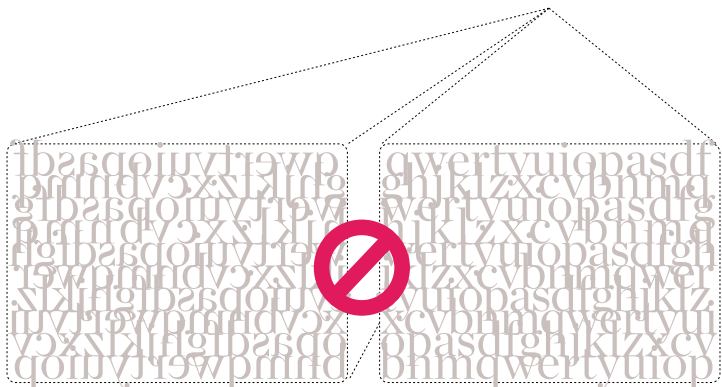




SCIENCE

MEET YOUR BRAIN

JOHN MEDINA, A DEVELOPMENTAL MOLECULAR BIOLOGIST AND AUTHOR OF *BRAIN RULES*, SAYS SCIENCE CAN HELP US RUN BETTER MEETINGS. IN OUR Q&A WITH HIM, HE SPELLS OUT HIS FIRST RULE: **BURN YOUR POWERPOINT SLIDES.**



Q: IN YOUR BOOK, YOU WRITE THAT THE BEST WAY TO PRESENT INFORMATION IS VISUALLY. WHY ARE GRAPHICS SUCH A POWERFUL TEACHING TOOL?

A: Most of the things that could kill us are moving, to put it in evolutionary terms. We don't pay as much attention to the tree as we might to the rustling grass because a tree is not a threat, but the rustling grass might hold a saber-toothed tiger. That's why a third of the brain is devoted exclusively to visual processing. It is far and away the dominant sense. If you add a piece of information that is graphical, the brain is much more likely to remember it than if you project it any other way. But it's not just vision—it's the *moving* visual image that appears to be the spark that the brain pays the most attention to. Here's the hierarchy: The brain loves a rotating three-dimensional image the most. If you've ever been in a 3-D movie you'll notice that the thing that pops out is the thing that you pay the most attention to. The next most memorable is a rotating two-dimensional image.

Q: Does that mean we should be using more videos in our presentations?

A: Utterly. If you can make them 3-D, I'd counsel you to do that. [He laughs.]

Q: So given that, what do you think about PowerPoint presentations?

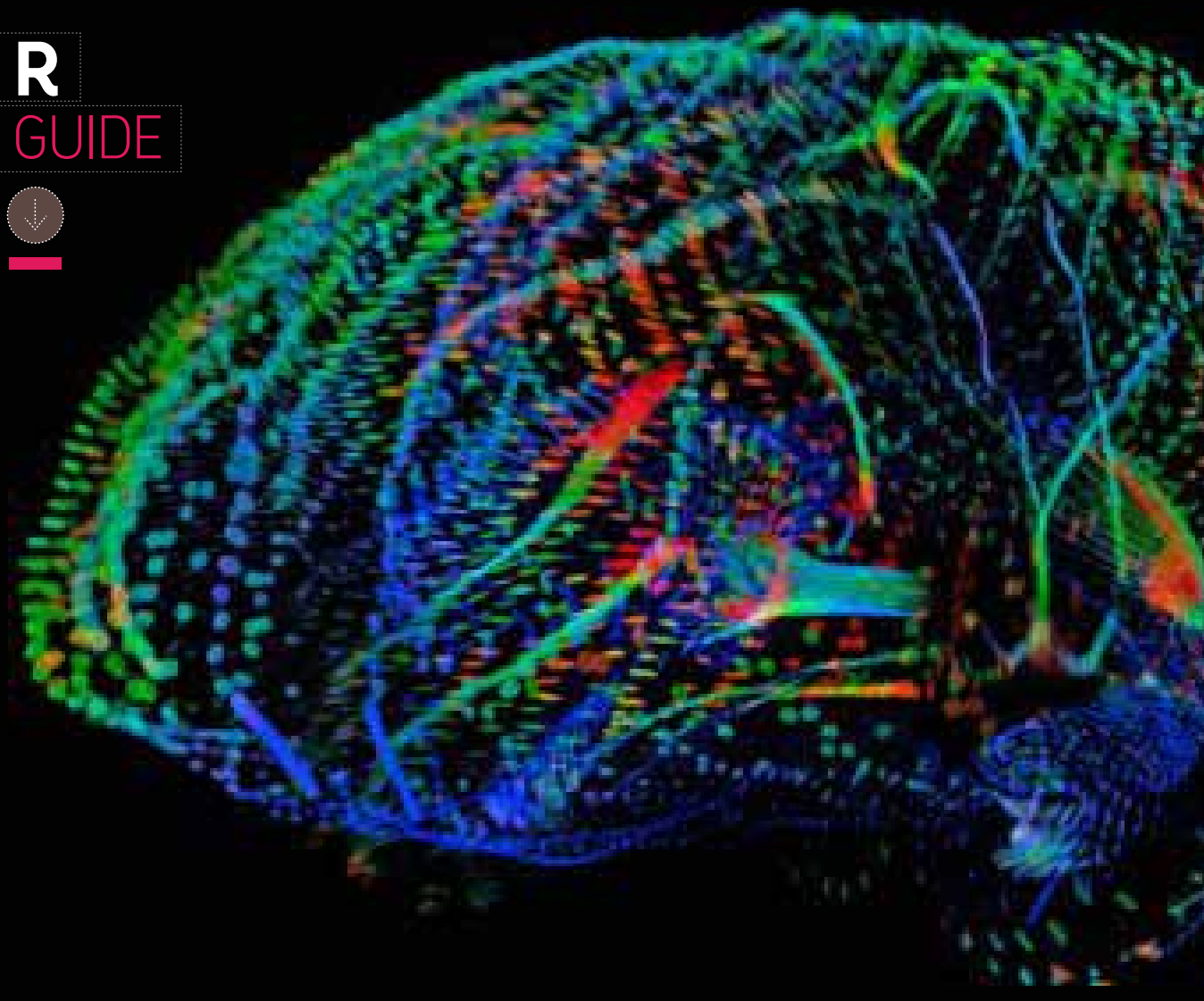
A: I think they suck. My first objection is this: Even though PowerPoint appears to be visual in nature, people just put their entire presentation on the slide and essentially read off it. Number two is that text is one of the most impoverished ways of projecting information into the brain. We see individual letters as hieroglyphics—a whole bunch of little pictures—so the brain has to go by each letter in a word and inspect it each time. The brain simply gets tired of seeing text on the screen, particularly if you've got 40 words per slide, which is the average.

Q: But people love their PowerPoint presentations. What can we do to make them better?

A: The first thing you can do is burn them. Burn what you have right now. And then start over. Lead with a visual and make it move if you can. The anima-

IMAGE SOURCE/GETTY IMAGES





Colorized MRIs of our brains in action, left and previous page

IF YOU USE EMOTIONAL CONNECTIONS, YOU ARE MORE LIKELY TO WIN YOUR AUDIENCE OVER.



BONUS CONTENT Visit the Brain Rules website to see videos of Medina's ideas in action: brainrules.net/brain-rules-video. SEE P. 4 FOR HOW TO USE THIS TAG.

tion engine on a typical PowerPoint package is very primitive, but use it, for heaven's sake. Use your wipes, use your transitions. Then, if you have to have text, use two or three words that actually describe the visual object. Make your slides as simple and minimalist as you can. You want Ernest Hemingway PowerPoints, not William Faulkner PowerPoints, okay?

Q: If 3-D is the best way to grab somebody, does that mean you should move around when you speak to a group?

A: Not necessarily. I think speakers should be moving around in direct relation to the force of the information

they're trying to project. I am profoundly in favor of speakers staying absolutely still unless they have a reason to move. When you feel very strongly about something and you want to emphasize it, one of the best things that you can do is get out of your still stance, get in front of the podium, raise your hand, and say, "Doggone it, you pay attention to this!" by raising the amplitude of your voice. Then go back to where you were behind the podium and continue to talk. Unbelievable moments come from orators who know how to do that.

Q: Why is that more effective than constant movement?

A: If you're just kind of moving back and forth, back and forth, but the brain cannot connect any meaning to it, then you're diluting this very powerful weapon at your disposal, which is physical movement of the body. Think of all body movements as exclamation points. They can emphasize and produce excitement.

Q: You wrote in *Brain Rules* that humans have a 10-minute attention span. What does that mean for a 30-minute presentation?

A: A research psychologist at the University of Michigan asked undergraduates: When you're in class, how long is it before you start looking at the clock on the wall wondering when this painful experience is going to be over? The answer turned out to be about 10 minutes, so he ended up calling it the 10-minute rule. That finding has held up pretty well over the years in other studies. So, if that's the case, and you have to give a 30-minute presentation, you should probably not give a 30-minute

presentation. You should probably give three 10-minute presentations, and then do something to connect the segments.

Q: And that something should be?

A: I teach medical and bioengineering graduate students. Every 10 minutes, I pulse the meaning of what I'm saying to the audience, and then I can keep a class going for two to three hours. If I have to introduce a group of bioengineering graduate students to neurotransmitters related to mental health issues, I'm not going to start with all the mathematics. I'm going to give them the *meaning* of mental health by talking about some interesting cases I've seen, like people with schizophrenia who live in a hallucination. This makes an emotional connection. It only takes about a minute, maybe two minutes, but I can win another 9 minutes and 59 seconds of the boring stuff. And this applies to any topic. You can be talking about return on investments or health care costs, but if you use hooks—emotional connections—you are more likely to win your audience over.

Q: What makes a good hook?

A: Make it relevant, make it short, and, if it's possible, give it narrative structure. It turns out that the human brain loves narratives. Connect somebody to an fMRI machine and tell him, "The king died and then the queen died." The fMRI lights up, but the brain's not all that interested. You can make the brain light up like a Christmas tree simply with the addition of two words at the end of that sentence: "The king died and then the queen died of *grief*." All of a sudden you've begun to create a narrative structure and the brain pays lots of attention to it.

Q: What are some of the most common mistakes made at big meetings—ways of doing things that are simply counter to how the brain works?

A: The biggest mistake is having a lot of boring speakers. I would argue that it's a design flaw, simply because of the relational capabilities of the human brain. You have to have a really good speaker, who's doing this 10-minute business and rotating images and all that, to coax the brain into paying attention, when what the participants really should be doing is talking to each other.

Q: Any other mistakes?

A: Nobody should hold a meeting or give a presentation between the hours of 2 o'clock and 4 o'clock in the afternoon because of sleep cycles. During that time—we call it the nap zone—the brain wants to down-cycle. It would like you to close your eyes and go to sleep for about 25 minutes. During the nap zone, you're not in great shape, brain-wise. You can't problem-solve, you can't pattern-match. Your brain is going to be fighting to go to sleep, and it's a fight that your brain will engage your body in for hours. Because we don't take naps, any speaker who has to present in that toxic time will be dealing with a bunch of sleepy people. They don't need to hear you and your brilliant ideas, they need to go back to their hotel room and take a 25-minute nap. 🕒
—Jennifer Abbasi

BANISH BLAND

RENAISSANCE HOTELS IS USING BRAIN SCIENCE TO MAKE MEETINGS SENSORY EXPERIENCES AND TO CREATE LASTING MEMORIES.

"The more senses you can stimulate simultaneously at the moment of learning, the more robust that learning becomes," says *Brain Rules* author John Medina. Meetings at Renaissance Hotels embody that philosophy, providing meeting planners with the environment and tools necessary to create not only memorable events, but also events whose content is remembered.

ENGAGING THE SENSES

Walk into a ballroom at a Renaissance hotel and you'll notice fragrant candles burning and soothing scents. It's not solely to make the room smell good—it's because when your senses are engaged, you can learn more and solve problems more creatively, as Medina explains in *Brain Rules*. To that end, too, decorative centerpieces are replaced with tactile items like oversize gems, shiny steel balls, and perhaps a tic-tac-toe game. The sensory experience extends to the cuisine, with flavorful local foods on the menu. "It's a great way to create more energy and more dialogue," says Erin Longo, director of meeting planning at Prudential, who frequently hosts events at the Renaissance Newark Airport Hotel.

THE NEW NETWORKING

Say your CEO is a big blues fan. The Renaissance team can book a local musician to perform in the lobby, where your group will mingle with other hotel guests and locals. Networking needn't be a chore. Renaissance's R Navigators create guides that, say, include a behind-the-scenes tour of a famous sports stadium rather than just a list of popular sights. "We find local hot spots," says Brian Fausset, Navigator at the Renaissance Atlanta Midtown. "It's a multisensory experience rather than just a meeting."



A fully engaged brain learns better, so Renaissance meeting rooms are stocked with intriguing objects.