



SO YOU'VE EITHER WON BIG OR BEEN FORCED TO FOLD IN RISK LAB—WHAT NEXT? DISCOVER MORE ABOUT THE SCIENCE AND PSYCHOLOGY OF RISK AT SOME OF OUR RISK LAB EVENTS. WITH TALKS, DISCUSSIONS AND EVEN A TABLE QUIZ, THERE ARE PLENTY OF WAYS YOU CAN GET MORE INVOLVED AND HAVE YOUR SAY ON THE RISKY TOPICS THAT MATTER TO YOU.

SFI SPEAKER SERIES: THE UPSIDE OF RISK—CURATOR TALK WITH DAVID SPIEGELHALTER
 FRI 03.05.13, 18:00–19:15
 RISK LAB Curator and Winton Professor for the Public Understanding of Risk at Cambridge, David Spiegelhalter talks about how and why people take risks, and about the lighter side of probability—serendipity, coincidence, and happy accidents.

RISK LAB: TABLE QUIZ
 TUE 14.05.13, 18:00–20:00
 Does your general knowledge span from the history of quantum mechanics to *Dr. Who*? Prove it. The Science Gallery table quiz returns with a risky new format to ask the hard questions, the harder questions and maybe even some sports questions too.

AGAINST THE ODDS: STORIES OF RISK AND CHANCE
 WED 15.05.13, 18:00–19:30
 Radio producer Julien Clancy curates an evening of stories that explore the human side of taking chances and risking it all. Mixing radio documentary with guest speakers, this listening event will cover the funny, surprising, and extreme stories of chance.



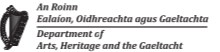




SFI SPEAKER SERIES: THE BIOLOGY OF FINANCIAL RISK-TAKING WITH JOHN COATES
 THU 23.05.13, 18:00–19:15
 Neuroscientist and author of *The Hour Between Dog and Wolf*, John Coates explores the biology of risk taking and, as a former Wall Street trader, will explain how our body chemistry can drive us to take extreme financial risks.

RISK INTELLIGENCE WITH DYLAN EVANS
 WED 29.05.13, 18:00–19:15
 Author and behavioural scientist Dylan Evans describes why 'risk intelligence' not only makes it easier to live with risk and uncertainty, but helps us make the decisions that allow us to survive and succeed.

HEALTH RISK: THE PERSONAL GENOMICS DEBATE WITH FUTUREPROOF
 WED 19.06.13, 18:00–19:30
 Presenter of *Newstalk's Futureproof* and RTE's *The Science Squad* Jonathan McCrea has his genome sequenced to find out what it says about his future health. A panel of experts will debate the ethics and science of personal genomics.

ABOUT SCIENCE GALLERY

Through the generous support of our partners, Science Gallery develops and brings ground-breaking exhibitions to Dublin. Being a partner allows companies to enjoy year-round association with Science Gallery and its work to ignite passion and creativity in the fields of science, art, technology, engineering and maths. Join us in inspiring the next generation of innovators, building a fresh start for Ireland's future.

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03.05.13–23.06.13
RISK LAB
ARE YOU FEELING LUCKY?

A FREE 'LAB IN THE GALLERY' EXPLORING RISK, COINCIDENCE AND THE PATTERNS OF CHANCE

“THE DANGERS OF LIFE ARE INFINITE, AND AMONG THEM IS SAFETY.” *Goethe*

RISK LAB is supported by Science Gallery founding partner Wellcome Trust, Winton Capital, Deloitte, and the European Commission Seventh Framework Programme. A special thanks to our curators David Spiegelhalter and Aoibhinn Ní Shúilleabháin, to Mike Pearson and researcher Jessica Stanley.

Why does the house always win? Is it better to do business with a bookie or a banker? How healthy is it to have a ‘healthy’ appetite for risk?

As part of Science Gallery’s ‘LAB IN THE GALLERY’ series, RISK LAB examines the psychology and mathematics underpinning the risks that surround every aspect of our lives, and our ability to assess and understand those risks.

From bad driving to the lotto, from real estate to smoking, humans find it tricky to evaluate risk. How do emotions, scenarios, or media skew our assessment of the odds? Is it possible to recalibrate our perceptions of risk? Visitors to RISK LAB will be presented with opportunities to contribute to real research that will investigate these, and many more questions around the psychology, physiology and mathematics of risk. Artworks and interactive demonstrations around risk, uncertainty, coincidence and patterns of chance will give visitors an insight into their own ability to assess risk, and shed light on their appetite or aversion to risk.

RISK LAB will explore our inability to determine the probability of everything from a car crash to a card hand. So join the geeked-up casino that brings you inside the house and wants you to win. Go behind the scenes, and voyage through luck, health hazards, opportunity, gambits, and the reasoning behind the risks we take. Take a risk and play your hand.

David Spiegelhalter
Winton Professor for the Public Understanding of Risk at the University of Cambridge

Aoibhinn Ní Shúilleabháin
Ph.D. Candidate in Mathematics Education at School of Education, Trinity College Dublin

RISK LAB: EXPERIMENTS



IMPULSE TO DRIVE MICHAEL GORMLEY & GEORGIA O’CALLAGHAN

Speeding, dangerous overtaking, drink driving, tailgating: what makes us do these things? Why is it that different people have radically varying attitudes towards driving safety, and is it possible to predict how risky you are on the road from your impulsivity? This experiment tests the link between driver safety and impulsive behaviour.



RAT RACE ROULETTE LEA DELERIS, DONNA GRESH, STEPHANE DEPARIS & SAM CROMIE

Which route should you take to get from A to B on time? How easy is it to understand risk and uncertainty, and how does this affect travel delays? Travel on hypothetical journeys through Dublin in this experiment, which examines travel time uncertainty.



WHAT COULD POSSIBLY GO WRONG? MARGARET RYAN, LOUISE HOPPER & SAM CROMIE

Can you judge the consequences of your actions, or are you blind to major hazards? Can you see the link between risk and consequence? This experiment measures your conscious and unconscious acknowledgment of risk to help identify gaps in risk awareness.



DON'T BURST MY BALLOON DAVID HEVEY

Do you play it safe or would you risk it all for the chance of a big win? How much would you bet on how much you can inflate a balloon before it pops? This experiment explores impulsivity through the simple act of inflating a virtual balloon.



PUT YOUR MONEY WHERE YOUR MIND IS DAVID SPIEGELHALTER & MIKE PEARSON

How sure are you of what you know? Find out in this general knowledge quiz, where you must bet on how certain you are that your answers are correct.



THE SCARE BOOTH SHIMMER RESEARCH & SAM CROMIE

Are you easily scared? Step inside the scare booth and test your physiological response to risk.



HAZARD A GUESS EWAN DOUGLAS & SAM CROMIE

Can you see the risks that surround you? Would you report a hazard if you saw one, or leave it to someone else? Human error and poor risk management contribute to catastrophes like Chernobyl, and this experiment explores risk reporting culture.



RISKY RIGHTS AND WRONGS MARY PARKINSON & RUTH BYRNE

What would you do if faced with a moral dilemma? Would you choose a solution that would definitely solve some of the problem, or would you risk it all for a chance to solve all of it? This experiment examines how people make risky moral decisions.



PRICE YOUR VICE DENIS O’HORA, MACIEJ DABROWSKI, RACHEL CAREY & AOIFE KERVICK

Can you delay gratification? Are you more impulsive with your money or your vices? Do you ignore the future and live in the present? Disordered decision-making plays a role in heart disease, cancer and many more of the world’s greatest health problems. This experiment investigates how you balance risk and reward.

TO PARTICIPATE IN RISK LAB YOU WILL NEED TO FILL IN A CONSENT FORM AND FOLLOW THE PROTOCOL FOR EACH EXPERIMENT. PLEASE NOTE THAT RESEARCH RESULTS TAKE TIME TO PROCESS AND WE WILL NOT BE ABLE TO GIVE YOU SPECIFIC INDIVIDUAL FEEDBACK AFTER EVERY EXPERIMENT.

RISK LAB: ARTWORKS

RISK
MICHELLE BROWNE
Irish artist Michelle Browne presents a series of poker games played by professional risk-takers who are wired up to biometric sensors while they play, monitoring their physiological response to the risks of gambling.

SoN01R 1.0
FREDERIK DE WILDE
& FREDERIK VANHOUTTE
A visualisation of true random numbers generated from a quantum mechanical system.

RISK LAB: HANDS ON

TOTALLY RANDOM?
DAVID SPIEGELHALTER
& MIKE PEARSON

What does a true random pattern look like? It might not be what you expect.

LUCKY NUMBERS?
DAVID SPIEGELHALTER
& MIKE PEARSON

Is the Lotto really random? Watch this animation of past Lotto numbers to see the patterns that emerge.

TOPPLING TOWER

Stack blocks while wearing biometric sensors and find out how you respond to the risk of toppling the tower.

THE NON POP BALLOON STOP

How far will a balloon inflate before it bursts, and will you risk finding out?

COINCIDENCES

Do you have a good coincidence story? Share it with us on our wall of coincidences.

SHOCKING PRICE RISE

IVAN TWOHIG
Play our version of the steady hand game, which charts the rise and fall of Irish house prices from the 1970s to now.

FAR-FETCHED FATALITIES

Death by lightning, or falling off a cliff? Pick a card from the raffle of unusual causes of death to find out the past odds of dying in a statistically unlikely way.

ROULETTE

Play roulette with us while learning about the maths behind the game.