bunch of Pittsburgh NHL fans. Depending on whether fish or krill has been eaten recently, this substance creates white- or pink-colored streaks at the edges of nests. For 10 points, name this substance depicted being excreted in the following image: <http://i.imgur.com/fHfUjWX.jpg>.

ANSWER: **penguin poop** [or **guano**; or obvious equivalents]

4. An Ig Nobel was won by James Watson for a book about the importance of a chain of these events witnessed by a "Mr. Richard Buckley". This event was a common problem among farmers in New Zealand in the 1930s, due to attempting to control ragwort with sodium chlorate, which formed a deadly mix with organic fibers. For 10 points, identify this pretty terrifying phenomenon in which an article of clothing covering a farmer's lower body would spontaneously combust.

ANSWER: **exploding trousers** [or obvious equivalents, such as **exploding breeches**]

5. Peter Barss's investigation of these events during a 4-year period revealed that 2.5% of admissions to Provincial Hospital in Alotau, Papua New Guinea were due to them (which is a lot). Writing about a US Marine who suffered this fate, Francis Fox Parry noted "To survive four months of bloodshed only to be taken" this way, by an unthinking object, "hours before departure is somehow more difficult to accept than being cut down by enemy fire". At least three separate people have suffered this event as a result of intervention by a harvesting monkey. Given that these events can involve an object weighing 2.2 to 8.8 pounds traveling up to like 110 feet, they can generate 1 metric ton of force. For 10 points, identify these devastating events involving a palm tree and a human.

ANSWER: being hit [in the head] by a falling **coconut** [or being killed by a falling **coconut**; or obvious equivalents]

6. An acute perforation may result from this phenomenon during a treatment for hemorrhagic radiation proctitis, argon plasma coagulation. Due to fermentation by *E. coli*, the incidence of this phenomenon increased as a result of oral administration of mannitol, leading to mannitol's abandonment as a cleaning solution. As explored in an Ig Nobel-winning trawl of the medical literature by Ladas, Karamanolis, and Ben-Soussan, this phenomenon is thankfully rare because it mostly requires a heat source, like an electrocauterizer, to be used in an uncleaned

bowel. For 10 points, identify this unbelievably frightening consequence of a colonoscopy in which flammable gases like hydrogen and methane combust in your colon.

ANSWER: **colonic** gas **explosion** [or colonic **gas explosion**; **intracolonic explosion**; or obvious equivalents, such as pretty much anything science-y that sounds right]

7. Cecil Jacobson's Ig Nobel came from his failure to actually use one of these institutions, opting for a personal touch instead. The head of the Pawnee Sewage Department, Joe, is a frequent contributor to one of these institutions, fortunately scaring Ann off from using it. The eugenicist Robert Klark Graham won an Ig Nobel for starting one of these things for Nobelists whose only known patron was the famous eugenicist William Shockley, calling it the Repository for Germinal Choice. For 10 points, name these repositories of human male gametes.

ANSWER: **sperm banks** [or **semen banks**; or obvious equivalents]

8. Mara Sidoli published a case study about a boy who used this phenomenon "as a defence against unspeakable dread". Ben Wilson was the lead researcher on a study about how this phenomenon is used to communicate in herrings. A product for eliminating this phenomenon won Alan Kligerman the very first Ig Nobel in Medicine. Lynn Margulis found examples of this phenomenon trapped in amber, suggesting that fossils are capable of doing it. That Kligerman product works on foods containing alpha-1, 6-galactopryanosyl since it is just the enzyme alpha galactosidase in tablet form. A prize is notoriously suggested for a "Drug wholesome & not disagreeable, to be mix'd with our common Food, or Sauces, that shall render" this phenomenon as agreeable as perfume in Benjamin Franklin's "A Letter to the Royal Academy". For 10 points, name this phenomenon reduced by Beano.

ANSWER: **farting** [or **flatulence**; or obvious equivalents, such as **breaking wind** or **raspberry-blowing**]

9. Multiple papers about this predicament decry "overzealous intervention", including an Ig Nobel-winning one by Nolan, Stillwell, and Sands, Jr., who discussed "acute management" of it. For obvious reasons, this predicament occurs mostly when one of its subjects is moved upwards rather than downwards – though strangely, it occurs about equally in boys wearing and not wearing underwear. It is the most common cause of prepuceal injury in children. For 10 points, identify this predicament in which the foreskin, shaft, or glans is caught in the actuator or teeth of a certain pants component.

ANSWER: **penile zipper** entrapment [or obvious equivalents, such as a **zipper**-entrapped **penis**]

10. Humphreys, Saraiya, Belenky, and Dworkin tested the use of strips of cured pork as a packing in the treatment of this symptom of Glanzmann thrombasthenia. Though it has nothing to do with the vagina, premarin cream is often used to treat recurrent versions of this symptom. The most common packing for severe occurrences of this symptom is an inflatable balloon, albeit a very small one. Like 90% of the time, this symptom occurs in the anterior portion of the affected structure, in the so-called Kiesselbach's plexus or Little's area. In a nod to *Midnight Cowboy*, the Seinfeld episode about Jon Voight's car ends with Kramer and Jerry on a train and Kramer going "Jerry, these [things] are starting again". This symptom is a particular problem for patients with a deviated septum. It can be treated by decongestants like Afrin because they are vasodilators. For 10 points, name this symptom in which a red fluid suddenly comes streaming out of a facial cavity.

ANSWER: **nosebleeds** [or **epistaxis**; or obvious equivalents]

11. James and Gaines Campbell are responsible for the invention of this strategy, a feat that transformed Arcade Inc. into a powerhouse. The success of this print-based strategy is explained by actual-Nobel-winning research by Richard Axel and Linda B. Buck. The USPS requires that consumers not be involuntarily exposed to this thing, leading to the development of the powder-like Microdot technology. Modern examples of this strategy include LiquaTouch, which is heavily utilized by Avon. The Campbells's award includes a citation of a 1995 study showing that this strategy exacerbated asthma in like 36% of cases. This strategy is most prevalent in beauty magazines and

in the fragrance market. For 10 points, identify this marketing strategy that often involves labels like "scratch 'n' sniff".

ANSWER: **scented ads** [or **scented strips**; or **fragrance advertising** until "fragrance" is read; or **sniff ads** until "sniff" is read; or obvious equivalents]

12. A loosening of this law was offered by Tommy Koh to keep a free trade agreement intact. In the immediate aftermath of this law, smugglers would hit up Johor Bahru, which is across the border from the country that instituted this law, but the black market created by it never really took off. The rationale for this law was that the substance involved had been applied to door sensors in its country's Mass Rapid Transit system, causing them to malfunction. Criticism of this law led Lee Kuan Yew to retort that critiquers should "try a banana" if they "can't think because [they] can't chew". Inexplicably, given the tiny economic stakes, a free trade agreement between the US and the country that enacted this law became the subject of lobbying by the Wrigley Company, which did loosen this law. For 10 points, identify this law that prohibited a foodstuff often abandoned under desks.

ANSWER: **Singapore's ban** on chewing **gum** [or obvious equivalents]

13. Robert Matthews won his Ig Nobel for his study of this phenomenon as confirming the "innate cussedness of our universe". Matthews also offers the clearest explanation for this "quotidian" phenomenon as due to the "fundamental constants in our universe" – namely that tables are about 75 centimeters, or 2.5 feet high, thus allowing the object involved precisely half a turn. According to the Institute of Physics, pressing hard enough with the knife while creating the object involved in this phenomenon will curve the object and cause this thing not to occur. For 10 points, identify this phenomenon that's an integral part of a perpetual motion machine when combined with cats, since cats always land on their feet.

ANSWER: **toast always falls butter side down** [or obvious equivalents]

14. This thing is maybe not preferentially stained by thiazole orange, formed in messenger RNA to make possible a ribosomal frameshift event for HIV, or formed through Hoogsteen interactions in the major groove. A long post disputing clues in a tossup on this answer was made in the "2013 ICT DI specific question discussion" by Eric Mukherjee after he got beat to the tossup by Tommy Casalaspí. The "Iranian-American fashion icon" Bijan Pakzad gained notoriety and an Ig Nobel for developing the DNA Cologne and DNA Perfume, both of which came in a container of this structure. For 10 points, name this structure that DNA notably does not have, though Linus Pauling initially suggested it did.

ANSWER: **triple helix**

15. This person's half-sister Lisa sang the backup vocals on a Weird Al song poking fun at and named for this guy. He owns the world's largest collection of olive oil bottles. On *Futurama*, this person's head hosts one of the Academy of Inventors Annual Symposium, where he is credited with developing the technology that allows human heads to be kept in jars. This man's father created "the greatest kitchen appliance ever made", which door-to-door salesman had trouble selling due to the insane amount of groceries they had to carry around to prove its worth. The best known invention of this founder of Ronco is either the Veg-o-Matic or the Showtime Rotisserie, which was popularized using the phrase "Set it and forget it!". He's responsible for the catchphrase "But wait, there's more!". For 10 points, name this legendary salesman who created the infomercial.

ANSWER: Ron **Popeil**

16. A piece of software that deters this activity can play stock sounds like a dissonant harmonica recording or a human badly imitating a snake hiss; however, that program notes that it "does not include a miracle cure for deafness". That program even includes a screensaver for "extra-sensitive detection" of this activity and is distributed by BitBoost. In the recent past, results of this activity have included "\", "]", and "EW

ERFGBH5GTN —————DEM3

". The fact that this action can "enter

random commands and data, damage your files, and even crash your computer" spurred the creation of PawSense. For 10 points, identify this action in which a feline attempts to do human things with a computer and fails miserably.

ANSWER: **cats typing** [or obvious equivalents]

17. The research proposal involving this thing also suggested lots of other research, including identifying chemicals that would attract bees and cause them to sting and chemicals that would cause a severe and sustained case of halitosis. A Gizmodo article about this thing wondered why a musical named for it missed a golden naming opportunity, as it could've been *Brothers-in-Arms*, *Das Booty*, or *Saving Ryan's Privates*, and one assumes, even *A Few Hard Men*. The Air Force's Wright Laboratory proposed this device, whose basic idea was that it would make enemy soldiers irresistibly attracted to each other. For 10 points, identify this non-lethal weapon intended to turn its targets homosexual, at least for a brief period of time.

ANSWER: **gay bomb** [or obvious equivalents]

18. George and Charlotte Blonsky patented an apparatus that assists in this process by imparting centrifugal force. Grantly Dick-Read introduced the idea of pairing this process with hypnosis, which is probably useless. Involving a "coach" in this process was popularized by Robert Bradley. Alternating between deep and shallow breathes, also known as patterned breathing, during this process is a key aspect of the Lamaze technique. In a classic case of woo, some people believe that having this process occur in a pool of warm water is beneficial. If you are Tom Green, this process might be followed by swinging its subject around by the umbilical cord. For 10 points, name this process in which an infant is expelled from the uterus.

ANSWER: giving **birth** [or natural child**birth**]

19. A subscriber to this view claims that her DNA has changed to take up more hydrogen and has been restructured to consist of twelve strands. That subscriber to this view believes that the Count of St. Germain has encouraged her to spread it and, when tested by a *60 Minutes* program about this view, claimed that "pollutants" due to a major road were interfering. The most legit holder of this view is Prahlad Jani, or Mataji, a follower of Durga, the deity that supposedly drips amrit through a hole in his palate. The best known proponent of this view is responsible for the deaths of at least four people and is the consummate liar Jasmuheen. This view holds that humans can subsist solely on prana. For 10 points, name this belief that mostly involves people staring at the Sun in the belief that their eyes will somehow photosynthesize light.

ANSWER: **breatharianism** [or **inedia**; or obvious equivalents, such as **only needing air** to live, **not needing food or water** to live, &c.; or **pranic nourishment** until "prana" is read]

20. Research by Molly Goettsche and Nicole Moin indicates that this precept is a severe underestimate. Jillian Clarke, the youngest recipient of an Ig Nobel, was awarded hers for research about this precept. Genghis Khan apparently investigated a similar matter as this precept but only refined it to 12 to 20 hours. Inexplicably, women invoke this precept far more often than men. Jillian Clarke's investigation of this precept involved swabbing some tiled floors that failed to yield enough bacteria to actually do an experiment. It is far more often invoked for sweets than vegetables. For 10 points, name this "rule" dictating the length of time a food item may remain on the floor and still be eaten.

ANSWER: **five-second** rule [or obvious equivalents]

21. As I am very fond of relating, this guy is the lead author on "Antidepressants and risk of first-time hospitalization for myocardial infarction", a study I very nearly referenced for VCU's Minnesota Open 2011 submission. Probably his best known paper now-a-days is "Oral contraceptive use and hormone replacement therapy are associated with microalbuminuria". This Dutch pharmacoepidemiologist handily defeated Florida murder victim Commie Spead, retired Lutheran preacher Rev. Demon Sox, wine merchant Monsterville Horton IV,

girlfriend attacker Vernon Lee Bad Marriage, Neptune Pringle III, and Courvoisier Winetavius Richardson. For 10 points, name this 2011 Name of the Year winner who was pretty much guaranteed the title but was seeded 2, for some reason.

ANSWER: **Taco B.M. Monster** [prompt on partial answer]