



INTELLECTUAL JAZZ

DAVID **AGUS**  
DAN **ARIELY**  
KEITH **BLACK**  
DAVID **BLAINE**  
MIKE **BLOCK**  
ADAM **BLY**  
SCOTT **BOLTON**  
DAVID **BROOKS**  
MARK **CUBAN**  
ANTONIO **DAMASIO**  
JACK **DANGERMOND**  
DAVE **GALLO**  
FRANK **GEHRY**  
MATT **GROENING**  
HERBIE **HANCOCK**  
DANNY **HILLIS**  
BJARKE **INGELS**  
QUINCY **JONES**  
MARY **JORDAN**  
JON **KAMEN**  
JEFFREY **KATZENBERG**  
NORMAN **LEAR**  
YO-YO **MA**  
JOHN **MAEDA**  
JOHN **MAZZIOTTA**  
NICHOLAS **NEGROPONTE**  
TODD **OLDHAM**  
CRISTINA **PATO**  
STEVEN **PINKER**  
LISA **RANDALL**  
PETER **RAVEN**  
MOSHE **SAFDIE**  
MEGAN **SMITH**  
BENEDIKT **TASCHEN**  
JULIE **TAYMOR**  
CHARITY **TILLEMANN DICK**  
CRAIG **VENTER**  
GEOFFREY **WEST**  
**will.i.am**  
C. K. **WILLIAMS**  
EO **WILSON**  
DAMIAN **WOETZEL**  
STEPHEN **WOLFRAM**  
WILL **WRIGHT**  
JOSHUA **WURMAN**  
RICHARD SAUL **WURMAN**



## SCHEDULE

### TUES18SEPT

Mission Inn Hotel and Spa  
3649 Mission Inn Avenue  
Riverside, CA 92501  
Tel: 951.784.0300  
[www.missioninn.com](http://www.missioninn.com)

**5:00PM OPENING** in the St. Francis of Assisi Chapel at The Mission Inn

RICHARD SAUL **WURMAN**  
YO-YO **MA** and **will.i.am**  
C. K. **WILLIAMS** AND STEVEN **PINKER**

**7:20PM WINE** and hors d'oeuvres in the Atrio adjacent to the Chapel

**8:30PM DINNER** in the Galleria at The Mission Inn

### WED19SEPT

Esri  
380 New York Street  
Redlands, CA 92373  
Tel. 909.793.2853  
[www.esri.com](http://www.esri.com)

**7:00AM Transport** from the Mission Inn to Esri Conference Center

**7:15AM Coffee, Juice** / Esri Conference Center

**8:00AM promptly**

JEFFREY **KATZENBERG** and NORMAN **LEAR**  
DAVID **AGUS** and ANTONIO **DAMASIO**  
HERBIE **HANCOCK** and **will.i.am**

**10:15AM BREAK**—Esri Café, adjacent to the Conference Center

**11:15AM**

E.O. **WILSON** and CRAIG **VENTER**  
KEITH **BLACK** and DAVID **AGUS**  
YO-YO **MA** and MIKE **BLOCK**

**1:15PM LUNCH**—Esri Café, adjacent to the Conference Center

**2:45PM**

DANNY **HILLIS** and STEPHEN **WOLFRAM**  
DAVID **BLAINE** and JULIE **TAYMOR**  
MATT **GROENING** and DAVID **BROOKS**

**4:45PM BREAK**—Esri Café, adjacent to the Conference Center  
**5:15PM Chinese Telepresence** / Esri Executive Briefing Room

**6:00PM**

YO-YO **MA** and DAVID **BROOKS**  
MARK **CUBAN** and DAN **ARIELY**  
QUINCY **JONES** and DAMIAN **WOETZEL**

**8:00PM Transport** to The Mission Inn

**8:45PM DINNER** in the Galleria at The Mission Inn

### THURS20SEPT

Esri  
380 New York Street  
Redlands, CA 92373  
Tel. 909.793.2853  
[www.esri.com](http://www.esri.com)

**7:00AM Transport** from the Mission Inn to Esri Conference Center

**7:15AM Coffee, Juice** / Esri Conference Center

**8:00AM promptly**

CHARITY **TILLEMANN DICK**  
PETER **RAVEN** and JACK **DANGERMOND**  
MEGAN **SMITH** and NICHOLAS **NEGROPONTE**  
FRANK **GEHRY** and JOHN **MAZZIOTTA**

**10:15AM BREAK**—Esri Café, adjacent to the Conference Center

**11:00AM**

BENEDIKT **TASCHEN** and JON **KAMEN**  
MARY **JORDAN** and MOSHE **SAFDIE**  
JOSHUA **WURMAN** and DAVE **GALLO**

**1:00PM LUNCH**—Esri Café, adjacent to the Conference Center

**2:15PM**

JOHN **MAEDA** and ADAM **BLY**  
TODD **OLDHAM** and BJORKE **INGELS**

**4:00PM BREAK**—Esri Café, adjacent to the Conference Center  
**4:30PM Chinese Telepresence** / Esri Executive Briefing Room

**5:00PM**

LISA **RANDALL** and SCOTT **BOLTON**  
CRISTINA **PATO**  
EO **WILSON** and WILL **WRIGHT**

**6:15PM GEOFFREY WEST** and RICHARD SAUL **WURMAN**

**7:15PM Transport** to The Mission Inn

**8:30PM FAREWELL DINNER** in the Spanish Art Gallery at The Mission Inn

## DAVID AGUS



David Agus (born January 29, 1965) is an American physician and a co-founder of Navigenics, a personal genetic testing company, and Oncology.com, the largest online cancer resource and virtual community and Applied Proteomics. He is a Professor of Medicine and Engineering at the University of Southern California.

He graduated cum laude in molecular biology from Princeton University and received his medical degree from the University of Pennsylvania School of Medicine in 1991. Agus completed his residency training at Johns Hopkins Hospital and completed his oncology fellowship training at the Memorial Sloan-Kettering Cancer Center in New York. He spent two years at the National Institutes of Health as a Howard Hughes Medical Institute-NIH Research Scholar.

Agus has had a long and varied career. At the Memorial Sloan-Kettering Cancer Center in New York, he was an attending physician in the Department of Medical Oncology and head of the Laboratory of Tumor Biology. He was also Assistant Professor of Medicine at Cornell University Medical Center.

As director of the Spielberg Family Center for Applied Proteomics at Cedars-Sinai Medical Center in Los Angeles, he led a multidisciplinary team of researchers dedicated to the development and use of proteomic technologies to guide doctors in making health-care decisions tailored to individual needs. The center grew out of earlier clinical projects at Cedars-Sinai, where Agus served as an attending physician in oncology, which showed striking differences between the aggressiveness of prostate cancer in certain patients and their ability to respond to treatment.

Agus also served as Director of the Louis Warschaw Prostate Cancer Center, and as an attending physician in the Department of Medicine, Division of Medical Oncology at Cedars-Sinai. He was also an Associate Professor of Medicine at the University of California, Los Angeles (UCLA).

He currently is a Professor of Medicine and Engineering at the Keck School of Medicine of USC and the Viterbi School of Engineering and is the Director of the USC Center for Applied Molecular Medicine and the USC Westside



Norris Cancer Center. Agus is co-Director of the newly funded USC-NCI Physical Sciences in Oncology Center together with Danny Hillis. Dr. Agus is an international leader in new technologies and approaches for personalized healthcare, chairs the Global Agenda Council (GAC) on Genetics for the World Economic Forum, and speaks regularly at TEDMED, the Aspen Ideas Festival and the World Economic Forum.

Agus has received many honors and awards, including the American Cancer Society Physician Research Award, a Clinical Scholar Award from the Sloan-Kettering Institute, a CaP CURE Young Investigator Award and the American Cancer Society Clinical Oncology Fellowship Award, the HealthNetwork Foundation's Excellence Award, and the 2009 Geoffrey Beene Foundation's Rock Stars of Science™, as seen in GQ. In 2009, he was selected to serve as a judge for the first Biotech Humanitarian Award.

Agus's research has focused on the application of proteomics and genomics for the study of cancer and the development of new medications for cancer. He has published many scientific articles.

He is a member of several scientific and medical societies, including the American Association for the Advancement of Science, American Association for Cancer Research, American College of Physicians, American Society of Clinical Oncology, American Society of Hematology and the American Medical Association.

Agus was recently named one of the "Future Health 100" by HealthSpottr.

*The End of Illness* is Agus's first book, was published January, 2012 by the Free Press Division of Simon and Schuster and is a New York Times #1 Bestseller.

Agus is married to Amy Joyce Povich, actress and daughter of syndicated television talk show host Maury Povich. Her stepmother, Connie Chung, is a former CBS News anchor. Agus' grandfather, the late Rabbi Jacob B. Agus, was a theologian and the author of several books on Jewish history and philosophy. Agus has two children, Sydney and Miles.

Agus has one film credit to his name, appearing as "David Agus" in the 2006 documentary "Who Needs Sleep?"

## DAN ARIELY

Dan Ariely (born April 29, 1968) is an Israeli American professor of psychology and behavioral economics. He teaches at Duke University and is the founder of The Center for Advanced Hindsight. Ariely's talks on TED have been watched 2.8 million times. He is the author of *Predictably Irrational* and *The Upside of Irrationality*, both of which became New York Times best sellers.

Dan Ariely was born in New York City while his father was studying for an MBA degree at Columbia University. The family returned to Israel when he was three. He grew up in Ramat Hasharon. In his senior year of high school, he was active in Hanoar Haoved VeHalomed, an Israeli youth movement. While preparing a ktotet esh (fire inscription) for a traditional nighttime ceremony, the flammable materials he was mixing exploded, causing third-degree burns over 70 percent of his body.

Ariely is married to Sumi, with whom he has two children, a son and a daughter.

Ariely was a physics and mathematics major at Tel Aviv University, but transferred to philosophy and psychology. However, in his last year he dropped philosophy and concentrated solely on psychology, in which he received his B.A. He also holds an M.A. and a Ph.D. in cognitive psychology from the University of North

Carolina at Chapel Hill. He completed a second doctorate in business administration at Duke University at the urging of Nobel economic sciences laureate Daniel Kahneman.

After obtaining his Ph.D. degree, he taught at MIT between 1998 and 2008, before returning to Duke University as James B. Duke Professor of Psychology and Behavioral Economics. He was formerly the Alfred P. Sloan Professor of Behavioral Economics at MIT Sloan School of Management. Although he is a professor of marketing with no formal training in economics, he is considered one of the leading behavioral economists. Ariely is the author of the books *Predictably Irrational: The Hidden Forces That Shape Our Decisions* and *The Upside of Irrationality: The Unexpected Benefits of Defying Logic at Work and at Home*. When asked whether reading *Predictably Irrational* and understanding one's irrational behaviors could make a person's life worse (such as by defeating the benefits of a placebo), Ariely responded that there could be a short-term cost, but that there would also likely be long-term benefits, and that reading his book would not make a person worse off.

Ariely's laboratory, the Center of Advanced Hindsight at Duke University, pursues research in subjects like the psychology of money, decision making by physicians and patients, cheating, and social justice.



## KEITH **BLACK**



Keith L. Black (born September 13, 1957) is an American neurosurgeon specialising in the treatment of brain tumors and a prolific campaigner for funding of cancer treatment. He is chairman of the neurosurgery department and director of the Maxine Dunitz Neurosurgical Institute at Cedars-Sinai Medical Center in Los Angeles, California.

Keith Black was born in Tuskegee, Alabama. His mother, Lillian, was a teacher and his father, Robert, was the principal at a racially segregated elementary school in Auburn, Alabama; prohibited by law to integrate the student body, Black's father instead integrated the faculty, raised standards, and brought more challenging subjects to the school. Later in his childhood, Black's parents found new jobs and relocated the family to Shaker Heights, Ohio. Black attended Shaker Heights High School. Already interested in medicine, Black was admitted to an apprenticeship program for minority students at Case Western Reserve University, and then became a teenaged lab assistant for Frederick Cross and Richard Jones (inventors of the Cross-Jones artificial heart valve) at St. Luke's Hospital in Cleveland. At 17, he won an award in a national science competition for research on the damage done to red blood cells in patients with heart-valve replacements. According to Black: "I was working in the lab of a heart surgeon who had developed his own artificial heart valve, and I had a concept that the heart valve might be damaging red blood cells, so I asked to do a research project using a scanning electron microscope at the time. When I was trying to basically learn the technique, I took some blood from the heart-lung bypass machine from patients undergoing heart-lung bypass, and when I incubated the red blood cells overnight, I noticed that a certain percentage of these cells change from their normal discoid shape to one that resembled a porcupine, called an econocyte. What I did was to describe the discocyte-econocyte transformation in patients undergoing heart-lung bypass, as an index of sub-lethal red blood cell damage. The importance being that the blood cells could not parachute through the small capillaries." He attended the University of Michigan in a program that allowed him to earn both his undergraduate degree and his medical degree in 6 years. He received his M.D. degree from the University of Michigan Medical School in 1981.

After serving his internship and residency at the University of Michigan, in 1987 he moved to the UCLA Medical Center in Los Angeles, where he later became head of UCLA's Comprehensive Brain Tumor Program. In 1997, after 10 years at UCLA, he moved to Cedars-Sinai Medical Center to head the Maxine Dunitz Neurosurgical Institute. He was also on the faculty of the University of California, Irvine School of Medicine from 1998 to 2003. In 2007 he opened the new Johnnie L. Cochran Jr. Brain Tumor Center at Cedars-Sinai, a research center named after the famous lawyer who had been Black's patient and supporter.

Black has been a frequent subject of media reports on medical advances in neurosurgery. He was featured in a 1996 episode of the PBS program *The New Explorers* entitled "Outsmarting the Brain". *Esquire* included him in its November 1999 "Genius Issue" as one of the "21 Most Important People of the 21st Century." He has been cited as an expert in reports about whether mobile phone use affects the incidence of brain tumors. He is also noted for his very busy surgery schedule: a 2004 *Discover* article noted that he performs about 250 brain surgeries per year, and that at age 46 he had "already performed more than 4,000 brain surgeries, the medical equivalent of closing in on baseball's all-time career hits record." (As of 2009, Black's surgery count had risen to "more than 5,000 operations for resection of brain tumors".)

In 1997, *Time* magazine featured Black on the cover of a special edition called "Heroes of Medicine". The accompanying article described Black's reputation as a surgeon who would operate on tumors that other doctors would not, as well as aspects of his medical research, including his discovery that the peptide bradykinin can be effective in opening the blood-brain barrier.

In 2009 Black published his autobiography, co-authored with Arnold Mann, entitled *Brain Surgeon*. New York Times reviewer Abigail Zuger described the book as a "fascinating, if somewhat stilted, memoir". The Publishers Weekly review commented that the book "examines racial hurdles he had to leap to become a neurosurgeon" and "alternat[es] incisive writing about incisions with his personal memoir, insightful and inspirational."

For more than a decade, David Blaine has been attracting the world's attention with his high-profile endurance stunts. Starting his career as a magician who appeared to do the impossible with a deck of cards, he was soon following in the footsteps of Houdini—seeking out that which seems physically impossible and actually doing it. To that end, he's been buried alive in New York City for a week, barely survived being encased inside a six-ton block of ice for three days and three nights, stood atop a 100-foot-tall pillar in Bryant Park for 36 hours without a safety net, survived inside a transparent box in London on nothing but water for 44 days, and spent one week submerged in a sphere-shaped aquarium at Lincoln Center, at the end of which he attempted to break the world record for breath holding. A year later, he succeeded live on the Oprah Winfrey show, holding his breath for 17 minutes and 4 seconds.

Born in Brooklyn, Blaine discovered his passion for magic at the age of four when he saw a magician perform in the subway. His mother encouraged his passion and he began performing professionally at private parties by the age of thirteen. By the age of twenty-three, Blaine had created, directed, and produced an original television program titled *Street Magic*, which garnered rave reviews by critics and

revolutionized the way magic is portrayed on television. Penn Jillette of Penn & Teller called *Street Magic* “the best TV magic special ever done” and “the biggest breakthrough in our lifetime.” The *New York Times* noted that David has “taken a craft that’s been around for hundreds of years and done something unique and fresh with it.” The *New Yorker* claimed that “he saved magic.” Since then, Blaine has produced nine additional primetime specials.

Blaine has performed magic privately for U.S. Presidents Bill Clinton and George W. Bush, Governor Arnold Schwarzenegger, Bill Gates, Henry Kissinger, Mayor Bloomberg, Mark Zuckerberg, and Muhammad Ali, as well as President Dmitry Medvedev of Russia and other international leaders. He also performed alongside Michael Jackson, and during the Super Bowl halftime show.

In 2010, Blaine performed magic for 72 hours straight in Times Square, raising nearly \$100,000 for relief efforts following the earthquake in Haiti.

Blaine resides in New York City with his fiancée, Alizee Guinochet. The couple welcomed a magical daughter into the world on January 27, 2011.



## MICHAEL GLEN **BLOCK**



Michael Glen Block (born May 25, 1982) is an American cellist, composer, arranger, and solo artist hailed as "the ideal musician of the twenty-first century" by cultural icon Yo-Yo Ma. Mike Block has worked with Yo-Yo Ma, Bobby McFerrin, Lenny Kravitz, Shakira, The National, Joe Zawinul, Alison Krauss, Rachel Barton Pine, Mark O'Connor, and other notable musicians. Block currently plays with the Silk Road Ensemble. He has appeared on Late Night with Conan O'Brien, National Public Radio's St. Paul Sunday, Regis and Kelly, VH1, the Disney Channel, WNBC-TV with Chuck Scarborough, and the CBS Early Show.

Block is most famous for playing second cello alongside Yo-Yo Ma. He performed in Mark O'Connor's Appalachia Waltz trio for three years. His performances have been described as "vital, rich-hued solo playing" by the *New York Times*, and "a true artist ... a sight to behold" by the Salt Lake City Desert News.

Mike Block's Cello Concerto, Movement 1 was completed in 2009.

Mr. Block's classical compositions have been performed at the Bremen MusikFest, Tribeca New Music Festival, the Kimmel Center series "Fresh Ink," and the MATA Festival, at which he performed as soloist in his own Cello Concerto in 2009.

His non-classical writing has been featured at festivals such as Rockygrass, Delfest, Celtic Connections, and Wintergrass.

Mike Block has served as musical director to cellist Yo-Yo Ma, singer Bobby McFerrin, ballet star Damien Woetzel, jookin dancer Lil' Buck, actor/comedian Bill Irwin, jazz trumpeter Marcus Printup, world-music group The Silk Road Ensemble, and classical orchestra The Knights.

A frequent guest lecturer, Mr. Block has presented at Stanford University, Princeton University, Harvard University, New York University, Berklee College of Music, Cleveland Institute of Music, Belmont University, Southern Methodist University, Sam Houston State University, Illinois State University, Illinois Wesleyan University, and University of Arkansas. In 2006, he received Suzuki method certification in music education from the New York City-based School for Strings, under Pamela Devenport.

In 2009 Mike founded The Mike Block String Camp, which takes place in multiple locations each summer. The camp's goal is to empower musicians of all ages/levels to perform, improvise, compose, and arrange their own music - all by ear. The first location debuted in 2010 in Vero Beach, Florida, followed in 2011 with Fayetteville, Arkansas, and Saline, Michigan in 2012. The world-class faculty has included Darol Anger, Hanneke Cassel, Joe Craven, Rushad Eggleston, Brittany Haas, Natalie Haas, Jeremy Kittel, Clay Ross, Kimber Ludiker, Jefferson Hamer, Victor Lin, Emy Phelps, and Lauren Rioux.

Since 2009, Mike has been the Lead Teaching Artist for Silk Road Connect, a partnership between the Silk Road Project and schools in New York City and Boston areas.

The Mike Block Band presents an exciting and genre-bending combination of rock, classical, jazz, and folk music through original songs and instrumental compositions, featuring quirky yet honest lyrics, and a variety of musical influences.

Mike Block has also worked with notable musicians such as Edgar Meyer, Mike Marshall, Zakir Hussain, My Brightest Diamond, Bon Iver, Tim O'Brien, Marcel Khalifé, Goran Bregović, Kayhan Kalhor and Bruce Molsky.



Triborough Trio—Featuring Mike Block (cello), Hans Holzen (guitar), and Kyle Kegerreis (bass), the trio's mission is to put their personal spin on traditional and contemporary music from around the world in well-crafted and creative arrangements.

Mike is also the Artistic Director and host of GALA Brooklyn: "Global Art - Local Art:", a Music Festival in Brooklyn featuring a diverse array of musicians and artists in unique collaborations.

Notable guests include Anthony McGill (Metropolitan Opera), Aoife O'Donovan (singer for Crooked Still), Aaron Dugan (guitarist for Matisyahu), Multi-genre violinist/composer Todd Reynolds, Grammy-Nominated classical artists Anastasia Khitruk (violin), and the Enso Quartet, Marcus Printup from Jazz at Lincoln Center, and jazz saxophonist Seamus Blake, and singer-songwriter Amy Correia.

Performed on WNYC's Soundcheck with John Schaefer.

Mike has also worked with director Yaron Zilberman as a Music Consultant for "A Late Quartet", a 2011 movie starring Philip Seymour Hoffman and Christopher Walken.

On April 4, 2009, Mike Block was struck by a NYC Taxi while walking at the corner of W85th St. and West End Ave, in Manhattan. Injuries included broken rib, jaw, cheek, nose, and he lost nine teeth. His reconstruction required multiple surgeries, and his missing teeth were eventually restored on February 15, 2012.

## ADAM BLY

Adam Bly (born 1981 in Montreal, Canada) is founder and CEO of Seed. He is the editor of "Science is Culture: Conversations at the New Intersection of Science + Society" (published by HarperCollins) and the creator of the data visualization platform Visualizing.org.

He began his career at the age of 16 as the youngest researcher at the National Research Council of Canada, where he spent three years studying the biochemistry of cancer, specifically the role of cell adhesion in metastasis. Out of the lab, he founded *Seed*—tag-lined "Science is Culture™"—and served as its Editor-in-Chief. "The best comparison for *Seed*," wrote a media critic at the time of the magazine's launch in 2001, "is the early years of *Rolling Stone*, when music was less a subject than a lens for viewing culture." Under his leadership, the magazine earned critical acclaim for modernizing scientific publishing and for bridging long-standing divides between science and society—from art and design to politics and religion. Together with Paola Antonelli he co-founded a monthly gathering of scientists, architects, and designers that laid the foundation for *Design and the Elastic Mind*, an exhibition about science and design at The Museum of Modern Art.

In 2007, Bly was named a Young Global Leader by the World Economic Forum. He is a recipient of the Golden Jubilee Medal from Her Majesty Queen Elizabeth II and his achievements have been highlighted by Canadian Prime Minister Jean Chrétien, "for showing people the scope and power of science not just as an object of study but as a key to understanding the world around us."

Bly has lectured around the world on the future of science and its role in society, including at the World Economic Forum, the National Academies of Science, the Royal Society, the National Institutes of Health, the State Department, NASA, the Chinese Ministry of Science and Technology, The Museum of Modern Art, and The Academy of Sciences for the Developing World, before the National Science Board and the U.S. House of Representatives, and at universities including Harvard, MIT, and Beijing. He has served on the nominating committees and juries of the Buckminster Fuller Challenge, the Earth Award, and the TED Prize, and sits on the Science Advisory Committee of the World Economic Forum, the External Advisory Board of the University of Michigan's Risk Science Center, the American Committee of the Weizmann Institute of Science, the Communications Advisory Board of the National Academy of Sciences, and as an advisor to OECD's Global Project on Measuring the Progress of Societies.

Bly was recently named Vice Chair of the World Economic Forum's Global Agenda Council on Design Innovation and Partner to the Executive Coordination Office for the Rio+20 United Nations Conference on Sustainable Development.

## SCOTT BOLTON

Dr. Scott Bolton is the Director of the Space Sciences Department at Southwest Research Institute (SwRI) in San Antonio, Texas. Dr. Bolton is also the Principal Investigator for the Juno project, a project within NASA's New Frontiers Program. Prior to being Director at SwRI, Dr. Bolton was a senior scientist and manager at the Jet Propulsion Laboratory (JPL) for over 25 years. During his tenure as Director of Space Science at SwRI, Dr. Bolton oversaw the launches of New Horizons and IBEX, the selection of Juno, the confirmation of MMS, and the delivery of hardware for a number of non-NASA programs related to national security. As director of SwRI's Space Science Department, Dr. Bolton is responsible for the approximately 150 engineers and scientists working on over a dozen programs including new proposals, instrument development, mission operations and scientific data analysis.

As Principal Investigator of Juno, Dr. Bolton is responsible for all aspects of the Juno program including project management by JPL, spacecraft development at Lockheed Martin, all science instruments, launch vehicle development and operation, and the resulting scientific analysis throughout the life of the project. Dr. Bolton has more than 30 years experience in the field of aerospace and space science. Dr. Bolton received his B.S. in Aerospace Engineering from U. Michigan in 1980, and a Ph.D. in Astrophysics from U.C. Berkeley in 1990.

Dr. Bolton is a Co-Investigator on a number of NASA missions including experiments on the Cassini mission. Dr. Bolton chaired the Titan science group for the Cassini-Huygens mission and was responsible for the formulation of the scientific investigation of Saturn's moon Titan. Dr. Bolton has been a Principal Investigator with NASA on various research programs since 1988. His research includes the modeling of the Jovian and Saturnian radiation belts, atmospheric dynamics and composition, and the formation and evolution of the solar system. He has authored over 150 scientific papers, five book chapters, and consulted/appeared in five space science documentaries. He received the NASA Outstanding Leadership Medal in 2012, Exceptional Achievement Medal in 2002; the NASA Exceptional Scientific Achievement Medal in 1994. He also received JPL Individual Awards for Exceptional Excellence in Leadership in 2002, 2001, and 1996, and Excellence in Management in 2000; and has received sixteen NASA Group Achievement Awards. Dr. Bolton maintains a relationship with JPL and the California Institute of Technology through a special appointment as a Senior Staff Scientist.

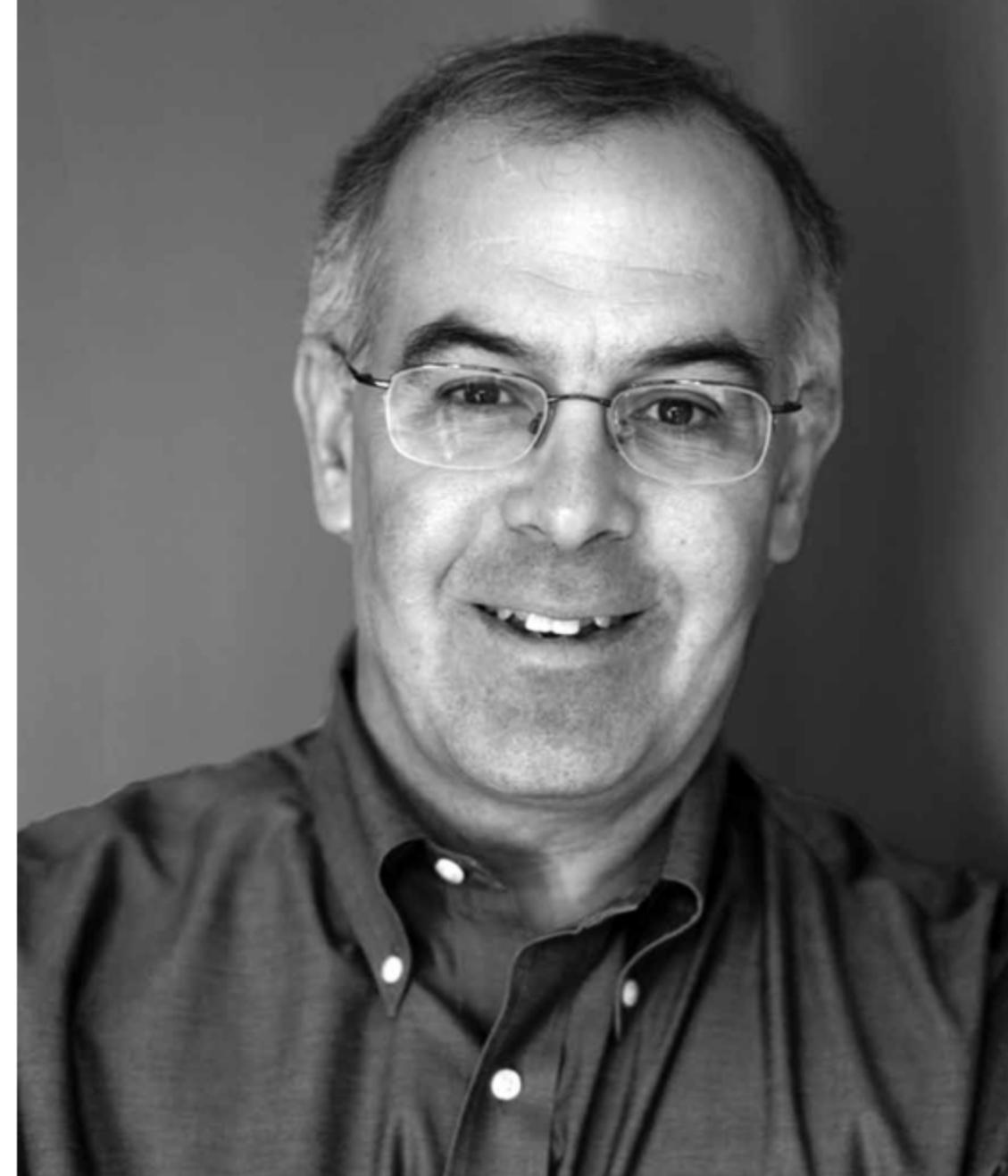
Dr. Bolton also leads a number of educational programs aimed at developing science, math and art skills for children from elementary to high school and college level. As part of the NASA Juno educational Outreach Program, Dr. Bolton has dedicated developed educational programs involving both formal and informal education including the



creation of science and math curriculum driving new national standards for elementary level education (an age bracket known to be underserved in this area). Dr. Bolton has worked with a number of corporate sponsors dedicated to space science educational programs, including Lego, Universal, Sony, and Time-Warner. Dr. Bolton helped develop an innovative educational program, in partnership with the Lewis Center for Educational Excellence, that provides an opportunity for elementary to high school level children to experience the scientific and engineering process directly. This program trains teachers on science and math education and provides access to NASA research facilities and scientists for hundreds of schools around the country. Through his private company, Artistic Sciences, Inc, Dr. Bolton's has produced a number of musical concerts, art exhibits, scientific documentaries and videos aimed at inspiring and motivating children in academic studies. He has worked with a number of musical artists developing both educational and musical programs. He is one of the founding members of the Vangelis Foundation in Athens, Greece dedicated to the combined study of Science, Math, Art, Music and Philosophy.



## DAVID BROOKS



David Brooks (born August 11, 1961) is a political and cultural commentator who writes for *The New York Times*. He worked as an editorial writer and film reviewer for the *Washington Times*; a reporter and later op-ed editor for *The Wall Street Journal*; a senior editor at *The Weekly Standard* from its inception; a contributing editor at *Newsweek* and *The Atlantic Monthly*; and as a commentator on National Public Radio. He is now a columnist for *The New York Times* and commentator on PBS NewsHour.

Brooks, who is Jewish, was born in Toronto, Canada—his father was a U.S. citizen living in Canada at the time—and grew up in New York City in Stuyvesant Town. He graduated from Grace Church School in New York City, Radnor High School (located in a Main Line suburb of Philadelphia) in 1979 and from the University of Chicago, with a degree in history, in 1983.

Brooks edited a 1996 anthology of writings by new conservative writers, *Backward and Upward: The New Conservative Writing*. He wrote a book of cultural commentary titled *Bobos in Paradise: The New Upper Class and How They Got There*, published in 2000, and followed it four years later with *On Paradise Drive: How We Live Now (And Always Have) in the Future Tense*.

He also authored *The Social Animal: The Hidden Sources of Love, Character and Achievement*. The book was excerpted in *The New Yorker* magazine in January 2011 and received mixed reviews upon its full publication, by Random House, in March of that year. The book has been a commercial success, reaching the #3 spot on the Publishers Weekly best-sellers list for non-fiction in April 2011.

Brooks was a visiting professor of public policy at Duke University's Terry Sanford Institute of Public Policy, and he taught an undergraduate seminar there in the fall of 2006.

He and his wife live in the Cleveland Park neighborhood of Northwest Washington, DC.

Brooks describes himself as being originally a liberal before "coming to my senses." In 1983, he wrote a parody of conservative pundit William F. Buckley Jr., which said "In the afternoons he is in the habit of going into crowded rooms and making everybody else feel inferior. The evenings are reserved for extended bouts of name-dropping."

Buckley admired the parody and offered Brooks a job with *National Review*. A turning point in Brooks's thinking came later that year in a televised debate with Milton Friedman, which, as Brooks describes it, "was essentially me making a point, and he making a two-sentence rebuttal which totally devastated my point."

Before the 2003 invasion of Iraq, Brooks argued forcefully for American military intervention, echoing the belief of commentators and political figures that American and British forces would be welcomed as liberators. In the spring of 2004, some of his opinion pieces suggested that he had tempered his earlier optimism about the war.

Brooks' public writing about the U.S. wars in Afghanistan and Iraq is similar to those by neoconservatives, according to a *Salon* article by Glenn Greenwald, that labels Brooks as a neoconservative. His angry dismissal of the conviction of Scooter Libby as being "a farce" and having "no significance" was derided by political blogger Andrew Sullivan.

On August 10, 2006, Brooks wrote a column for *The New York Times* titled "Party No. 3". The column proposed the idea of the McCain-Lieberman Party, or the fictional representation of the fictional moderate majority in America.

Ottawa Citizen commentator David Warren has identified Brooks as the sort of conservative pundit that liberals like, someone who is "sophisticated" and "engages with" the liberal agenda, in contrast to a real conservative like Charles Krauthammer. Brooks has long been a supporter of John McCain; however, he did not show a liking for McCain's 2008 running mate, Sarah Palin, calling her a "cancer" on the Republican Party. He has referred to her as a "joke," unlikely to ever win the Republican nomination. But he later admitted during a CSPAN interview that he had gone too far in his previous "cancer" comments about Palin, which he regretted, and simply stated he was not a fan of her values.

In a March 2007 article published in *The New York Times* titled "No U-Turns", Brooks explained that the Republican Party must distance itself from the minimal-government conservative principles that had arisen during the Abraham Lincoln, Barry Goldwater, Ronald Reagan and Calvin Coolidge eras. He claims that these core concepts had served their purposes and should no longer be embraced by Republicans in order to win elections, which he considers the most important purpose of a political party designed to serve the political class.

Brooks has been a frequent admirer of President Barack Obama. In an August 2009 profile of Brooks, *The New Republic* describes his first encounter with Obama, in the spring of 2005: "Usually when I talk to senators, while they may know a policy area better than me, they generally don't know political philosophy better than me. I got the sense he knew both better than me. [...] I remember distinctly an image of—we were sitting on his couches, and I was looking at his pant leg and his perfectly creased pant, and I'm thinking,

a) he's going to be president and b) he'll be a very good president." Two days after Obama's second autobiography, *The Audacity of Hope*, hit bookstores, Brooks published a column in *The New York Times*, titled "Run, Barack, Run", urging the Chicago politician to run for president. However as of December 2011 in a CSPAN interview, Brook's opinion of Obama's presidency was more tempered, giving Obama only a "B-" rating, and said that Obama's chances of reelection would be less than 50-50 if elections were held at that time.

In writing for *The New York Times* in January 2010, Brooks described Israel as "an astonishing success story". He wrote that "Jews are a famously accomplished group," who, because they were "forced to give up farming in the Middle Ages... have been living off their wits ever since". In Brooks' view, "Israel's technological success is the fruition of the Zionist dream. The country was not founded so stray settlers could sit among thousands of angry Palestinians in Hebron. It was founded so Jews would have a safe place to come together and create things for the world."

Brooks opposes what he sees as self-destructive behavior, such as teenage sex and divorce. His view is that "sex is more explicit everywhere barring real life. As the entertainment media have become more sex-saturated, American teenagers have become more sexually abstemious" by "waiting longer to have sex...[and] having fewer partners." He sees the culture war as nearly over, because "today's young people...seem happy with the frankness of the left and the wholesomeness of the right." As a result, he is optimistic about the United States' social stability, which he considers to be "in the middle of an amazing moment of improvement and repair."

Brooks also broke with many in the conservative movement when, in late 2003, he came out in favor of same-sex marriage in his *New York Times* column. He equated the idea with traditional conservative values: "We should insist on gay marriage. We should regard it as scandalous that two people could claim to love each other and not want to sanctify their love with marriage and fidelity.... It's going to be up to conservatives to make the important, moral case for marriage, including gay marriage."

Regarding abortion, Brooks has advocated for pro-choice government regulations: abortion should be legal, with parental consent for minors, during the first four or five months, and illegal afterward, except in extremely rare circumstances. (*New York Times*, April 22, 2002.)

## MARK **CUBAN**

When Mark Cuban purchased the Dallas Mavericks on January 14, 2000, the face of the organization began to change immediately. Once again Mavericks games had a party atmosphere as Reunion Arena rocked with the return of the "Reunion Rowdies." Mavericks games became more than just ordinary NBA games—they were a total entertainment experience.

Cuban was not only successful at instilling a sense of pride and passion into Mavericks fans by presenting himself as the ultimate role model by cheering from the same seats he had in years past, but he also became the first owner in team sports to encourage fan interaction through e-mail on his personal computer. It was through this personal touch that fans throughout the Metroplex, and around the world, began to notice Cuban's energetic personality and take notice of the Mavericks. He has personally responded to thousands of emails, and several suggestions from fans have led to innovative changes such as a new three-sided shot clock, which allows line of site to the 24-second clock from anywhere in the arena.

Cuban's whatever-it-takes attitude and commitment to winning has everyone's attention. From his first introduction to the team to the end of his first season as owner, the players responded with a 31-19 record, including a 9-1 mark in April 2000. In addition to hiring special coaches for offense, defense and shooting, Cuban has promised to do everything in his power to improve the team. This goal was achieved as the club finished the 2000-01 season with a 53-29 record en route to their first playoff appearance in 11 years where they became just the sixth team in NBA history to be down 0-2 and come back to win a five-game series vs. Utah in Round 1.

Before the start of the 2001-02 season, American Airlines Center, the Mavs new home, opened and Cuban co-founded HDNet, an all high-definition television network on DIRECTV channel 199 which launched in September 2001. As with his other ventures, Cuban is revolutionizing the television industry with HDNet. He is planning to expand HDNet to include three more networks showing high-def sports, movies and entertainment by the end of 2002.

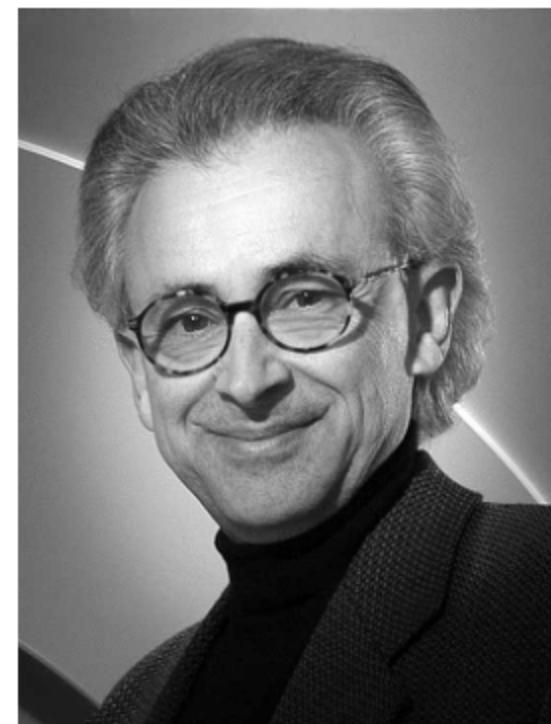
During the Mavs 2001-02 campaign, the team continued their winning ways by finishing the season with a franchise-best record of 57-25 and an NBA-best road record of 27-14, advancing to the postseason for the second-consecutive year.

Prior to his purchase of the Mavericks, Cuban co-founded Broadcast.com, the leading provider of multimedia and streaming on the Internet, in 1995, selling it to Yahoo! in July of 1999. Before Broadcast.com, Cuban co-founded MicroSolutions, a leading National Systems Integrator, in 1983, and later sold it to CompuServe.

Today, in addition to his ownership of the Mavericks, Cuban is an active investor in leading and cutting-edge technologies and continues to be a sought-after speaker.



## ANTONIO DAMASIO



Antonio Damasio (born February 25, 1944 in Lisbon, Portugal) is a University Professor (an award based on multi-disciplinary interests and significant accomplishments in several disciplines) and David Dornsife Professor of Neuroscience at the University of Southern California, where he heads USC's Brain and Creativity Institute. Prior to taking up his posts at USC, in 2005, Damasio was M.W. Van Allen Professor and Head of Neurology at the University of Iowa Hospitals and Clinics from 1976 to 2005. He is also Adjunct Professor at the Salk Institute.

Damasio is the author of several best-selling books which describe his scientific thinking. "As a leading neuroscientist, Damasio has dared to speculate on neurobiological data, and has offered a theory about the relationship between human emotions, human rationality, and the underlying biology."

Damasio was born in Lisbon and studied medicine at the University of Lisbon Medical School in Portugal, where he also did his neurological residency and completed his doctorate. He worked as a research fellow at the Aphasia Research Center in Boston in 1967, prior to receiving his MD in Lisbon. His work there on behavioural neurology was done under the supervision of the late Norman Geschwind, the Harvard neurologist who created the field.

As a researcher, Damasio's main field is the neurobiology of the mind, especially neural systems which subserve emotion, decision-making, memory, language and consciousness. Damasio's seeks to demonstrate that emotions play a critical role in high level cognition, an idea that ran counter to dominant 20th century views in psychology, neuroscience and philosophy. He showed that emotions and their biological underpinnings are involved in decision-making (both positively and negatively, and often non-consciously); provide the scaffolding for the construction of social cognition; and are required for the self processes which undergird consciousness. "Damasio provides a contemporary scientific validation of the linkage between feelings and the body by highlighting the connection between mind and nerve cells... this personalized embodiment of mind."

He formulated the somatic markers hypothesis, which captures the essence of these ideas. This idea has inspired many systems-neuroscience experiments carried out in laboratories in the U.S. and Europe, and has had a major impact in contemporary science and philosophy. His articles on this topic include: Bechara A, Damasio AR, Damasio H, Anderson S. Insensitivity to future consequences following damage to human prefrontal cortex. *Cognition*. 50:7-15. 1994; Bechara A, Damasio H, Tranel D, Damasio AR. Deciding advantageously before knowing the advantageous strategy. *Science*. 275:1293-1294. 1997; Anderson SW, Bechara A, Damasio H, Tranel D, Damasio AR. Impairment of social and moral behaviour related to early damage in human prefrontal cortex. *Nature Neuroscience*. 2:1032-1037. Damasio

has been named by the Institute of Scientific Information as one of the most highly cited researchers in the past decade). Current work on the biology of moral decisions, neuro-economics, social communication, and drug-addiction, has been strongly influenced by Damasio's hypothesis.

Damasio also proposed that emotions are part of homeostatic regulation and are rooted in reward/punishment mechanisms. He recovered James' perspective on feelings as a read-out of body states, but expanded it with an "as-if-body-loop" device which allows for the substrate of feelings to be simulated rather than actual (foreshadowing the simulation process later uncovered by mirror neurons). He demonstrated experimentally that the insular cortex is a critical platform for feelings, a finding that has been widely replicated, and he uncovered cortical and subcortical induction sites for human emotions, e.g. in ventromedial prefrontal cortex and amygdala. He also demonstrated that while the insular cortex plays a major role in feelings, it is not necessary for feelings to occur, suggesting that brain stem structures play a basic role in the feeling process.

He has continued to investigate the neural basis of feelings and demonstrated that although the insular cortex is a major substrate for this process it is not exclusive, suggesting that brain stem nuclei are critical platforms as well. He regards feelings as the necessary foundation of sentience.

In another development, Damasio proposed that the cortical architecture on which learning and recall depend involves multiple, hierarchically organized loops of axonal projections that converge on certain nodes out of which projections diverge to the points of origin of convergence (the convergence-divergence framework). This architecture is applicable to the understanding of memory processes and of aspects of consciousness related to the access of mental contents.

In "The Feeling of What Happens", Damasio lays the foundations of the "enchainment of precedences": "the nonconscious neural signaling of an individual organism begets the protoself which permits core self and core consciousness, which allow for an autobiographical self, which permits extended consciousness. At the end of the chain, extended consciousness permits conscience."

Damasio's research depended significantly on establishing the modern human lesion method, an enterprise made possible by Hanna Damasio's structural neuroimaging/neuroanatomy work complemented by experimental neuroanatomy (with Gary Van Hoesen and Josef Parvizi), experimental neuropsychology (with Antoine Bechara, Ralph Adolphs, and Dan Tranel) and functional neuroimaging (with Kaspar Meyer, Jonas Kaplan, and Mary Helen Immordino-Yang). The experimental neuroanatomy work with Van Hoesen and Bradley Hyman led to the discovery of the disconnection of the hippocampus caused by neurofibrillary tangles in the entorhinal cortex of patients with Alzheimer's disease.

As a clinician, he and his collaborators have studied and treated disorders of behaviour and cognition, and movement disorders.

Damasio's books deal with the relationship between emotions and feelings, and what their brain substrates. His 1994 book, *Descartes' Error: Emotion, Reason and the Human Brain*, won the Science et Vie prize, was a finalist for the *Los Angeles Times Book Award*, and is translated in over 30 languages. It is regarded as one of the most influential books of the past two decades. His second book, *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*, was named as one of the ten best books of 2001 by the *New York Times Book Review*, a *Publishers Weekly* Best Book of the Year, a *Library Journal* Best Book of the Year, and has over 30 foreign editions. Damasio's *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain*, was published in 2003. In it, Damasio suggested that Spinoza's thinking foreshadowed discoveries in biology and neuroscience views on the mind-body problem. Spinoza was a protobiologist. His latest book is *Self Comes to Mind: Constructing the Conscious Brain*. In it Damasio suggests that the self is the key to conscious minds and that feelings, from the kind he designates as primordial to the well-known feelings of emotion, are the basic elements in the construction of the protoself and core self. The book received the Corinne International Book Prize.

Damasio is a member of the American Academy of Arts and Sciences, the National Academy of Sciences' Institute of Medicine, and the European Academy of Sciences and Arts. Damasio has received many awards including the Prince of Asturias Award in Science and Technology, the Honda Prize, the Kappers Neuroscience Medal, the Beaumont Medal from the American Medical Association, the Nonino Prize and the Reenpaa Prize in Neuroscience. He has received honorary doctoral degrees (Doctor honoris causa) from the University of Aachen (2002), University of Aveiro (2003), University of Copenhagen (Copenhagen Business School; 2009), University of Leiden (2010), University Ramon Llull, Barcelona (2010), University of Coimbra (2011) and from the EPFL, Lausanne (2011).

His current work involves the social emotions, consciousness and the creative interface between neuroscience and the arts, especially music and film. The role of feelings states on sentience.

Damasio is married to Dr. Hanna Damasio, his colleague and frequent co-author.

Damasio himself notes, in fallibilist fashion, "I have a difficult time seeing scientific results, especially in neurobiology, as anything but provisional approximations". Whether despite or because of that fallibilism, Damasio writes in the belief that 'scientific knowledge can be a pillar to help humans endure and prevail'.

# OUR HOST

## JACK DANGERMOND



Jack Dangermond is the founder and president of Esri, the world's fourth largest privately held software company. Founded in 1969 and headquartered in Redlands, California, Esri is widely recognized as the technical and market leader in geographic information systems, or GIS, pioneering innovative solutions for working with spatial data.

Esri has more than one million users in over 350,000 organizations representing government; nongovernmental organizations (NGOs); academia; and industries such as utilities, health care, transportation, telecommunications, homeland security, retail, and agriculture.

Dangermond is recognized not only as a pioneer in spatial analysis methods but also as one of the most influential people in GIS. He actively manages Esri and is closely connected to projects, clients, and company vision. He takes a leadership role in national and global initiatives to facilitate standards for data access and sharing across agencies

and organizations. He is personally committed to applying GIS methods for environmental stewardship and sustainable communities.

Dangermond is the recipient of numerous fellowships, honorary degrees, and awards. He has authored hundreds of papers on GIS in such diverse fields as photogrammetry, computer science, planning, environmental science, and cartography. He delivers keynote addresses at meetings and conferences around the globe.

Dangermond's current work is focused on helping organizations deploy spatial data in enterprise environments, Web-based services, and mobile computing systems as well as enhancing applications, models, and tools that can be used for optimized routing, intelligent site selection, crime and disease analysis, location-based services, infrastructure management, public safety, and homeland security.

## DAVE GALLO



David Gallo is an American oceanographer and Director of Special Projects at the Woods Hole Oceanographic Institution—a preeminent, globally recognized scientific laboratory. For more than 25 years, Dr. Gallo has been at the forefront of ocean exploration, participating in and being witness to the development of new technologies and scientific discoveries that shape our view of planet earth. He has been described by TED Conferences as “an enthusiastic ambassador between the sea and those of us on dry land.” With more than 8 million views his TED presentation “Underwater Astonishments” is among the top 5 TED Talks viewed to date.

David has participated in expeditions to all of the world’s oceans and was one of the first scientists to use a combination of robots and submarines to explore the deep seafloor. Most recently he co-led an expedition to create the first detailed and comprehensive map of the RMS *Titanic* and he co-led the successful international effort to locate the remains of Air France flight 447.

Dr. Gallo is currently active in planning a series of challenging expeditions and is encouraging the development of new technologies for ocean exploration. He is a member of James Cameron’s Deep Ocean Task Force and the XPrize Ocean Advisory Board. Almost every expedition into the deep provides results that are often surprising, sometimes startling and in many cases revolutionary.

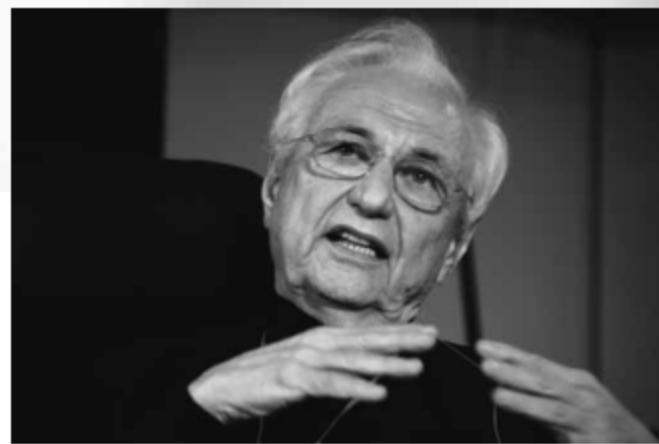
David is becoming increasingly outspoken about the relationship between humanity and the sea. He feels strongly that instead of taking the oceans for granted we need to recognize the oceans critical role in providing the air we breath, the water we drink, and the food we eat. At the same time, Dr. Gallo feels that human activity has impacted the ocean on a global scale and with significant consequences. The oceans hold the clues to our past and the key to our future yet they remain mostly unexplored and poorly understood.

Dr. Gallo is personally committed to conveying the excitement and importance of ocean exploration to the

public-at-large. He has lectured internationally to audiences ranging from children to CEO’s with the goal of awakening the little bit of Jacques Cousteau and Jules Vernes that resides in each of us. He has given more than 10 TED and TEDx presentations and has appeared in numerous documentaries (Discovery Channel, History Channel, National Geographic) and has been featured on numerous televised news programs (Weather Channel, PBS *Need to Know*, MSNBC *Ed Show*, and NBC *Today show*).

In recognition of his efforts in exploration and science communications, David was recently elected a fellow of the American Association for the Advancement of Science. He is a National Fellow of the Explorer’s Club, a member of the American Geophysical Union, and active on several boards including the Marine Environmental Research Institute, the One World One Ocean Campaign, and the Terramar Project.

## FRANK GEHRY



Raised in Toronto, Canada, Frank Gehry moved with his family to Los Angeles in 1947. Mr. Gehry received his Bachelor of Architecture degree from the University of Southern California in 1954, and he studied City Planning at the Harvard University Graduate School of Design. In subsequent years, Mr. Gehry has built an architectural career that has spanned five decades and produced public and private buildings in America, Europe and Asia. Hallmarks of Mr. Gehry's work include a particular concern that people exist comfortably within the spaces that he creates, and an insistence that his buildings address the context and culture of their sites and the budgets of his clients. His work has earned Mr. Gehry several of the most significant awards in the architectural field. He was inducted into the College of Fellows of the American Institute of Architects in 1974, and his buildings have received over 100 national and regional A.I.A. awards. In 1977, Mr. Gehry was named recipient of the Arnold W. Brunner Memorial Prize in Architecture from the American Academy of Arts and Letters. In 1989, he was awarded the Pritzker Architecture Prize, perhaps the premiere accolade of the field, honoring "significant contributions to humanity and the built environment through the art of architecture." In 1992, he received the Wolf Prize in Art (Architecture) from the Wolf Foundation. In the same year, he was named the recipient of the Praemium Imperiale Award by the Japan Art Association to "honor outstanding contributions to the development, popularization, and progress of the arts." In 1994, he became the first recipient of the Dorothy and Lillian Gish Award for lifetime contribution to the arts. In 1998, Mr. Gehry received the National Medal of Arts, and he became the first recipient of the Friedrich Kiesler Prize. In 1999, Mr. Gehry received the Lotos Medal of Merit from the Lotos Club, and he received the Gold Medal from the American Institute of Architects. In 2000, Mr. Gehry received the Gold Medal from the Royal Institute of British Architects, and he received the Lifetime Achievement Award from Americans for the Arts. In 2002, Mr. Gehry received the Gold Medal for Architecture from the American Academy of Arts and Letters. Mr. Gehry was named a Fellow of the American Academy of Arts and Letters in 1987, a trustee of the American Academy in Rome in 1989, and a Fellow of the American Academy of Arts and Sciences in 1991. In 1994, he was bestowed with the title of Academician by the National Academy of Design. In 1998, he was named an Honorary Academician by the Royal Academy of Arts. In 2003, Mr. Gehry was inducted into the European Academy of Sciences and Arts and he was designated as a Companion to the Order of Canada. In 2005 Mr. Gehry received the Ordre National de Legion d'honneur Chevalier from the French Government. In 2006 he was a first year inductee into the California Hall of Fame. In 2008, Mr. Gehry received the Golden Lion Lifetime Achievement Award at the Venice Biennale. In 2010, Mr. Gehry received the John Singleton Copley Award from the American Associates of the Royal Academy Trust, and he received the Cooper Union for the Advancement of Science and Art Award in New York. Mr. Gehry has received honorary doctoral degrees from Occidental College, Whittier College, the California College of Arts and Crafts, the Technical University of Nova Scotia, the Rhode Island School of Design, the California Institute of Arts, the Southern California Institute of Architecture,

the Otis Art Institute at the Parsons School of Design, the University of Toronto, the University of Southern California, Yale University, Harvard University, and the University of Edinburgh. Mr. Gehry has held teaching positions at some of the world's most prestigious institutions including Harvard University, University of Southern California, University of California Los Angeles, Sci-Arc, University of Toronto, Columbia University, the Federal Institute of Technology in Zurich, and at Yale University where he still teaches today.

Notable projects include: the Guggenheim Museum in Bilbao, Spain; the DZ Bank Building in Berlin; Nationale-Nederlanden Building in Prague; the Jay Pritzker Pavilion and BP Bridge in Millennium Park in Chicago, Illinois; Maggie's Centre, a cancer patient center in Dundee, Scotland; Hotel Marques de Riscal in El Ciego, Spain; Lou Ruvo Brain Institute in Las Vegas, Nevada; Princeton University Peter B. Lewis Science Library in Princeton, New Jersey; Art Gallery of Ontario Renovation in Toronto, Ontario, Canada; the New World Symphony in Miami, Florida; the Eight Spruce Street Residential Tower located in New York City; and the Walt Disney Concert Hall in Los Angeles, California. Projects under construction include the Signature Theatre in New York City; the Ohr O'Keefe Museums in Biloxi, Mississippi; the Make it Right Foundation in New Orleans, Louisiana, the Puente de Vida Museum of Biodiversity in Panama; the Frederick R. Weisman Art Museum Expansion at the University of Minnesota; and the Foundation Louis Vuitton Museum in Paris, France. Mr. Gehry is also completing work on the Guggenheim Abu Dhabi; LUMA Foundation in Arles, France and the University of Technology, Sydney in Sydney, Australia.



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## MATT GROENING

Matt Groening was born in Portland, Oregon, on February 15, the third of five children. His father, Homer, was a cartoonist and filmmaker. From an early age, Matt created his own cartoons, amusing his friends and annoying his teachers. Groening attended Evergreen State College in Washington State, where he studied philosophy and continued his interest in cartoons, comics and music.

After his graduation in 1977, Groening headed to Los Angeles where he struggled in immobilizing but irksome poverty. Increasingly frustrated by the traffic, smog, and his landlords, Matt began to vent his angst to his friends by sending them cartoons starring a bug-eyed rabbit named Binky. Groening soon began to publish and sell these cartoons at the record shop where he worked. Their popularity encouraged Matt to syndicate, and in April 1980, *Life In Hell* formally debuted in the *Los Angeles Reader*. It was there that he met his future wife, Deborah Caplan, and together they formed Acme Features Syndicate, which today circulates *Life in Hell* to more than 250 newspapers around the world in a half-dozen languages.

*Life in Hell* has also been collected in a best-selling series of books with over two million copies in print, including *Love is Hell*, *Work is Hell*, *School is Hell*, *Childhood is Hell*, *Akbar & Jeff's Guide to Life*, *Greetings From Hell*, *The Big Book of Hell*, *With Love From Hell*, *How to Go to Hell*, *The Road to Hell*, *Binky's Guide to Love*, and *Love is Still Hell*.

In 1987 James L. Brooks approached Matt about creating animated shorts to fit between sketches of "The Tracey Ullman Show." Matt agreed, but instead of using the *Life in Hell* characters, he created an entirely new cast: *The Simpsons*, which bear the names of his family members, Homer, Marge, Lisa and Maggie (Bart is an anagram for brat).

*The Simpsons* were soon spun off into a half-hour animated series which first aired on December 17, 1989 with a Christmas special, followed by the series premiere on January 14, 1990. It has since gone on to become the longest running prime-time animated show in television history. An international hit, the series has also spawned a licensing and merchandising empire.

Books based on *The Simpsons* include *The Simpsons Xmas Book*, *Greetings From The Simpsons*, *The Simpsons Rainy Day Fun Book*, *The Simpsons Uncensored Family Album*, *Maggie Simpson's Alphabet Book*, *Maggie Simpson's Counting Book*, *Maggie Simpson's Book of Colors & Shapes*, *Maggie Simpson's Book of Animals*, *The Simpsons Fun in the Sun Book*, *Making Faces With The Simpsons*, *The Ultra-Jumbo Rain-Or-Shine Fun Book*, *Cartooning With The Simpsons*, *Bart's Guide To Life* and *The Simpsons: A Complete Guide To Our Favorite Family*, a companion book to the television series.

Groening is also creator and publisher of Bongo Comics and Zongo Comics.



## HERBIE HANCOCK

Herbie Hancock is a true icon of modern music. Throughout his explorations, he has transcended limitations and genres while maintaining his unmistakable voice. With an illustrious career spanning five decades and 14 Grammy® Awards, including Album of the Year for *River: The Joni Letters*, he continues to amaze audiences across the globe.

There are few artists in the music industry who have had more influence on acoustic and electronic jazz and R&B than Herbie Hancock. As the immortal Miles Davis said in his autobiography, "Herbie was the step after Bud Powell and Thelonious Monk, and I haven't heard anybody yet who has come after him."

Born in Chicago in 1940, Herbie was a child piano prodigy who performed a Mozart piano concerto with the Chicago Symphony Orchestra at age 11. He began playing jazz in high school, initially influenced by Oscar Peterson and Bill Evans. He also developed a passion for electronics and science, and double-majored in music and electrical engineering at Grinnell College.

In 1960, Herbie was discovered by trumpeter Donald Byrd. After two years of session work with Byrd as well as Phil Woods and Oliver Nelson, he signed with Blue Note as a solo artist. His 1963 debut album, 'Takin' Off', was an immediate success, producing the hit "Watermelon Man."

In 1963, Miles Davis invited Herbie to join the Miles Davis Quintet. During his five years with Davis, Herbie and his colleagues Wayne Shorter (tenor sax), Ron Carter (bass), and Tony Williams (drums) recorded many classics, including 'ESP', 'Nefertiti' and 'Sorcerer'. Later on, Herbie made appearances on Davis' groundbreaking 'In a Silent Way' and 'Bitches Brew', which heralded the birth of jazz-fusion.

Herbie's own solo career blossomed on Blue Note, with classic albums including 'Maiden Voyage', 'Empyrean Isles', and 'Speak Like a Child'. He composed the score to Michelangelo Antonioni's 1966 film 'Blow Up', which led to a successful career in feature film and television music.

After leaving Davis, Herbie put together a new band called The Headhunters and, in 1973, recorded 'Head Hunters.' With its crossover hit single "Chameleon," it became the first jazz album to go platinum.

By mid-decade, Herbie was playing for stadium-sized crowds all over the world and had no fewer than four albums in the pop charts at once. In total, Herbie had 11 albums in the pop charts during the 1970s. His '70s output inspired and provided samples for generations of hip-hop and dance music artists.

Herbie also stayed close to his love of acoustic jazz in the '70s, recording and performing with VSOP (reuniting him with his Miles Davis colleagues), and in duet settings with Chick Corea and Oscar Peterson.

In 1980, Herbie introduced the trumpeter Wynton Marsalis to the world as a solo artist, producing his debut album and touring with him as well. In 1983, a new pull to the alternative side led Herbie to a series of collaborations with

Bill Laswell. The first, 'Future Shock', again struck platinum, and the single "Rockit" rocked the dance and R&B charts, winning a Grammy for Best R&B Instrumental. The video of the track won five MTV awards. 'Sound System', the follow-up, also received a Grammy in the R&B instrumental category.

Herbie won an Oscar in 1986 for scoring the film "Round Midnight", in which he also appeared as an actor. Numerous television appearances over the years led to two hosting assignments in the 1980s: "Rock School" on PBS and Showtime's "Coast To Coast".

After an adventurous 1994 project for Mercury Records, 'Dis Is Da Drum', he moved to the Verve label, forming an all-star band to record 1996's Grammy-winning 'The New Standard'. In 1997, an album of duets with Wayne Shorter, '1+1', was released.

The legendary Headhunters reunited in 1998, recording an album for Herbie's own Verve-distributed imprint, and touring with the Dave Matthews Band. That year also marked the recording and release of 'Gershwin's World', which included collaborators Joni Mitchell, Stevie Wonder, Kathleen Battle, the Orpheus Chamber Orchestra, Wayne Shorter and Chick Corea. 'Gershwin's World' won three Grammys in 1999, including Best Traditional Jazz Album and Best R&B Vocal Performance for Stevie Wonder's "St. Louis Blues."

Herbie reunited with Bill Laswell to collaborate with some young hip-hop and techno artists on 2001's FUTURE2FUTURE. He also joined with Roy Hargrove and Michael Brecker in 2002 to record a live concert album, 'Directions In Music: Live at Massey Hall', a tribute to John Coltrane and Miles Davis.

'Possibilities', released in August 2005, teamed Herbie with many popular artists, such as Sting, Annie Lennox, John Mayer, Christina Aguilera, Paul Simon, Carlos Santana, Joss Stone and Damien Rice. That year, he played a number of concert dates with a re-staffed Headhunters, and became the first-ever Artist-In-Residence at the Tennessee-based festival Bonnaroo.

In 2007, Hancock recorded and released 'River: The Joni Letters', a tribute to longtime friend and collaborator Joni Mitchell featuring Wayne Shorter, guitarist Lionel Loueke, bassist Dave Holland and drummer Vinnie Colaiuta and co-produced by Larry Klein. He enlisted vocalists Norah Jones, Tina Turner, Corinne Bailey Rae, Luciana Souza, Leonard Cohen and Mitchell herself to perform songs she wrote or was inspired by. The album received glowing reviews and was a year-end Top 10 choice for many critics. It also garnered three Grammy Awards, including Album of the Year; Herbie is one of only a handful of jazz musicians ever to receive that honor.

In 2010 Hancock released the critically-acclaimed CD, 'Herbie Hancock's The Imagine Project,' winner of two 2011 Grammy Awards for Best Pop Collaboration and Best Improvised Jazz Solo. Utilizing the universal language of



music to express its central themes of peace and global responsibility, the 'Imagine' project was recorded around the world and features a stellar group of musicians including Jeff Beck, Seal, Pink, Dave Matthews, The Chieftains, Lionel Loueke, Oumou Sangare, Konono #1, Anoushka Shankar, Chaka Khan, Marcus Miller, Derek Trucks, Susan Tedeschi, Tinariwen, and Ceu.

Herbie Hancock also maintains a thriving career outside the performing stage and recording studio. Recently named by the Los Angeles Philharmonic as Creative Chair For Jazz, he currently also serves as Institute Chairman of the Thelonious Monk Institute of Jazz, the foremost international organization devoted to the development of jazz performance and education worldwide. Hancock is also a founder of The International Committee of Artists for Peace, and was recently awarded the much esteemed "Commandeur des Arts et des Lettres" by French Prime Minister Francois Fillon.

In July of 2011 Hancock was designated a UNESCO Goodwill Ambassador by UNESCO Director-General Irina Bokova. Recognizing Herbie Hancock's "dedication to the promotion of peace through dialogue, culture and the arts," the Director-General has asked the celebrated jazz musician "to contribute to UNESCO's efforts to promote mutual understanding among cultures, with a particular emphasis on fostering the emergence of new and creative ideas amongst youth, to find solutions to global problems, as well as ensuring equal access to the diversity of artistic expressions." UNESCO's Goodwill Ambassadors are an outstanding group of celebrity advocates who have generously accepted to use their talent and status to help focus the world's attention on the objectives and aims of UNESCO's work in its fields of competence: education, culture, science and communication/information

Now in the fifth decade of his professional life, Herbie Hancock remains where he has always been: in the forefront of world culture, technology, business and music. Though one can't track exactly where he will go next, he is sure to leave his inimitable imprint wherever he lands.

## DANNY HILLIS



William Daniel "Danny" Hillis (born September 25, 1956, in Baltimore, Maryland) is an American inventor, scientist, engineer, entrepreneur, and author. He co-founded Thinking Machines Corporation, a company that developed the Connection Machine, a parallel supercomputer designed by Hillis at MIT. He is also co-founder of the Long Now Foundation, Applied Minds, Metaweb Technologies, Applied Proteomics, and author of *The Pattern on the Stone: The Simple Ideas That Make Computers Work*.

Danny Hillis was born in Baltimore, Maryland in 1956. His father, William Hillis, was a US Air Force epidemiologist studying hepatitis in Africa and relocated with his family through Rwanda, Burundi, Republic of the Congo, and Kenya. He spent a brief part of his childhood in Calcutta, India when his father was a visiting faculty at ISI, Calcutta. During these years the young Hillis was home schooled by his mother Arye Briggs Hillis, a biostatistician, and developed an early appreciation for mathematics and biology. His younger brother is David Hillis, a professor of evolutionary biology at the University of Texas at Austin, and his sister is Arye E. Hillis, a professor of neurology at Johns Hopkins University.

In 1978 Hillis graduated from MIT with a BS degree in mathematics, followed in 1981 with an MS degree in Electrical Engineering and Computer Science (EECS), specializing in robotics.

During this time Hillis worked at the MIT Logo Laboratory developing computer hardware and software for children. He designed computer-oriented toys and games for the Milton Bradley Company, and co-founded Terrapin Software—a producer of computer software for elementary schools. He also built a digital computer composed of Tinkertoys that is on display at the Museum of Science, Boston.

Hillis' major research, however, was into parallel computing. Hillis designed the Connection Machine, a parallel supercomputer; in 1983 Hillis co-founded Thinking Machines Corporation to produce and market supercomputers based on this design. In 1988, continuing this research, Hillis received a PhD in EECS from MIT under doctoral advisers Gerald Jay Sussman, Marvin Minsky and Claude Shannon.

Hillis co-founded Thinking Machines Corporation in 1983 while doing his doctoral work at MIT. The company was to develop Hillis' Connection Machine design into commercial parallel supercomputers, and to explore computational pathways to building artificial intelligence. Hillis' ambitions are represented by the company's motto: "We're building a machine that will be proud of us," and Hillis' parallel architecture was to be the main component for this task:

Clearly, the organizing principle of the brain is parallelism. It's using massive parallelism. The information is in the connection between a lot of very simple parallel units working together. So if we built a computer that was more along that system of organization, it would likely be able to do the same kinds of things the brain does.

At Thinking Machines Corporation, Hillis built a technical team with many people that would later become leaders in science and industry including Brewster Kahle, Guy Steele, Sydney Brenner, David Waltz, Jack Schwartz, and Eric Lander. He even recruited Richard Feynman to spend his summers there. For many years, Thinking Machines Corporation connection machines were the fastest computers in the world.

During 1994, however, Thinking Machines filed for bankruptcy. In 1996, after a short stint as a professor at the MIT Media Lab, Hillis joined The Walt Disney Company full time in the newly created role of Disney Fellow and Vice President, Research and Development, Walt Disney Imagineering, which Hillis claimed was an early ambition of his:

I've wanted to work at Disney ever since I was a child...I remember listening to Walt Disney on television describing the 'Imagineers' who designed Disneyland. I decided then that someday I would be an Imagineer. Later, I became interested in a different kind of magic—the magic of computers. Now I finally have the perfect job—bringing computer magic into Disney.

At Disney, Hillis developed new technologies as well as business strategies for Disney's theme parks, television, motion pictures, Internet and consumer products businesses. He also designed new theme park rides, a full sized walking robot dinosaur and various micro mechanical devices.

Hillis left Disney in 2000, taking with him Bran Ferren, President of the Walt Disney Imagineering, R&D Creative Technologies division. Together, Ferren and Hillis founded Applied Minds, a company aimed at providing technology and consulting services to firms in an array of industries, including aerospace, electronics, and toys. In July 2005, Hillis and others from Applied Minds initiated Metaweb Technologies, Inc. to develop a semantic data storage infrastructure for the Internet, and Freebase, an "open, shared database of the world's knowledge". When Metaweb was acquired by Google, the technology became the basis of Google's Knowledge Graph. Hillis, together with Dr. David B. Agus, cofounded a spinoff of Applied Minds called Applied Proteomics Inc which designed and prototyped a machine that measures the level of proteins in the blood for medical diagnosis.

Hillis' work with Agus on cancer led to the founding of the University of Southern California Physical Sciences-Oncology Center (USC PS-OC), funded by the National Cancer Institute (NCI). Hillis is the principle investigator of this program.

In 1993, with Thinking Machines facing its demise, Hillis wrote about long-term thinking and suggested a project to build a clock designed to function for millennia:

When I was a child, people used to talk about what would happen by the year 2000. Now, thirty years later, they still talk about what will happen by the year

2000. The future has been shrinking by one year per year for my entire life. I think it is time for us to start a long-term project that gets people thinking past the mental barrier of the Millennium. I would like to propose a large (think Stonehenge) mechanical clock, powered by seasonal temperature changes. It ticks once a year, bongs once a century, and the cuckoo comes out every millennium.

This clock became the Clock of the Long Now, a name invented by the songwriter and composer, Brian Eno. Hillis wrote an article for Wired magazine suggesting a clock that would last over 10,000 years. The project led directly to the founding of the Long Now Foundation in 1996 by Hillis and others, including Stewart Brand, Brian Eno, Esther Dyson, and Mitch Kaplan.

Hillis asserts that parallelism itself is approximately the main ingredient of intelligence; that there is not anything else required to make a mind result from a distributed network of processors. Hillis believes that

...intelligence is just a whole lot of little things, thousands of them. And what will happen is we'll learn about each one at a time, and as we do it, machines will be more and more like people. It will be a gradual process, and that's been happening.

This is not so different from Marvin Minsky's Society of Mind theory, which holds that mind is a collection of agents, each one taking care of a particular aspect of intelligence, and communicating with one another, exchanging information as required.

Some artificial intelligence theorists have other opinions—that it's not the underlying computational mode that's crucial, but rather particular algorithms (of reasoning, memory, perception, etc.). Others argue that the right combination of "little things" is needed to give rise to the overall emergent patterns of coordinated activity that constitute real intelligence.

Hillis is one of a small number of people who have made a serious attempt to create such a "thinking machine" and his ambitions are clear:

"I'd like to find a way for consciousness to transcend human flesh. Building a thinking machine is really a search for a kind of Earthly immortality. Something much more intelligent than we can exist. Making a thinking machine is my way to reach out to that."

Hillis' 1998 popular science book *The Pattern on the Stone* attempts to explain concepts from computer science for laymen using simple language, metaphor and analogy. It moves from Boolean algebra through topics such as information theory, parallel computing, cryptography, algorithms, heuristics, Turing machines, and promising technologies such as quantum computing and emergent systems.

**BJARKE INGELS****QUINCY JONES**

Bjarke Ingels started BIG Bjarke Ingels Group in 2005 after co-founding PLOT Architects in 2001 and working at OMA in Rotterdam. Through a series of award-winning design projects and buildings, Bjarke has developed a reputation for designing buildings that are as programmatically and technically innovative as they are cost and resource conscious. Bjarke has received numerous awards and honors, including the Danish Crown Prince's Culture Prize in 2011, the Golden Lion at the Venice Biennale in 2004, and the ULI Award for Excellence in 2009. In 2011, the Wall Street Journal awarded Bjarke the Architectural Innovator of the Year Award. In 2012, the American Institute of Architects granted the 8 House its Honor Award, calling it "a complex and exemplary project of a new typology."

Alongside his architectural practice, Bjarke taught at Harvard University, Yale University, Columbia University, and Rice University and is an honorary professor at the Royal Academy of Arts, School of Architecture in Copenhagen. He is a frequent public speaker and has spoken in venues such as TED, WIRED, AMCHAM, 10 Downing Street, and the World Economic Forum.





An impresario in the broadest and most creative sense of the word, Quincy Jones' career has encompassed the roles of composer, record producer, artist, film producer, arranger, conductor, instrumentalist, TV producer, record company executive, magazine founder, multi-media entrepreneur and humanitarian. As a master inventor of musical hybrids, he has shuffled pop, soul, hip-hop, jazz, classical, African and Brazilian music into many dazzling fusions, traversing virtually every medium, including records, live performance, movies and television.

Celebrating more than 60 years performing and being involved in music, Quincy's creative magic has spanned over six decades, beginning with the music of the post-swing era and continuing through today's high-technology, international multi-media hybrids. In the mid-50's, he was the first popular conductor-arranger to record with a Fender bass. His theme from the hit TV series *Ironside* was the first synthesizer-based pop theme song. As the first black composer to be embraced by the Hollywood establishment in the 60's, he helped refresh movie music with badly needed infusions of jazz and soul. His landmark 1989 album, *Back On The Block*—named "Album Of The Year" at the 1990 Grammy Awards—brought such legends as Dizzy Gillespie, Ella Fitzgerald, Sarah Vaughan and Miles Davis together with Ice T, Big Daddy Kane and Melle Mel to create the first fusion of the be bop and hip hop musical traditions; while his 1993 recording of the critically acclaimed *Miles and Quincy Live At Montreux*, featured Quincy conducting Miles Davis' live performance of the historic Gil Evans arrangements from the *Miles Ahead*, *Porgy and Bess* and *Sketches of Spain* sessions, garnered a Grammy Award for Best Large Jazz Ensemble Performance. As producer and conductor of the historic "We Are The World" recording (the best-selling single of all time) and Michael Jackson's multi-platinum solo albums, *Off The Wall*, *Bad* and *Thriller* (the best selling album of all time, with over 50 million copies sold), Quincy Jones stands as one of the most successful and admired creative artist/executives in the entertainment world.

His 1995 recording, *Q's Jook Joint*, again showcased Quincy's ability to mold the unique talents of an eclectic group of singers and musicians, in what resulted in a retrospective of his broad and diverse career from that of a seasoned Jazz musician, to skilled composer, arranger, and bandleader, to acclaimed record producer.

A reference to the backwoods club houses of rural America in the 1930's, 40's, and 50's, the platinum selling *Q's Jook Joint* featured performances by artists such as Bono, Brandy, Ray Charles, Phil Collins, Coolio, Kenny "Babyface" Edmonds, Gloria Estefan, Rachelle Ferrell, Aaron Hall, Herbie Hancock, Heavy D., Ron Isley, Chaka Khan, R. Kelly, Queen Latifah, Tone Loc, the Luniz, Brian McKnight, Melle Mel, Shaquille O'Neal, Joshua Redman, the Broadway musical troupe Stomp, SWV, Take 6, newcomer Tamia, Toots Thielemans, Mervyn Warren, Barry White, Warren Wiebe, Charlie Wilson, Nancy Wilson, Stevie Wonder, Mr. X, and Yo-Yo, among others, and garnered seven Grammy nominations. His recording, *From Q, With Love*, featured a collection of 26 love songs that he recorded over the last 32 years of his more than 50 year career in the music business.

Named by Time Magazine as one of the most influential jazz musicians of the 20th century, Quincy Jones was born on March 14, 1933, in Chicago and brought up in Seattle. While in junior high school, he began studying trumpet and sang in a gospel quartet at age 12. His musical studies continued at the prestigious Berklee College of Music in Boston, where he remained until the opportunity arose to tour with Lionel Hampton's band as a trumpeter,

arranger and sometime-pianist. He moved on to New York and the musical "big leagues" in 1951, where his reputation as an arranger grew. By the mid-50's, he was arranging and recording for such diverse artists as Sarah Vaughan, Ray Charles, Count Basie, Duke Ellington, Big Maybelle, Dinah Washington, Cannonball Adderly and LeVern Baker.

In 1957, Quincy decided to continue his musical education by studying with Nadia Boulanger, the legendary Parisian tutor to American expatriate composers such as Leonard Bernstein and Aaron Copland. To subsidize his studies he took a job with Barclay Disques, Mercury's French distributor. Among the artists he recorded in Europe were Charles Aznavour, Jacques Brel and Henri Salvador, as well as such visitors from America as Sarah Vaughan, Billy Eckstine and Andy Williams. Quincy's love affair with European audiences continues through the present: in 1991, he began a continuing association with the Montreux Jazz and World Music Festival, which he serves as co-producer.

Quincy won the first of his many Grammy's in 1963 for his Count Basie arrangement of "I Can't Stop Loving You." Quincy's three-year musical association as conductor and arranger with Frank Sinatra in the mid-60's also teamed him with Basie for the classic *Sinatra At The Sands*, containing the famous arrangement of "Fly Me To The Moon," the first recording played by astronaut Buzz Aldrin when he landed upon the moon's surface in 1969.

When he became vice-president at Mercury Records in 1961, Quincy became the first high-level black executive of an established major record company. Toward the end of his association with the label, Quincy turned his attention to another musical area that had been closed to blacks--the world of film scores. In 1963, he started work on the music for Sidney Lumet's *The Pawnbroker* and it was the first of his 33 major motion picture scores. In 1985, he co-produced Steven Spielberg's adaptation of Alice Walker's *The Color Purple*, which garnered eleven Oscar nominations, introduced Whoopi Goldberg and Oprah Winfrey to film audiences, and marked Quincy's debut as a film producer. In 1991 Quincy helped launch NBC-TV's hit series, *The Fresh Prince Of Bel Air*, for which he served as an executive producer.

In 1990, Quincy Jones formed Quincy Jones Entertainment (QJE), a co-venture with Time Warner, Inc. The new company, which Quincy served as CEO and chairman, had a broad ranging, multi-media agenda which encompassed programming for current and future technologies, including theatrical motion pictures and network, cable and syndicated television. QJE produced NBC Television's *Fresh Prince Of Bel Air* (now in syndication), and UPN's *In The House* and Fox Television's *Mad TV*, among other syndicated shows and television specials. In 1991 Jones founded VIBE Magazine, and with his publishing group VIBE Ventures, would go on to acquire *SPIN Magazine* before divesting his magazine interests.

In January 1992, Quincy Jones executive produced the *An American Reunion* concert at Lincoln Memorial, an all-star concert and celebration that was the first official event of the presidential inaugural celebration and drew widespread acclaim as an HBO telecast.

On March 25, 1996, Quincy Jones, executive produced the most watched awards show in the world, the 68th Annual Academy Awards. The show received widespread acclaim as one of the most memorable Academy Award shows in recent years.

In 1997, Quincy Jones formed the Quincy Jones Media Group. QJMG's feature film projects in development include such highly anticipated films as the adaptations of the Ralph Ellison novel *Juneteenth*, David Halberstam's *The Children*

for Home Box Office in association with producers Kathleen Kennedy and Frank Marshall, a bio-pic on the 19th century Russian poet Alexander Pushkin, *Pimp and Seeds of Peace* for Showtime, among others. For television, QJMG is developing the sit-com *The White Guy*. QJMG is also active in live entertainment, direct response marketing, and cross-media projects for home entertainment and educational applications.

As a record company executive, Quincy remained highly active in the recording field throughout the 1990s as the guiding force behind his own Qwest Records, which boasted such important artists as New Order, Tevin Campbell, Andre Crouch, Patti Austin, James Ingram, Siedah Garrett, Gregory Jefferson and Justin Warfield. New Order's album, *Substance* earned Qwest a gold album in 1987. Tevin Campbell's *T.E.V.I.N* was both a critical sensation and major commercial success, and the label's release of the *Boyz N The Hood* soundtrack album was among the most successful soundtrack recordings of 1991. Qwest Records has also released soundtrack albums from the major motion pictures *Sarafina!* and *Malcolm X*.

In 1994, Quincy Jones led a group of businessmen, including Hall of Fame football player Willie Davis, television producer Don Cornelius, television journalist Geraldo Rivera and businesswoman Sonia Gonsalves Salzman in the formation of Qwest Broadcasting, a minority controlled broadcasting company which purchased television stations in Atlanta and New Orleans for approximately \$167 million, establishing it as one of the largest minority owned broadcasting companies in the United States. Quincy served as chairman and CEO of Qwest Broadcasting. In 1999, taking advantage of the rapid escalation of broadcast station values, Jones and his partners sold Qwest Broadcasting for a reported \$270 million.

The laurels, awards and accolades have been innumerable: Quincy has won an Emmy Award for his score of the opening episode of the landmark TV miniseries, *Roots*, seven Oscar nominations, the Academy of Motion Picture Arts and Sciences' Jean Hersholt Humanitarian Award, 27 Grammy Awards, and N.A.R.A.S.' prestigious Trustees' Award and The Grammy Living Legend Award. He is the all-time most nominated Grammy artist with a total of 79 Grammy nominations. In 1990, France recognized Quincy with its most distinguished title, the Commandeur de la Legion d' Honneur. He is also the recipient of the French Ministry of Culture's Distinguished Arts and Letters Award. Quincy is the recipient of the Royal Swedish Academy of Music's coveted Polar Music Prize, and the Republic of Italy's Rudolph Valentino Award. He is also the recipient of honorary doctorates from Howard University, the Berklee College of Music, Seattle University, Wesleyan University, Brandeis University, Loyola University (New Orleans), Clark Atlanta University, Claremont University's Graduate School, the University of Connecticut, Harvard University, Tuskegee University, New York University, University of Miami and The American Film Institute, among others. In 2001, Jones was named a Kennedy Center Honoree, for his contributions to the cultural fabric of the United States of America. He was recognized by the National Endowment for the Arts as a Jazz Master—the nation's highest jazz honor, and was most recently bestowed the National Medal of Arts, our nation's highest artistic honor.

In 1990, his life and career were chronicled in the critically acclaimed Warner Bros. film, *Listen Up: The Lives of Quincy Jones*, produced by Courtney Sale Ross, a film which helped illuminate not only Quincy's life and spirit, but also revealed much about the development of the African American musical tradition. Reflecting on the changes in pop music over the years, Quincy says, "If there are any common denominators, they are spirit and



musicality. I go for the music that gives me goose bumps, music that touches my heart and my soul." Over the years, Quincy Jones has reached the essence of music and art: the ability to touch people's feelings and emotions.

In 2001, Quincy Jones added the title "Best Selling Author" to his list of accomplishments when his autobiography *Q: The Autobiography of Quincy Jones* entered the *New York Times*, *Los Angeles Times* and *Wall Street Journal* Best-Sellers lists. Released by Doubleday Publishing, the critically acclaimed biography retells Jones' life story from his days as an impoverished youth on the Southside of Chicago through a massively impressive career in music, film and television where he worked beside legends such as Billie Holiday, Ray Charles, Dizzy Gillespie, Count Basie, Ella Fitzgerald and Michael Jackson, among many others. In conjunction with the autobiography, Rhino Records released a 4-cd boxed set of Jones' music, spanning his more than 5 decade career in the music business, entitled "Q: The Musical Biography of Quincy Jones."

The audio recording of "Q: The Autobiography of Quincy Jones," (Simon & Schuster) earned Jones his 27th Grammy Award, in the Best Spoken Word Category, while "Q: The Musical Biography of Quincy Jones" garnered him a 15th NAACP Image Award, in the category of Outstanding Jazz Artist.

In 2008 *The Complete Quincy Jones: My Journey & Passions*, (Palace Press) examined the virtuosity of the man Frank Sinatra named "Q," celebrating his prolific contribution to American art and culture. The book included a foreword by Clint Eastwood, preface from Bono, an introduction by Maya Angelou and an afterword by Sidney Poitier. Comprised of personal interviews and recollections from Jones, this collection peers behind the veil of celebrity, with extraordinary access to his creative inspirations and achievements.

Jones next projects include the forthcoming release of *Soul Bossa Nostra*, an album featuring some of today's biggest recording artists and producers such as Usher, Ludacris, Akon, Jamie Foxx, Jennifer Hudson, Mary J. Blige, T-Pain, Robin Thicke, LL Cool J, John Legend, Snoop Dogg, Wyclef Jean, Q-Tip, Talib Kweli, Three 6 Mafia, David Banner, Bebe Winans, Mervyn Warren, Jermaine Dupri, DJ Paul, and Scott Storch, among others, who have joined together to celebrate the music of the multi-Grammy winning producer, composer and arranger by recording contemporary versions of popular recordings from his massive catalog; the book *Q on Producing* which recounts his six-decade long career working in the recording studio with music icons such as Count Basie, Duke Ellington, Ella Fitzgerald, Frank Sinatra and Michael Jackson, among many others; a duets album with Stevie Wonder and Tony Bennett; as well as multiple projects for film and television.

With a long history of humanitarian work which began in the 1960's and 70's, Jones was one of the key supporters of Jesse Jackson's Operation P.U.S.H. In 1985, he pioneered the model of using celebrity to raise money and awareness for a cause with "We Are the World." The song remains the best-selling single of all-time, and raised more than \$63 Million for Ethiopian famine relief. More importantly, however, it shined a spotlight on the Ethiopian drought and U.S. Government responded with over \$800 million in aid.

In 1999 Quincy Jones joined Bono and Bob Geldof during a meeting with Pope John Paul II as a part of the Jubilee 2000 delegation to end third world debt. The delegation's visit resulted in \$27 billion in third world debt relief for Bolivia, Mozambique, and the Ivory Coast.

In 2004, in front of a live audience of more than a half-million spectators, Jones launched the *We Are the Future* initiative with a concert featuring Carlos Santana,

Alicia Keys, Josh Groban, Oprah Winfrey, Norah Jones and a host of other entertainers from around the world. The initiative has established Municipal Child Centers in the cities of Addis Ababa (Ethiopia), Asmara (Eritrea), Freetown (Sierra Leone), Kigali (Rwanda) and Nablus (Palestine) where youth are being trained to run child-based programs in health, nutrition, Information and Communication Technology (ICT), Sports and Arts.

In 2007, Jones and the Harvard School of Public Health joined forces to advance the health and well-being of children worldwide through Project Q, a strategic initiative of School's Center for Health Communication. Through the strategic use of media, Project Q challenges leaders and citizens of the world to provide essential resources to enable young people to achieve their full potential.

A centerpiece of Project Q is the Q Prize, which recognizes extraordinary leadership by public figures and social entrepreneurs who are championing the needs of children. The inaugural Q Prize was awarded in January 2007 to Scott Neeson, founder of the Cambodian Children's Fund, and over \$600,000 was raised in support of Neeson's work. The 2008 Q Prize will be awarded on October 23 in New York City.

Through his personal foundation, The Quincy Jones Foundation, Jones raises awareness and financial resources for initiatives that support global children's issues in areas of conflict, malaria eradication, clean water and efforts to restore the Gulf Coast (post-Katrina). Philanthropic partners include Malaria No More, Millennium Promise, and R&B singer Usher's New Look Foundation.

## MARY JORDAN



Mary Catherine Jordan (born November 10, 1960) is a Pulitzer Prize-winning American journalist for the *Washington Post*. She is currently the editor of Washington Post Live, which organizes political debates, conferences and news events for the media company. She has written on U.S. politics, the American education system and many other subjects. With her husband, *Post* journalist Kevin Sullivan, Jordan ran the newspaper's bureaus in Tokyo, Mexico City and London. Jordan has written from nearly 40 countries and also been a frequent commentator on BBC Television.

Jordan, a daughter of Irish immigrants, was born and raised in Cleveland, Ohio. She graduated from Georgetown University in 1983 and earned a master's degree from Columbia University's Graduate School of Journalism in 1984. In 1989-90, Jordan was awarded a Nieman Fellowship by Harvard University.

Jordan began her Post career as an intern for the Style section, crisscrossed the country writing about colleges and schools as the national education reporter, and covered Virginia and national politics.

For a year at Trinity College in Dublin, Ireland, she studied William Butler Yeats and other Irish poets. She was given her first job in the newspaper business by legendary Irish author and editor Tim Pat Coogan, who hired her to write a column in the *Irish Press*. She enrolled in Japanese language classes at Georgetown University before moving to Tokyo for four years and studied Spanish on a post-graduate fellowship at Stanford University before moving to Mexico for five years.

Currently, Jordan moderates many high-profile forums for the *Washington Post* including the "The 40th Anniversary of Watergate" in June 2012 that featured key Watergate figures including former White House counsel John Dean, *Washington Post* editor Ben Bradlee, and reporters Bob Woodward and Carl Bernstein.

She hosted the 2010 Maryland gubernatorial

debate between Governor Martin O'Malley and former Governor Robert Ehrlich, and moderated a rare sitdown with Redskin owner Dan Snyder, Capital's owner Ted Leonsis, and other owners of Washington's sports teams.

Among the many newsmakers she has interviewed: Legendary singer and songwriter Paul McCartney, Colombian novelist Gabriel Garcia Marquez, Nobel Prize winner Henry Kissinger, former British Prime Minister Tony Blair and Benjamin Arellano Felix, one of Mexico's most notorious drug kingpins. Jordan has written extensively about injustices and discrimination against women around the world including articles about the exceedingly low conviction rate of rape in Britain and the unfortunate girls in India denied schooling solely because they were not born male.

Jordan and Sullivan won the 2003 Pulitzer Prize for International Reporting for their *Post* series on the "horrific conditions in Mexico's criminal justice system and how they affect the daily lives of people," as the Pulitzer Board described. Along with four Post photographers, Jordan and Sullivan were also finalists for the 2009 Pulitzer Prize for International Reporting for their series of stories on the difficulties women face around the world. The Pulitzer jury called the series a "sensitive examination of how females in the developing world are often oppressed from birth to death, a reporting project marked by indelible portraits of women and girls and enhanced by multimedia presentations."

Jordan and Sullivan authored *The Prison Angel: Mother Antonia's Journey from Beverly Hills to a Life of Service in a Mexican Jail* (The Penguin Press, 2005). In 2006, the book won the Christopher Award, which "salutes media that affirm the highest values of the human spirit." Jordan and Sullivan have also won numerous other awards including the George Polk Award for their coverage of the 1997 Asian Financial Crisis and awards from the Overseas Press Club of America and the Society of Professional Journalists.

## JON KAMEN



@radical.media creates some of the world's most innovative content across all platforms of media. Originally renowned for its commercial and advertising success, it has transformed and grown to develop, produce, and distribute television, feature films, music programming, live events, digital content and design. As the founding Chairman and CEO of @radical.media, Jon continues to expand @radical's capabilities within this ever-evolving media landscape.

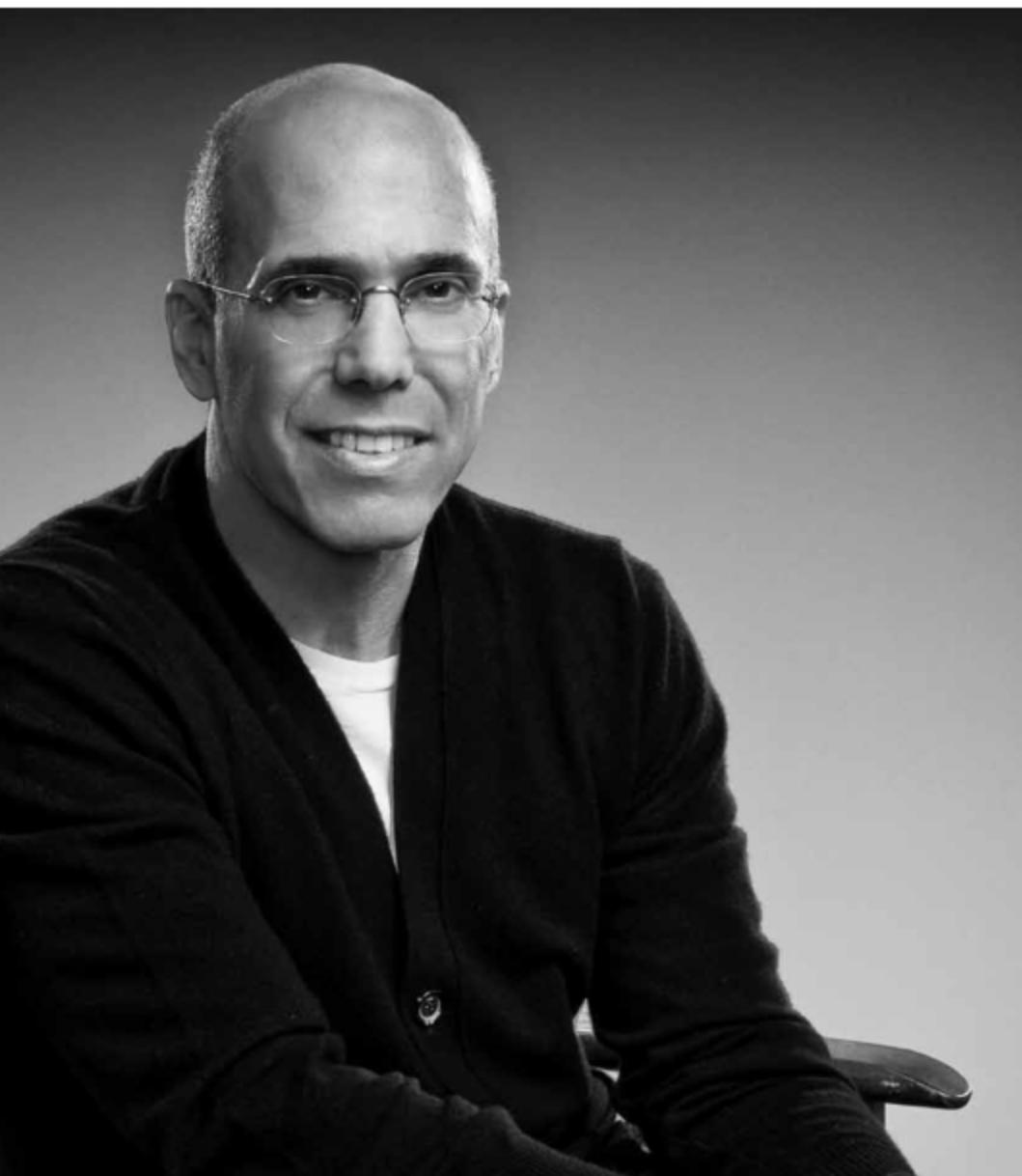
Beyond an Executive, Jon is a Producer and Executive Producer of groundbreaking projects. Amongst @radical's major achievements, @radical.media has been recognized for producing multiple award-winning projects including the Academy Award and Independent Spirit Award for the documentary *The Fog of War*; and a Grammy for the Concert for George. This past year, @radical produced the Academy Award and Emmy-nominated HBO documentary *Paradise Lost 3* and the Emmy-nominated A&E documentary following Paul Simon's *Graceland* journey, *Under African Skies*.

@radical is currently in production on a Ron Howard-directed documentary on the *Made In America* festival in Philadelphia. And it recently launched THNKR, a Premium YouTube Channel, offering viewers extraordinary access to the people, stories, and ideas that are transforming the world.

Beyond his professional duties and prolific production credits, Jon is on the Board of Trustees of the Rhode Island School of Design, and has recently been appointed to the Board of the Mr. Holland's Opus Foundation. Jon has continuously fostered @radical's work with numerous organizations and public service initiatives, including RED, ONE, and Conservation International. In 2012, he accepted Mayor Bloomberg's Made in New York Award at Gracie Mansion.

Jon strives to increase the reach, impact, and legacies of the advertising and entertainment industries. During his two terms as National Chairman of the AICP, he founded the "Art and Technique of the American Television Commercial," which has been presented for the past 20 years at the Museum of Modern Art. In 1994, Jon received the Crystal Apple Award for his outstanding contributions to the city's production industry.

## JEFFREY KATZENBERG



Jeffrey Katzenberg (born December 21, 1950) is an American film producer and CEO of DreamWorks Animation. He is perhaps most known for his period as chairman of The Walt Disney Studios when Disney produced some of its biggest hits, including *The Little Mermaid*, *Beauty and the Beast*, *Aladdin* and *The Lion King*. As a founder and CEO of DreamWorks Animation, he has overseen the production of such animated franchises as *Shrek*, *Madagascar*, *Kung Fu Panda*, *Monsters vs. Aliens* and *How to Train Your Dragon*.

Katzenberg was born in New York City, the son of Anne, an artist, and Walter, a stockbroker. He attended the Ethical Culture Fieldston School, graduating in 1969.

Katzenberg began his career as an assistant to producer David Picker, then in 1974 he became an assistant to Barry Diller, the Chairman of Paramount Pictures. Diller moved Katzenberg to the marketing department, followed by other assignments within the studio, until he was assigned to revive the *Star Trek* franchise, which resulted in the hit film, *Star Trek: The Motion Picture* (1979). He continued to work his way up and became President of Production under Paramount President Michael Eisner.

In 1984, Michael Eisner became Chief Executive Officer (CEO) at The Walt Disney Company. Eisner brought Katzenberg with him to take charge of Disney's motion picture division. Katzenberg was responsible for reviving the studio which, at the time, ranked last at the box office among the major studios. He focused the studio on the production of adult-oriented comedies under its Touchstone Pictures banner, including films such as *Down and Out in Beverly Hills* (1986), *Three Men and a Baby* (1987) and *Good Morning, Vietnam* (1987). By 1987, Disney had become the number-one studio at the box office. Katzenberg also oversaw Touchstone Television, which produced such hit TV series, *The Golden Girls* and *Home Improvement*.

Katzenberg was also charged with turning around Disney's ailing Feature Animation unit, creating some intrastudio controversy when he personally edited three minutes out of a completed Disney animated feature, *The Black Cauldron* (1985), shortly after joining the company.

Under his management, the animation department eventually began creating some of Disney's most critically acclaimed and highest grossing animated features. These films include *Who Framed Roger Rabbit* (1988), *The Little Mermaid* (1989), *The Rescuers Down Under* (1990), *Beauty and the Beast* (1991, the first animated feature to be nominated for an Academy Award for Best Picture), *Aladdin* (1992), and *The Lion King* (1994). In addition, Katzenberg also sealed the deal that created the highly successful partnership between Pixar and Disney and the deal that brought Miramax Films into Disney.

When Eisner's second in command, Frank Wells, died in a helicopter crash in 1994, Eisner refused to promote Katzenberg to the vacated position of president. This led to a falling out between the two executives, and Katzenberg left the company in September 1994. He launched a lawsuit against Disney to recover money he felt he was owed and settled out of court for an estimated \$250 million.

Later in 1994, Katzenberg co-founded DreamWorks SKG with Steven Spielberg and David Geffen, with Katzenberg taking primary responsibility for animation operations. He was also credited as executive producer on the DreamWorks animated films *The Prince of Egypt* (1998), *The Road to El Dorado* and *Joseph: King of Dreams* (both in 2000) and *Shrek* in 2001.

After DreamWorks Animation suffered a \$125 million loss on the traditionally-animated *Sinbad: Legend of the Seven Seas*, the studio switched to all computer-generated animation. Since then, DreamWorks' animated films have been consistently successful.

In 2004, DreamWorks Animation (DWA) was spun off from DreamWorks as a separate company headed by Katzenberg in an IPO and has recorded mostly profitable quarters since then.

The live-action DreamWorks movie studio was sold to Viacom in December 2005. In 2008, the live-action DreamWorks studio again became an independent production company, releasing its films through Disney.

In 2006, Katzenberg made an appearance on the fifth season of *The Apprentice*. He awarded the task winners

an opportunity to be character voices in *Over the Hedge*.

Katzenberg has been an industry leader in promoting digital 3D production of film, calling it "the greatest advance in the film industry since the arrival of color in the 1930s." When Katzenberg appeared on *The Colbert Report* on April 20, 2010, he confirmed that from now on "every single movie" that DreamWorks Animation produced would be in 3D and gave Stephen Colbert a pair of new 3D glasses.

Katzenberg married Marilyn Siegel, a kindergarten teacher, in 1975, and they have two children.

Together, Marilyn and Jeffrey have been highly active in charitable causes. They donated the multi-million-dollar Katzenberg Center to Boston University's College of General Studies, citing that the school gave their two children the "love of education." They also donated the Marilyn and Jeffrey Katzenberg Center for Animation at the University of Southern California.

In addition to serving as Chairman of the Board for the Motion Picture and Television Fund Foundation, Katzenberg sits on the boards or serves as a trustee of AIDS Project Los Angeles, American Museum of the Moving Image, California Institute of the Arts, Cedars-Sinai Medical Center, Geffen Playhouse, Michael J. Fox Foundation for Parkinson's Research, University of Southern California School of Cinematic Arts and The Simon Wiesenthal Center. Together with DreamWorks Animation, Katzenberg founded the DreamWorks Animation Academy of Inner-City Arts in 2008.

Katzenberg has an estimated worth of \$800 million according to Forbes. Katzenberg is reported to have donated over \$3.5 million in political contributions since 1979: 33% (\$1.171+ million) to Democrats, 66% (\$2.33+ million) to special interest groups without party affiliations, and less than 1% (\$7,000) to Republicans.

He was awarded an honorary doctorate from Ringling College of Art and Design on May 2, 2008.

## NORMAN LEAR



Norman Lear has enjoyed a long career in television and film, and as a political and social activist and philanthropist.

Mr. Lear began his television writing career in 1950 when he and his partner, Ed Simmons, were signed to write for the *The Ford Star Revue*, starring Jack Haley. After only four shows, they were hired away by Jerry Lewis to write for the *Martin and Lewis Colgate Comedy Hour*, which they continued to write until 1953. Mr. Lear then began writing on his own for comedy shows including *The Martha Raye Show*, *The George Gobel Show*, and *The Tennessee Ernie Ford Show*.

In 1958, Mr. Lear teamed with director Bud Yorkin to form Tandem Productions. Together they produced several feature films, with Mr. Lear taking on roles as executive producer, writer, and director. He was nominated in 1967 for an Academy Award for his script for *Divorce American Style*. In 1970, CBS signed with Tandem to produce *All in the Family*, which first aired on January 12, 1971 and ran for nine seasons. It earned four Emmy Awards for Best Comedy

series as well as the Peabody Award in 1977. *All in the Family* was followed by a succession of other television hit shows including *Maude*, *Sanford and Son*, *The Jeffersons*, *One Day at a Time*, *Good Times*, and *Mary Hartman, Mary Hartman*.

Concerned about the growing influence of radical religious evangelists, Mr. Lear decided to leave television in 1980 and formed People For the American Way, a non-profit organization designed to speak out for Bill of Rights guarantees and to monitor violations of constitutional freedoms. People For remains an influential and effective voice for freedom. In 1982, he produced a two-hour television special *I Love Liberty*, with a cast of stars and an audience filling the Los Angeles Sports Arena.

Mr. Lear's business career continued in 1984 when he and his business partners created T.A.T. Communications, later known as Embassy Communications, which was sold in 1985. Mr. Lear then created and is currently chairman of Act III Communications, a multimedia holding company with interests in the recording, motion picture, broadcasting, publishing, and licensing industries, including Concord Music Group and Village Roadshow Pictures Group.

In addition to People for the American Way, Mr. Lear has founded other nonprofit organizations, including the Norman Lear Center at the USC Annenberg School for Communication (2000–present), a multidisciplinary research and public policy center dedicated to exploring the convergence of entertainment, commerce and society; the Business Enterprise Trust (1989–2000) to spotlight exemplary social innovations in American business; and with his wife, Lyn, co-founded the Environmental Media Association (1989–present), to mobilize the entertainment industry to become more environmentally responsible.

In 1999, President Clinton bestowed the National Medal of Arts on Mr. Lear, noting that "Norman Lear has held up a mirror to American society and changed the way we look at it." He has the distinction of being among the first seven television pioneers inducted into the Television Academy Hall of Fame (1984). In addition to his awards for *All in the Family*, he has been honored by the International Platform Association (1977), the Writers Guild of America (1977) and many other professional and civic organizations.

In 2001, Lyn and Norman Lear created the Declaration of Independence Road Trip, a four-year educational initiative and national multimedia tour of one of the surviving original copies of the Declaration, which they purchased to share with the American people. As part of the project, Mr. Lear launched Declare Yourself, a nonpartisan youth voter initiative that registered well over four million new young voters in the 2004, 2006, and 2008 elections.

At the Presidential Inauguration in 2009, *Declare Yourself* premiered BornAgainAmerican.org, featuring an inspiring music video that has been viewed by millions across the country. It is part of an on-going drive to promote active and thoughtful citizenship, as embodied in the Declaration of Independence, which continues to tour.

Mr. Lear is married to Lyn Davis Lear and resides in Los Angeles, California. He has six children: Ellen, Kate, Maggie, Benjamin, Brianna, Madeline and four grandchildren: Daniel, Noah, Griffin, Zoe.

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## YO-YO MA



Yo-Yo Ma's multi-faceted career is testament to his continual search for new ways to communicate with audiences, and to his personal desire for artistic growth and renewal. Whether performing new or familiar works from the cello repertoire, coming together with colleagues for chamber music or exploring cultures and musical forms outside the Western classical tradition, Mr. Ma strives to find connections that stimulate the imagination.

One of Mr. Ma's goals is the exploration of music as a means of communication and as a vehicle for the migrations of ideas across a range of cultures throughout the world. Expanding upon this interest, in 1998, Mr. Ma established the Silk Road Project, a nonprofit arts and educational organization. Under his artistic direction, the Silk Road Project presents performances by the acclaimed Silk Road Ensemble, engages in cross-cultural exchanges and residencies, leads workshops for students, and partners with leading cultural institutions to create educational materials and programs.

The Project's ongoing affiliation with Harvard University has made it possible to broaden and enhance educational programming. In the 2011–2012 school year, with ongoing partnerships with arts and educational organizations in New York City, it continues to expand Silk Road Connect, a multidisciplinary educational initiative for middle-school students in the city's public schools. Developing new music is also a central undertaking of the Silk Road Project, which has been involved in commissioning and performing more than 60 new musical and multimedia works from composers and arrangers around the world.

As the Chicago Symphony Orchestra's Judson and Joyce Green Creative Consultant, Mr. Ma is partnering with Maestro Riccardo Muti to provide collaborative musical leadership and guidance on innovative program development for The Institute for Learning, Access and Training at the Chicago Symphony Orchestra, and for Chicago Symphony artistic initiatives. Mr. Ma's work focuses on the transformative power music can have in individuals' lives, and on increasing the number and variety of opportunities audiences have to experience music in their communities.

Mr. Ma and the Institute have created the Citizen Musician Initiative, a movement that calls on all musicians, music lovers, music teachers and institutions to use the art form to bridge gulfs between people and to create and inspire a sense of community. [www.citizenmusician.org](http://www.citizenmusician.org) features stories of Citizen Musician activity across the globe.

Mr. Ma is also widely recognized for his strong commitment to educational programs that bring the world into the classroom and the classroom into the world. While touring, he takes time whenever possible to conduct master classes as well as more informal programs for students—musicians and non-musicians alike. He has also reached young audiences through appearances on "Arthur," "Mister Rogers' Neighborhood" and "Sesame Street."

Mr. Ma's discography of over 75 albums (including more than 15 Grammy Award winners) reflects his wide-ranging interests. He has made several successful recordings that defy categorization, among them "Hush" with Bobby McFerrin, "Appalachia Waltz" and "Appalachian Journey" with Mark O'Connor and Edgar Meyer and two Grammy-winning tributes to the music of Brazil, "Obrigado Brazil" and "Obrigado Brazil—Live in Concert." Mr. Ma's recent recordings include Mendelssohn Trios with Emanuel Ax and Itzhak Perlman. His new album, "The Goat Rodeo Sessions," with Edgar Meyer, Chris Thile and Stuart Duncan was released in October 2011. Across this full range of releases, Mr. Ma remains one of the best-selling recording artists in the classical field. All of his recent albums have quickly entered the Billboard chart of classical best sellers, remaining in the Top 15 for extended periods, often with as many as four titles simultaneously on the list. In fall 2009, Sony Classical released a box set of over 90 albums to commemorate Mr. Ma's 30 years as a Sony recording artist.

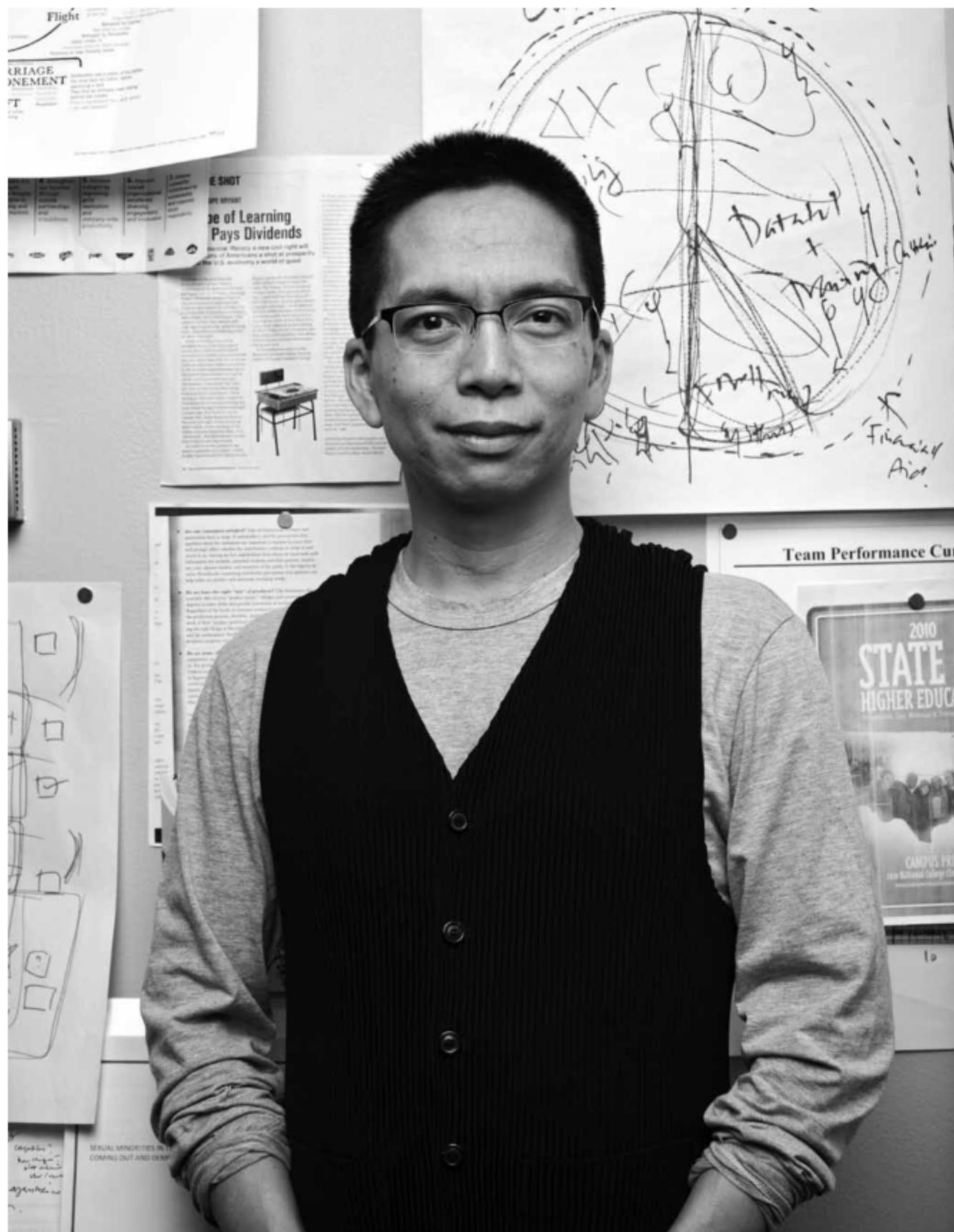
Yo-Yo Ma was born in 1955 to Chinese parents living in Paris. He began to study the cello with his father at age four and soon came with his family to New York, where he spent most of his formative years. Later, his principal teacher was Leonard Rose at The Juilliard School. He has received numerous awards, including the Avery Fisher Prize (1978),

the Glenn Gould Prize (1999), the National Medal of the Arts (2001), the Dan David Prize (2006), the Sonning Prize (2006), the World Economic Forum's Crystal Award (2008) and the Presidential Medal of Freedom (2010). In 2011 Mr. Ma was recognized as a Kennedy Center Honoree. He was the recipient of the 2012 Polar Music Prize. Appointed a CultureConnect Ambassador by the United States Department of State in 2002, Mr. Ma has met with, trained and mentored thousands of students worldwide in countries including Lithuania, Korea, Lebanon, Azerbaijan and China. Mr. Ma serves as a UN Messenger of Peace and as a member of the President's Committee on the Arts & the Humanities. He has performed for eight American presidents, most recently at the invitation of President Obama on the occasion of the 56th Inaugural Ceremony. Mr. Ma and his wife have two children. He plays two instruments, a 1733 Montagnana cello from Venice and the 1712 Davidoff Stradivarius.

For additional information, see: [www.yo-yoma.com](http://www.yo-yoma.com), [www.silkroadproject.org](http://www.silkroadproject.org), and [www.opus3artists.com](http://www.opus3artists.com).



## JOHN MAEDA



John Maeda (born 1966 in Seattle, Washington) is a Japanese-American graphic designer, computer scientist, academic, and author. His work in design, technology and leadership explores the area where the fields merge. He is the current President of the Rhode Island School of Design.

Maeda was originally a software engineering student at the Massachusetts Institute of Technology, when he became fascinated with the work of Paul Rand and Muriel Cooper. Cooper was a director of MIT's Visual Language Workshop. After completing his bachelors and masters degrees at MIT, Maeda studied in Japan at Tsukuba University's Institute of Art and Design to complete his Ph.D. in design.

As an artist, Maeda's early work redefined the use of electronic media as a tool for expression by combining computer programming with traditional artistic technique, laying the groundwork for the interactive motion graphics that are taken for granted on the web today. He has exhibited in one-man shows in London, New York and Paris. His work is in the permanent collections of

the Museum of Modern Art, the San Francisco Museum of Modern Art and the Cartier Foundation in Paris.

At RISD, Maeda is leading the movement to transform STEM (Science, Technology, Engineering, and Math) to STEAM by adding Art. He believes art and design are poised to transform our economy in the 21st century like science and technology did in the last century.

In 1999, he was named one of the 21 most important people in the 21st century by *Esquire*. In 2001, he received the National Design Award for Communication Design in the United States and Japan's Mainichi Design Prize.

In 2006, Maeda published *Laws of Simplicity*, his best-selling book to date, based on a research project to find ways for people to simplify their life in the face of growing complexity.

In 2009 he was inducted into the New York Art Director's Club Hall of Fame, and he received the AIGA Medal in 2011. He is a trustee of the Cooper-Hewitt National Design Museum.

## JOHN MAZZIOTTA



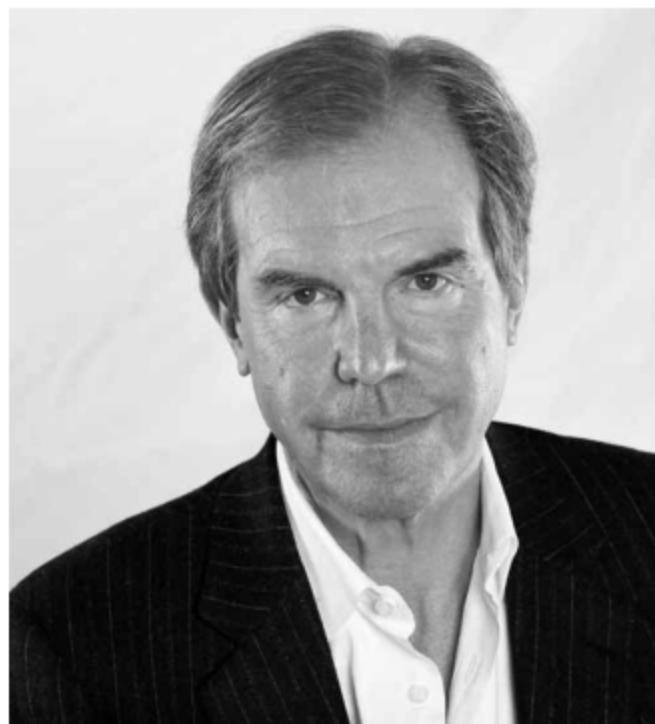
Dr. John Mazziotta is Chair of the Department of Neurology, David Geffen School of Medicine at UCLA, and Director of the UCLA Ahmanson-Lovelace Brain Mapping Center. After receiving his B.A. and M.A. degrees from Columbia University in 1972, he obtained an M.D. and Ph.D. in Neuroanatomy and Computer Science from Georgetown University in 1977. Following an internship at Georgetown, he completed Neurology and Nuclear Medicine training at UCLA and joined the faculty here in 1983.

Dr. Mazziotta chairs one of the nation's largest Neurology departments, which for nine of the last ten years achieved the distinguished position of being first in National Institutes of Health (NIH) research funding. An expert in brain imaging, he established the Brain Mapping Center at UCLA that includes all of the methods available to study human brain structure and function. He was the principal investigator of the International Consortium for Brain Mapping, whose goal is to develop the first atlas of the human brain that will include behavioral, demographic, imaging, and genetic data from 7,000 subjects.

Since beginning this work, Dr. Mazziotta has published more than 255 research papers and eight texts. He has received numerous awards and honors, including the Oldendorf Award from the American Society of Neuroimaging, the S. Weir Mitchell Award and the Wartenberg Prize of the American Academy of Neurology, the Von Hevesy Prize from the International Society of Nuclear Medicine, the 1996 Medical Science Award from the UCLA Medical Alumni Association, election to the Institute of Medicine of the National Academy of Sciences, Honorary Doctorate from l'Université de Caen and membership in the Royal College of Physicians.

In January 2012, Dr. Mazziotta was appointed Associate Vice Chancellor for Medical Sciences and Executive Vice Dean of the David Geffen School of Medicine at UCLA.

## NICHOLAS NEGROPONTE



Nicholas Negroponte (born December 1, 1943) is an American architect best known as the founder and Chairman Emeritus of Massachusetts Institute of Technology's Media Lab, and also known as the founder of the One Laptop per Child Association (OLPC).

Negroponte was born to Dimitri John Negroponte, a Greek shipping magnate, and grew up in New York City's Upper East Side. He is the younger brother of John Negroponte, former United States Deputy Secretary of State.

He attended Buckley School in New York City, Le Rosey in Switzerland, and The Choate School (now Choate Rosemary Hall) in Wallingford, Connecticut, from which he graduated in 1961. Subsequently, he studied at MIT as both an undergraduate and graduate student in Architecture where his research focused on issues of computer-aided design. He earned a Master's degree in architecture from MIT in 1966.

Negroponte joined the faculty of MIT in 1966. For several years thereafter he divided his teaching time between MIT and several visiting professorships at Yale, Michigan and the University of California, Berkeley.

In 1967, Negroponte founded MIT's Architecture Machine Group, a combination lab and think tank which studied new approaches to human-computer interaction. In 1985, Negroponte created the MIT Media Lab with Jerome B. Wiesner. As director, he developed the lab into the pre-eminent computer science laboratory for new media and a high-tech playground for investigating the human-computer interface. Negroponte also became a proponent of intelligent agents and personalized electronic newspapers, for which he popularized the term the Daily Me.

In 1992, Negroponte became involved in the creation of *Wired Magazine* as the first investor. From 1993 to 1998, he contributed a monthly column to the magazine in which he reiterated a basic theme: "Move bits, not atoms."

Negroponte expanded many of the ideas from his *Wired* columns into a bestselling book *Being Digital* (1995), which made famous his forecasts on how the interactive world, the entertainment world and the information world would eventually merge. *Being Digital* was a bestseller and was translated into some twenty languages. Negroponte is a digital optimist who believed that computers would make life better for everyone. However, critics such as Cass Sunstein have faulted his techno-utopian ideas for failing to consider the historical, political and cultural realities with which new technologies should be viewed.

Negroponte's belief that wired technologies such as telephones will ultimately become unwired by using airwaves instead of wires or fiber optics, and that unwired technologies such as televisions will become wired, is commonly referred to as the Negroponte switch.

In 2000, Negroponte stepped down as director of the Media Lab as Walter Bender took over as Executive Director. However, Negroponte retained the role of laboratory Chairman. When Frank Moss was appointed director of the lab in 2006, Negroponte stepped down as lab chairman to focus more fully on his work with One Laptop Per Child (OLPC) although he retains his appointment as professor at MIT.

In November 2005, at the World Summit on the Information Society held in Tunis, Negroponte unveiled the concept of a \$100 laptop computer, The Children's Machine, designed for students in the developing world. The price has increased to US\$180, however. The project is part of a broader program by One Laptop Per Child, a non-profit organisation started by Negroponte and other Media Lab faculty, to extend Internet access in developing countries.

Negroponte is an active angel investor and has invested in over 30 startup companies over the last 30 years, including Zagats, *Wired*, Ambient Devices, Skype and Velti. He sits on several boards, including Motorola (listed on the New York Stock Exchange) and Velti (listed on the London Stock Exchange and the NASDAQ). He is also on the advisory board of TTI/Vanguard. In August 2007, he was appointed to a five-member special committee with the objective of assuring the continued journalistic and editorial integrity and independence of the *Wall Street Journal* and other Dow Jones & Company publications and services. The committee was formed as part of the merger of Dow Jones with News Corporation. Negroponte's fellow founding committee members are Louis Boccardi, Thomas Bray, Jack Fuller, and the late former Congresswoman Jennifer Dunn.

Negroponte has influenced modern day futurists, such as David Houle.



## TODD OLDHAM



Todd is a well-known designer whose career spans more than 20 years. Distinguished as an innovator of accessible design, Todd Oldham is the founder of Todd Oldham Studio, a multifaceted, full-service design studio based in NYC.

Originally a New York fashion designer, the host of "Todd Time" on MTV's House of Style, Todd's career has evolved to include all areas of design, from interior design, film and photography, to furniture and graphic design.

Todd is currently working on his 19th book *Charley Harper's Animal Kingdom*. His previous books include a 672-page monograph on the life's work of artist Alexander Girard; a unique ongoing series called *Place Space* that explores singular places and the uncommonly devoted people that create them; an artist's monograph on the brilliant, warped work of Wayne White (all published by AMMO BOOKS). Most recently, Kid Made Modern, a collection of art supplies and kits, books and events, debuted this summer in all Target locations.

## CRISTINA PATO



Cristina Pato has already opened historical new paths for the Gaita (Galician bagpipe). In 1998 Cristina Pato became the first female Gaita player releasing a solo album and since then she has collaborated with world music, jazz, classical and experimental artists (including Chicago Symphony, Yo-Yo Ma, The Chieftains, Arturo O'Farril, World Symphony Orchestra, Paquito D'Rivera). Her unique and powerful style full of passion and energy has been acclaimed by *The New York Times* as "a virtuosic burst of energy" or the BBC as "the Galician bagpipe diva". Cristina Pato fuses the influences of Latin music, jazz, pop and contemporary music, and uses her artistry and unprecedented virtuosic skill to bring her musical vision to life. Pato is a member of Yo-Yo Ma's Silk Road Ensemble.

Internationally acclaimed as a Gaita master and classical pianist, Cristina Pato enjoys an active professional career devoted to both Galician popular and classical music. Her dual careers have led to performances throughout major stages throughout the world, including USA (Carnegie Hall, Lincoln Center), India (Kamani Auditorium), Jerusalem (Jerusalem Festival), Angola, China, Corea, Portugal (Festa do Avante), Brazil (Liszt Festival), UK (Celtic Connections), France, Italy (Etnofestival), Germany, Mexico (Palacio de Bellas Artes) and her native Spain.

An active recording artist and performer since age 12, Ms. Pato has released four solo Gaita recordings, two as a pianist and has collaborated in more than thirty recordings

as a guest artist, including the Grammy award winner "Yo-Yo Ma and Friends; Songs of Joy and Peace" (SONY BMG 2008), the "Miles Español: New Sketches of Spain" album and the Grammy nominated Silk Road Ensemble album "Off the Map" (World Village 2010). Ms. Pato has given more than 500 concerts with her own band many of them recorded and broadcasted by television stations such as BBC, TVG, CNN and RTVE, and she has been praised by newspapers as *The New York Times*, *El País*, *La Voz de Galicia* or *The Scotsman*.

Ms. Pato is Doctor of Musical Arts in Collaborative Piano from the Mason Gross School of the Arts, Rutgers University (NJ, USA), where she studied with a fellowship from Fundacion Barrie de la Maza. She was awarded with the Edna Mason Scholarship and the Irene Alm Memorial Prize for excellence in scholarly research and performance (Rutgers University, May 2008). Cristina Pato holds both a Master of Music Degree in Piano Performance and a Master of Music Degree in Music Theory and Chamber Music (with honors) from the Conservatorio de Música del Liceu (Barcelona). She also holds also a Master of Fine Arts Degree in Digital Arts (Computer Music) from the Universitat Pompeu Fabra (Barcelona).

Cristina Pato is part of the Leadership Council of The Silk Road Ensemble collaborating closely with Harvard University, the ensemble's residency. Cristina is also a faculty member (adjunct) at the

vocal department of New Jersey City University.

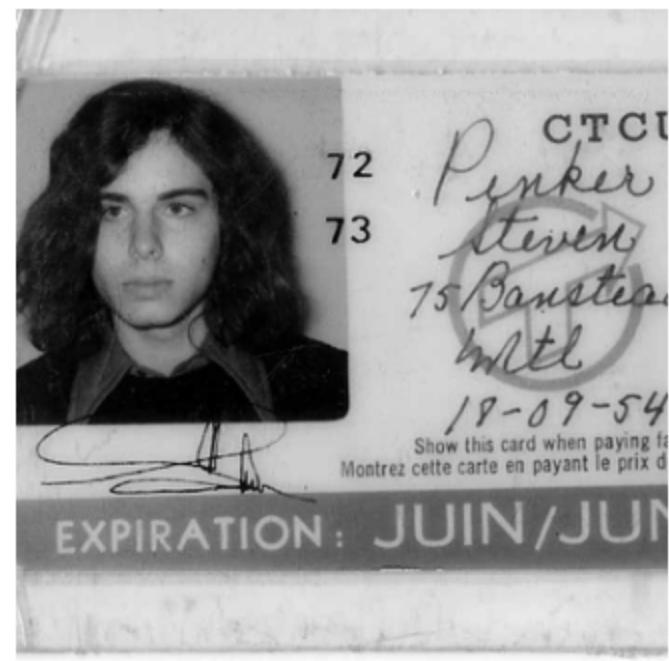
During the 2011-2012 season Cristina Pato has toured Africa and Spain with her own band; USA, China, and Korea with Yo Yo Ma and The Silk Road Ensemble and India with HUM Ensemble. She collaborated in the album Miles Español along with Chick Corea and Jack DeJonette and participated at the Kennedy Center Honors Awards honoring Yo Yo Ma with The Silk Road Ensemble, Johns Williams and James Taylor.

She is the founder and artistic director of Galician Connection, a forum in world music celebrated annually at Cidade da Cultura de Galicia.

Ms. Pato resides in New York City since 2004. More info: [www.cristinapato.com](http://www.cristinapato.com)



## STEVEN PINKER



Steven Pinker was born in 1954 in the English-speaking Jewish community of Montreal, Canada. He earned a bachelor's degree in experimental psychology at McGill University and then moved to Cambridge, Massachusetts in 1976, where he has spent most of his career bouncing back and forth between Harvard and MIT. He earned his doctorate at Harvard in 1979, followed by a postdoctoral fellowship at MIT, a one-year stint as an assistant professor at Harvard, and in 1982, a move back to MIT that lasted until 2003, when he returned to Harvard. Currently he is Harvard College Professor and the Johnstone Family Professor in the Department of Psychology. He also has spent two years in California: in 1981-82, when he was an assistant professor at Stanford, and in 1995-96, when he spent a sabbatical year at the University of California, Santa Barbara.

Pinker is an experimental psychologist who is interested in all aspects of language and mind. Much of his initial research was in visual cognition, the ability to imagine shapes, recognize faces and objects, and direct attention within the visual field. But beginning in graduate school he cultivated an interest in language, particularly language development in children, and this topic eventually took over his research activities. Aside from his experimental papers in language and visual cognition, he wrote two fairly technical books early in his career. One outlined a theory of how children acquire the words and grammatical structures of their mother tongue. The second focused on one aspect of this process, the ability to use different kinds of verbs in appropriate sentences, such as intransitive verbs, transitive verbs, and verbs taking different

combinations of complements and indirect objects. For the next two decades his research focused on the distinction between irregular verbs like bring-brought and regular verbs like walk-walked. The reason is that the two kinds of verbs neatly embody the two processes that make language possible: looking up words in memory, and combining words (or parts of words) according to rules. He has also studied language development in twins and the neuroimaging of language processes in the brain, and has recently begun lines of research on the nature of reminding and on the function of innuendo and other forms of indirect speech.

In 1994 he published the first of five books written for a general audience. *The Language Instinct* was an introduction to all aspects of language, held together by the idea that language is a biological adaptation. This was followed in 1997 by *How the Mind Works*, which offered a similar synthesis of the rest of the mind, from vision and reasoning to the emotions, humor, and art. In 1999 he published *Words and Rules: The Ingredients of Language* which presented his research on regular and irregular verbs as a way of explaining how language works in general. In 2002 he published *The Blank Slate: The Modern Denial of Human Nature*, which explored the political, moral, and emotional colorings of the concept of human nature. *The Stuff of Thought: Language as a Window into Human Nature*, published in 2007, discussed the ways in which language reveals our thoughts, emotions, and social relationships. His most recent book is *The Better Angels of Our Nature: Why Violence Has Declined*,

published in 2011. Pinker frequently writes for *The New York Times*, *Time*, *The New Republic*, and other magazines on subjects such as language and politics, the neural basis of consciousness, and the genetic enhancement of human beings.

Pinker is the Chair of the Usage Panel of *The American Heritage Dictionary* and has served as editor or advisor for numerous scientific, scholarly, media, and humanist organizations, including the American Association the Advancement of Science, the National Science Foundation, the American Academy of Arts and Sciences, the American Psychological Association, and the Linguistics Society of America. He has won many prizes for his books (including the William James Book Prize three times, the *Los Angeles Times* Science Book Prize, and the Eleanor Maccoby Book Prize), his research (including the Troland Research Prize from the National Academy of Sciences, the Early Career Award from the American Psychological Association, and the Henry Dale Prize from the Royal Institution of Great Britain), and his graduate and undergraduate teaching. He is also a Humanist Laureate, the 2006 Humanist of the Year, recipient of the 2008 Innovations for Humanity Award from La Ciudad de las Ideas in Mexico, the 2008 Honorary President of the Canadian Psychological Association, and the recipient of six honorary doctorates.

Pinker lives in Boston and in Truro with Rebecca Newberger Goldstein. The other authors in the family are his sister Susan Pinker and Rebecca's daughter Yael Goldstein Love.

## LISA RANDALL



## PETER RAVEN

Peter H. Raven, a leading botanist and advocate of conservation and biodiversity with a notably international outlook, is president emeritus of the Missouri Botanical Garden and George Engelmann Professor of Botany Emeritus at Washington University in St. Louis. In addition, Dr. Raven is a Trustee of the National Geographic Society and Chairman of the Society's Committee for Research and Exploration. For more than 39 years, Dr. Raven headed the Missouri Botanical Garden, an institution he nurtured to become a world-class center for botanical research, education, and horticulture display. During this period, the Garden became a leader in botanical research and conservation in Latin America, Africa, Asia, and North America.

Dr. Raven first realized in the mid 1960s that the rapid growth of the human population, consumption, and the spread of polluting technologies were threatening biological diversity to a degree that had not been realized earlier. He soon became an outspoken advocate of the need for conservation throughout the world based on efforts to attain sustainability and social justice everywhere. He was described by *Time* magazine as a "Hero for the Planet," and has received numerous prizes and awards, including the International Prize for Biology from the government of Japan; Volvo Environment Prize; the Tyler Prize for Environmental Achievement; the Sasakawa Environment Prize; and the BBVA Prize for Ecology and Conservation, Madrid. In October 2009 he was awarded the first RBG Kew International Medal, given on the occasion of the 250th anniversary of the Gardens; in January 2010, the Award for International Scientific Cooperation of the Chinese Academy of Science and the Friendship Award (for promoting international cooperation) from the government of China. Earlier in 2012, he received an award from the President of Mexico for his work with Mexican scientists and institutions over the years. Earlier in his career, Dr. Raven held Guggenheim and John D. and Catherine T. MacArthur Foundation Fellowships.

In 2001, Dr. Raven received the National Medal of Science, the highest award for scientific accomplishment in the United States. He has been president of the American Association for the Advancement of Science, Sigma Xi, the American Institute of Biological Sciences, and a number of other organizations. He served for 12 years as Home Secretary of the National Academy of Sciences, to which he was elected in 1977. He is also a member of the American Academy of Arts and Sciences and of the American Philosophical Society, of the academies of science in Argentina, Australia, Austria, Brazil, Chile, China, Denmark, Georgia, Hungary, India, Italy, Mexico, New Zealand, Russia, Sweden, Ukraine, the U.K. (the Royal Society), and of the Pontifical Academy of Sciences and the Academy of Sciences for the Developing World (TWAS).

Dr. Raven is Co-editor of the *Flora of China*, a joint Chinese-American international project that is leading to a contemporary, 50-volume account on all the plants of China scheduled for completion at the end of 2012. He was the first chair of the U.S. Civilian Research and Development Foundation, a private, congressionally-chartered organization that funds joint research with the independent countries of the former Soviet Union.

Dr. Raven has written numerous books and publications, both popular and scientific, including *Biology of Plants* (co-authored with Ray Evert and Susan Eichhorn, W. H. Freeman and Company/Worth Publishers, New York), the internationally best-selling textbook in botany, of which the eighth edition appeared in 2011; and *Environment* (co-authored with Linda Berg, Wiley & Sons, New York), a leading textbook on the environment, now in its eighth edition (2011).

Dr. Raven received his Ph.D. from the University of California, Los Angeles, in 1960 after completing his undergraduate studies at the University of California, Berkeley. He has been awarded honorary degrees by a number of universities in the United States and around the world.



Professor Lisa Randall studies theoretical particle physics and cosmology at Harvard University. Her research connects theoretical insights to puzzles in our current understanding of the properties and interactions of matter. She has developed and studied a wide variety of models to address these questions, the most prominent involving extra dimensions of space. Her work has involved improving our understanding of the Standard Model of particle physics, supersymmetry, baryogenesis, cosmological inflation, and dark matter. Randall's research also explores ways to experimentally test and verify ideas and her current research focuses in large part on the Large Hadron Collider and dark matter searches and models.

Randall has also had a public presence through her writing, lectures, and radio and TV appearances. Randall's books, *Warped Passages: Unraveling the Mysteries of the Universe's Hidden Dimensions* and *Knocking on Heaven's Door: How Physics and Scientific Thinking Illuminate the Universe and the Modern World* were both on The New York Times' list of 100 Notable Books of the Year. *Higgs Discovery: The Power of Empty Space* was released as a Kindle Single in the summer of 2012 as an update with recent particle physics developments.

Randall's studies have made her among the most cited and influential theoretical physicists and she has received numerous awards and honors for her scientific endeavors. She is a member of the National Academy of Sciences, the American Philosophical Society, the American Academy of Arts and Sciences, was a fellow of the American Physical Society, and is a past winner of an Alfred P. Sloan Foundation Research Fellowship, a National Science Foundation Young Investigator Award, a DOE Outstanding Junior Investigator Award, and the Westinghouse Science Talent Search. Randall is an Honorary Member of the Royal Irish Academy and an Honorary Fellow of the British Institute of Physics. In 2003,

she received the Premio Caterina Tomassoni e Felice Pietro Chisesi Award, from the University of Rome, La Sapienza. In 2006, she received the Klopsteg Award from the American Society of Physics Teachers (AAPT) for her lectures and in 2007 she received the Julius Lilienfeld Prize from the American Physical Society for her work on elementary particle physics and cosmology and for communicating this work to the public.

Randall has also pursued art-science connections, writing a libretto for *Hypermusic: A Projective Opera in Seven Planes* that premiered in the Pompidou Center in Paris and co-curating an art exhibit for the Los Angeles Arts Association, Measure for Measure, which was presented in Gallery 825 in Los Angeles, at the Guggenheim Gallery at Chapman University, and at Harvard's Carpenter Center. In 2012, she was the recipient of the Andrew Gemant Award from the American Institute of Physics, which is given annually for significant contributions to the cultural, artistic, or humanistic dimension of physics.

Professor Randall was on the list of *Time Magazine's "100 Most Influential People"* of 2007 and was one of 40 people featured in The *Rolling Stone* 40th Anniversary issue that year. Prof. Randall was featured in *Newsweek's "Who's Next in 2006"* as "one of the most promising theoretical physicists of her generation" and in *Seed Magazine's "2005 Year in Science Icons"*. In 2008, Prof. Randall was among *Esquire Magazine's "75 Most Influential People."*

Professor Randall earned her Ph.D. from Harvard University and held professorships at MIT and Princeton University before returning to Harvard in 2001. She is also the recipient of honorary degrees from Brown University, Duke University, Bard College, and the University of Antwerp.

## MOSHE SAFDIE

Moshe Safdie is an architect, urban planner, educator, theorist, and author. Embracing a comprehensive and humane design philosophy, Safdie is committed to architecture that supports and enhances a project's program; that is informed by the geographic, social, and cultural elements that define a place; and that responds to human needs and aspirations. Safdie has completed a wide range of projects, such as cultural, educational, and civic institutions; neighborhoods and public parks; mixed-use urban centers and airports; and master plans for existing communities and entirely new cities around the world.

Major projects by Safdie Architects currently under construction or recently completed include Mamilla Alrov Center, a dynamic urban center near the Old City in Jerusalem; Marina Bay Sands, a mixed-use integrated resort in Singapore; Khalsa Heritage Memorial Complex, the national museum of the Sikh people in the Punjab, India; the United States Institute of Peace Headquarters on the Mall in Washington, D.C.; the National Campus for the Archeology of Israel in



Jerusalem; Golden Dream Bay, a high-density residential project in Qinhuangdao, China; the Kauffman Center for the Performing Arts in Kansas City, Missouri; and the Crystal Bridges Museum of American Art in Bentonville, Arkansas.

Born in Haifa, Israel, in 1938, Safdie moved to Canada with his family at a young age. He graduated from McGill University in 1961 with a degree in architecture. After apprenticing with Louis I. Kahn in Philadelphia, Safdie returned to Montreal to oversee the master plan for the 1967 World Exhibition. In 1964 he established his own firm to realize Habitat '67, an adaptation of his thesis at McGill, which was the central feature of the World's Fair and a groundbreaking design in the history of architecture.

In 1970, Safdie established a Jerusalem branch office, commencing an intense involvement with the rebuilding of Jerusalem. He was responsible for major segments of the restoration of the Old City and the reconstruction of the new center, linking the Old and New Cities. Over the years, his involvement expanded and included the new city of Modi'in,

the new Yad Vashem Holocaust Museum, and the Rabin Memorial Center. During this period, Safdie also became involved in the developing world, working in Senegal, Iran, Singapore, and in the northern Canadian arctic. In 1978, after teaching at Yale, McGill, and Ben Gurion Universities, Safdie relocated his residence and principal office to Boston. He served as Director of the Urban Design Program at Harvard University Graduate School of Design from 1978 to 1984, and Ian Woodner Professor of Architecture and Urban Design from 1984 to 1989. In the following decade, he was responsible for the design of six of Canada's principal public institutions, including the Quebec Museum of Civilization, the National Gallery of Canada, and Vancouver Library Square.

Safdie has worked with a wide range of clients, including municipal entities and government agencies, colleges and universities, private developers, and non-profit organizations and civic institutions. Many of his firm's buildings have become beloved regional and national landmarks, including Exploration Place Science Center, Wichita, Kansas; Salt Lake City Public Library, Salt Lake City, Utah; Peabody Essex Museum, Salem, Massachusetts; Springfield Federal Courthouse, Springfield, Massachusetts; Skirball Cultural Center, Los Angeles, California; Lester B. Pearson International Airport, Toronto, Canada; the National Gallery of Canada; and Yad Vashem Holocaust Museum, Jerusalem, Israel.

In addition to numerous articles on the theory and practice of architecture, Safdie has written several books, most notably, *Beyond Habitat* (1970), *For Everyone a Garden* (1974), *Form and Purpose* (1982), and *Jerusalem: The Future of the Past* (1989). *The City After the Automobile* (1997) details Safdie's ideas about urbanism and city planning. A comprehensive monograph of his work, *Moshe Safdie I*, was published in 1996. *Moshe Safdie II*, a second monograph featuring work from 1996–2008, was published in 2009.

Safdie has been featured in several films, including *Moshe Safdie, The Power of Architecture*, which is a portrait film (directed by Donald Winkler, 2004), *My Architect: A Son's Journey* about Nathaniel Kahn and his father Louis I. Kahn (directed by Nathaniel Kahn, 2003), and *The Sound of the Carceri*, about Bach and Piranesi, with Yo-Yo Ma (directed by Francois Girard, 1997). In the fall of 2010, The National Gallery of Canada presented *Global Citizen: The Architecture of Moshe Safdie*, an exhibition that explores the architect's buildings and design philosophy. The exhibition is co-sponsored by Crystal Bridges Museum of American Art and the Skirball Cultural Center.

Past exhibitions of Safdie's designs include *Building a New Museum* (Peabody Essex Museum, 2003–2004); *Moshe Safdie, Museum Architecture 1971–1998* (Tel Aviv University, 1998); *Moshe Safdie, Projects: 1979–1989* (Harvard University Graduate School of Design, 1989); and *For Everyone a Garden* (Baltimore Museum of Art, National Gallery of Canada, and San Francisco Museum of Modern Art, 1973–1974).

Safdie has been the recipient of numerous awards, honorary degrees, and civil honors, including the Companion of the Order of Canada and the Gold Medal of the Royal Architectural Institute of Canada.



## MEGAN SMITH



Megan recently joined Google's advanced products team, Google [x], where she is working on a range of projects including co-creating/hosting SolveForX, a forum to encourage and amplify technology-based moonshot thinking and teamwork (<http://www.wesolveforx.com/>). For nine years before that she oversaw Google's New Business Development team managing early-stage partnerships, pilot explorations, and technology licensing working closely with Google's engineering and product teams globally across all product areas. She led many of the company's early acquisitions, including Keyhole (Google Earth), Where2Tech (Google Maps) and Picasa. Megan also led the Google.org team transition to expand and innovate engineering based projects including Google Crisis Response, Google for Nonprofits, and Earth Outreach/Earth Engine, Googler 1%-time (now called "GoogleServe20") in addition to operationalizing Google's more traditional corporate giving.

Prior to joining Google in 2003, Megan was the CEO and, earlier, COO of PlanetOut, the leading gay, lesbian, bisexual and transgender online community, where the team broke through many barriers and partnered closely with all of the early major web players. She also held roles at General Magic and Apple Japan. Over the years, Megan has contributed to a wide range of engineering projects, including an award-winning bicycle lock, space station construction program, solar cookstoves and was a member of the MIT student team who designed, built and raced a solar car 2000 miles across the Australian outback. She holds a bachelor's degree and a master's degree in mechanical engineering from MIT, where she now serves on the board. She completed her master's thesis work at the MIT Media Lab.

## BENEDIKT TASCHEN

Benedikt Taschen, 1961, Cologne, Germany, is a German publisher. His professional life started at age 18 in a 250-square-foot (23 m<sup>2</sup>) store in Cologne, Germany, named TASCHEN COMICS. In 1984, he bought 40,000 remainder copies of a Magritte monograph published in English with money borrowed from his family. The books sold through at double the price in two months and he was soon publishing his own books. By the end of the 1980s TASCHEN titles were available in over a dozen languages at prices that made art books affordable to students and collectors alike.

By the late 1990s, he had become a household name in publishing. When *Vanity Fair*'s Matt Tyrnauer deemed him, "one of the few people in business who has the courage to do exactly what he wants whenever he wants to", Benedikt Taschen tested the theory with Helmut Newton's *SUMO*, the largest bound book of the 20th century. "I have done a lot of books, and I can tell you—without mentioning names—that publishers are not all like him. There are very few like him. Or there are none like him. He is also, I might add, a madman", says Helmut Newton to *Vanity Fair*.

*SUMO* is also the company's most successful title of the last ten years and the precursor to Benedikt Taschen's most ambitious personal project: *GOAT—Greatest of All Time*, a tribute to Muhammad Ali, shipping in Spring 2004. Four years in the making, *GOAT* weighs 75 lbs and is 20" x 20" in size, with nearly 800 pages of archival and original photographs, graphic artwork and articles and essays—including those of Ali himself.

Another of his books is the *Icons* series of art books, some of the most accessible in the world.

Today, TASCHEN has offices in Cologne, Hong Kong, London, Los Angeles, Madrid, Paris and Tokyo and stores in Amsterdam, Berlin, Beverly Hills, Brussels, Cologne, Copenhagen, Hamburg, Hollywood, London, Miami, New York, and Paris. TASCHEN employs 200 staff members worldwide and many longtime freelance editors. As Billy Wilder put it in *Vanity Fair* 2000: "Benedikt reminds me of an old-time Hollywood figure—a studio head, someone who is in firm command and has his hand in everything".

He is married and lives in the *Chemosphere*, designed by John Lautner in 1960. He bought the home for \$1 million in 1997, restored the building, and published a book on Lautner. He lives and works in Cologne and Los Angeles.



## JULIE TAYMOR

In 1998, Julie Taymor became the first woman to win the Tony® Award for Best Direction of a Musical, and also won a Tony® for Best Costumes, for her landmark production of *The Lion King*. The musical has won three Molière Awards including Best Musical and Best Costumes, garnered Drama Desk, Outer Critics Circle and Drama League awards for Taymor's direction, and myriad awards for her original costume, mask and puppet designs. For her latest Broadway production, *Spider-Man: Turn Off the Dark*, Taymor served as director and co-book writer. Taymor made her Broadway debut in 1996 with *Juan Darién: A Carnival Mass*, nominated for five Tony® Awards.

Other theater work includes *The Green Bird*, *Titus Andronicus*, *The Tempest*, *The Taming of the Shrew*, *The Transposed Heads* and *Liberty's Taken*.

Taymor's feature film directorial debut, *Titus*, starred Anthony Hopkins, Jessica Lange and Alan Cumming. In 2002, her biographical film *Frida*, starring Salma Hayek and Alfred Molina, earned six Academy Award® nominations, winning two. She took on the music of the Beatles, and earned a Golden Globe® nomination for Best Motion Picture—Musical or Comedy, in *Across the Universe*. Julie's most recent film, *The Tempest*, had its North American premiere at the 48th New York Film Festival in October 2010, following a world premiere at the 67th Venice International Film Festival. Taymor's adaptation of the William Shakespeare play features an all-star cast including Helen Mirren, Russell Brand, Djimon Hounsou and Alfred Molina.

Beyond the theatre and screen, Taymor has directed five operas internationally including *Oedipus Rex* with Jessye Norman, for which she earned the International Classical Music Award for Best Opera Production. A subsequent film version premiered at the Sundance Film Festival and won her an Emmy® award.

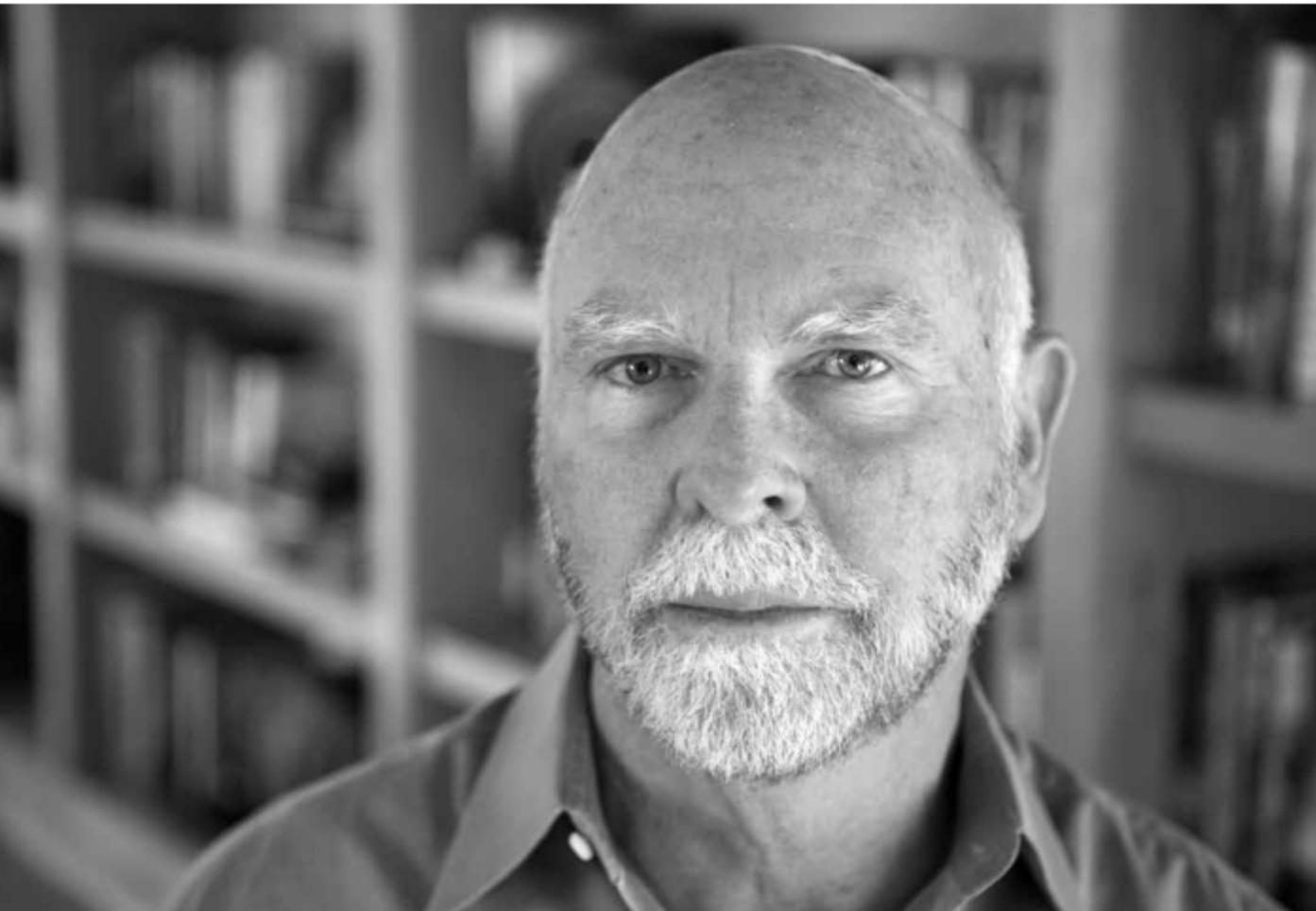
Taymor also directed *Salomé*, *The Flying Dutchman*, *Die Zauberflöte* (which has been in repertory at The Met for six years), *The Magic Flute* (the abridged English version of *Die Zauberflöte*, which inaugurated a new PBS series entitled "Great Performances at The Met") and Elliot Goldenthal's *Grendel*.



An illustrated book on her career, Julie Taymor: *Playing With Fire*, was recently expanded and revised by Harry N. Abrams. Her book, *The Lion King: Pride Rock on Broadway*, is published by Hyperion. Taymor's adapted screenplay for *Titus* is published in an illustrated book by Newmarket Press. An illustrated book, *Frida: Bringing Frida Kahlo's Life and Art to Film*, is available from Newmarket Press. Harry N. Abrams also published an illustrated screenplay of Taymor's film adaptation of *The Tempest* which coincided with its premiere.

Taymor is a 1991 recipient of the MacArthur "genius" Fellowship.

## J. CRAIG VENTER



J. Craig Venter, Ph.D., is regarded as one of the leading scientists of the 21st century for his numerous invaluable contributions to genomic research. He is Founder, Chairman, and President of the J. Craig Venter Institute (JCVI), a not-for-profit, research organization with approximately 300 scientists and staff dedicated to human, microbial, plant, synthetic and environmental genomic research, and the exploration of social and ethical issues in genomics.

Dr. Venter is also Founder and CEO of Synthetic Genomics Inc (SGI), a privately held company dedicated to commercializing genomic-driven solutions to address global needs such as new sources of energy, new food and nutritional products, and next generation vaccines.

Dr. Venter began his formal education after a tour of duty as a Navy Corpsman in Vietnam from 1967 to 1968. After earning both a Bachelor's degree in Biochemistry and a Ph.D. in Physiology and Pharmacology from the University of California at San Diego, he was appointed professor at the State University of New York at Buffalo and the Roswell Park Cancer Institute. In 1984, he moved to the National Institutes of Health campus where he developed Expressed Sequence Tags or ESTs, a revolutionary new strategy for rapid gene discovery. In 1992 Dr. Venter founded The Institute for Genomic Research (TIGR, now part of JCVI), a not-for-profit research institute, where in 1995 he and his team decoded the genome of the first free-living organism, the bacterium *Haemophilus*

*influenzae*, using his new whole genome shotgun technique.

In 1998, Dr. Venter founded Celera Genomics to sequence the human genome using new tools and techniques he and his team developed. This research culminated with the February 2001 publication of the human genome in the journal, *Science*. He and his team at Celera also sequenced the fruit fly, mouse and rat genomes.

Dr. Venter and his team at JCVI continue to blaze new trails in genomics. They have sequenced and analyzed hundreds of genomes, and have published numerous important papers covering such areas as environmental genomics, the first complete diploid human genome, and the groundbreaking advance in creating the first self-replicating bacterial cell constructed entirely with synthetic DNA.

Dr. Venter is one of the most frequently cited scientists, and the author of more than 250 research articles. He is also the recipient of numerous honorary degrees, public honors, and scientific awards, including the 2008 United States National Medal of Science, the 2002 Gairdner Foundation International Award, the 2001 Paul Ehrlich and Ludwig Darmstaedter Prize and the King Faisal International Award for Science. Dr. Venter is a member of numerous prestigious scientific organizations including the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Society for Microbiology.

## CHARITY TILLEMANN DICK



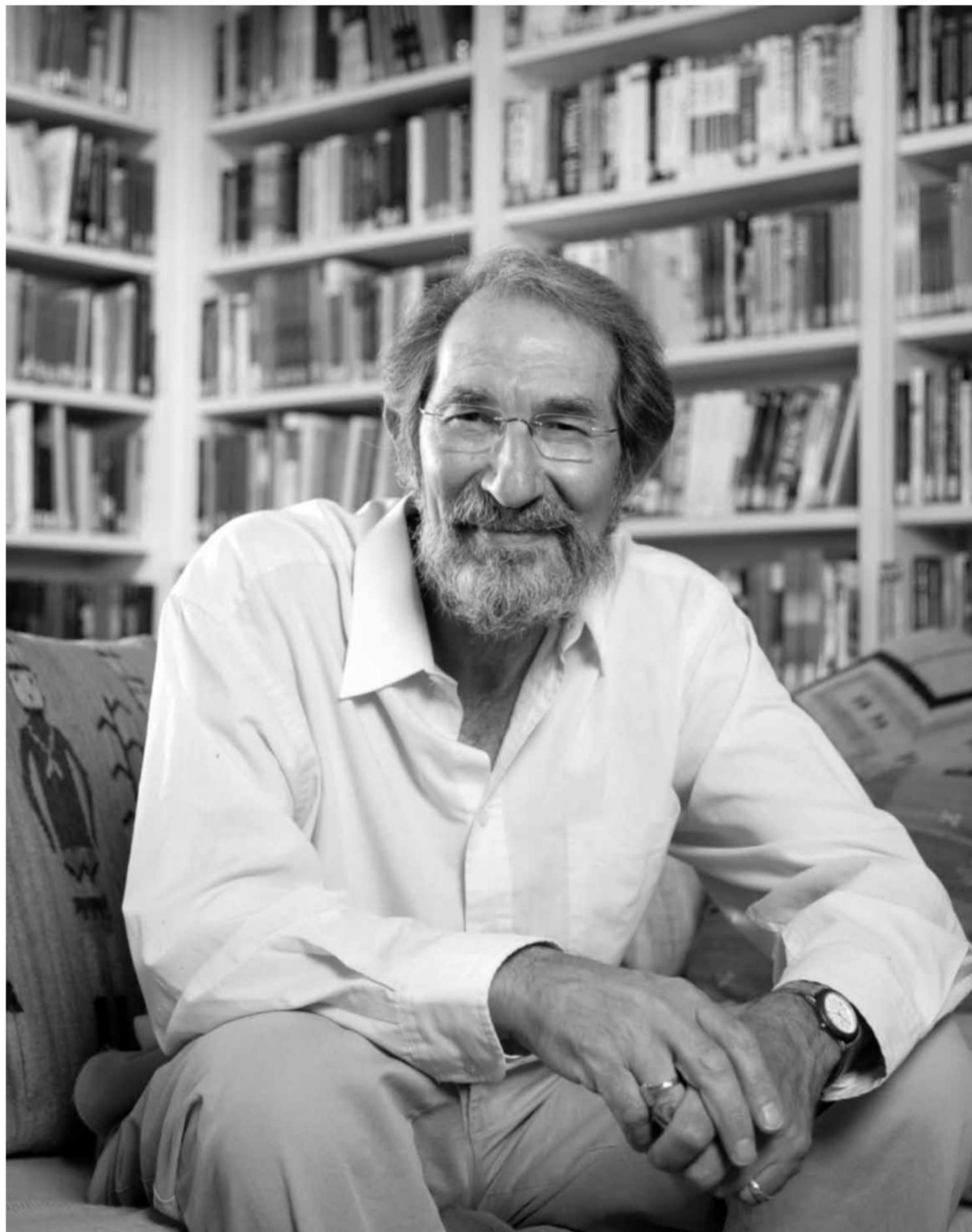
Charity Tillemann Dick is an American-born soprano and a recipient of two double lung transplants. Charity has performed across the United States, Europe, and Asia in venues as diverse as the Rose Theater at Lincoln Center in New York City; The Kennedy Center in Washington, DC; Severance Hall in Cleveland, Ohio; Il Giardino Di Boboli in Florence, Italy; the National Palace of the Arts in Budapest, Hungary; the Tel Aviv Opera House in Israel; the American Embassy in Beijing, China; the United Nations in New York; and National Statuary Hall in the United States Capitol. She has collaborated and performed with noted conductors and musicians including Eva Marton, Bruno Rigacci, Joela Jones, Marvin Hamlisch, Bono, Zoltan Kocis, Joan Dornemann, and former Secretary of State Dr. Condoleezza Rice. Some of her operatic roles have included Titania in *A Mid Summer's Night Dream*, Gilda in *Rigoletto*, Violetta in *La Traviata*, and Ophelia in *Ophelia Forever*. Charity has also performed for numerous presidents, prime ministers, members of Congress, and world dignitaries.

After receiving a diagnosis of Idiopathic Pulmonary Hypertension in 2004, Charity served as the national spokesperson for the Pulmonary Hypertension Association, working to raise awareness, increase federal research funding, expand stem cell research, and promote preventative and alternative medicine. In September of 2009, Charity received a bilateral lung transplant at the Cleveland Clinic in Ohio. After complications from rejection, Charity received a second bilateral lung transplant in January 2012.

Since receiving her first transplant, Charity has shared her amazing story and vocal talents at numerous conferences, musical performance, and events, including: TEDMED 2010 in San Diego, CA; the 6th National Learning Congress on Organ Donation in Dallas, TX; the 2010 Empathy and Innovation Summit in Cleveland, OH; and the EG Conference in Monterey, CA. Charity has been featured on CNN with Dr. Sanjay Gupta, CBS This Morning, Glamour magazine, ABCNews.com, TED.com, The Huffington Post, The Wall Street Journal Health Blog, the *Cleveland Plain Dealer*, the *San Francisco Chronicle*, and The *Sunday Times* (London). Her performances have been broadcast around the world on CNN, CBS, BBC, FOX, MSNBC, PBS, C-SPAN and NPR.

Charity received a Bachelor's degree with high honors from Regis University in Denver, CO, where she was raised with her 10 brothers and sisters. She later studied music at the Peabody Conservatory at Johns Hopkins University and the Liszt Academy of Music in Budapest. She currently resides in Washington, DC and New York City.

## GEOFFREY WEST



Geoffrey West is Distinguished Professor and former President of the Santa Fe Institute (SFI) and an Associate Fellow of the Said Business School, Oxford University. Prior to joining SFI in 2003, he was leader of high energy physics at Los Alamos National Laboratory, where he remains a Senior Fellow. He received his B.A. from Cambridge University in 1961 and his Ph.D. in physics from Stanford University in 1966. After spells at Cornell and Harvard Universities, he returned to Stanford in 1970 to join the faculty. He was President of SFI from 2005-2009.

West is a theoretical physicist whose primary interests have been in fundamental questions in physics and biology, ranging from the elementary particles, their interactions and cosmological implications to the origins of universal scaling laws and a unifying quantitative framework of biology. His research in biology has included metabolic rate, growth, aging and mortality, sleep, cancer, and ecosystem dynamics.

His recent work has focused on developing an underlying quantitative theory for the structure and dynamics of cities, companies and long-term sustainability, including rates of growth and innovation, the accelerating pace of life, and why companies die, yet cities survive.

He has given many colloquia, keynote addresses and public lectures world-wide. Awards include the Mercer Prize from the Ecological Society of America, the Weldon Prize for Mathematical Biology, and the Glenn Award for Aging research. He has been featured in many publications world-wide including *The New York Times*, *Nature*, *Science*, *The Financial Times*, *Time*, *Newsweek* and *Scientific American* and has participated in television productions including *Nova*, *National Geographic* and the *BBC*. His work was selected as a breakthrough idea of 2007 by *Harvard Business Review* and, in 2006, he was named to *Time* magazine's list of "100 Most Influential People in the World".

## will.i.am



will.i.am, a multi-faceted entertainer and creative innovator, is a seven-time Grammy Award winner. Known for his work with The Black Eyed Peas, who have sold 31 million albums and 58 million singles worldwide, he also works with some of the industry's biggest names including Michael Jackson, Rihanna, Usher, Nicki Minaj, Britney Spears, David Guetta, and film composer Hans Zimmer.

Frontman and founder of The Black Eyed Peas will.i.am has released two songs from his upcoming solo cd, #willpower on Interscope Records. The first two singles from the cd released in 2012 are: "T.H.E (The Hardest Ever)," featuring Mick Jagger and Jennifer Lopez, and number one hit song in the UK, "This is Love" featuring Eva Simons.

His songs and imagery have entertained and inspired millions, and the power of his words resonated deeply in his song "Yes We Can" that mobilized an entire generation to action during the 2008 presidential campaign. Demonstrating that music, brands and causes can be intertwined to entertain and inform, "Yes We Can" garnered an Emmy Award for "Best New Approaches in Daytime Entertainment."

In 2011, will.i.am executive produced and starred in his first prime time TV special "i.am FIRST: Science is Rock and Roll" to get young people excited about math and science education, as well as technology and science-related careers. Earlier this year he starred as a Coach on the hit reality TV show, "The Voice" UK edition on BBC One. While in London, will.i.am was a featured performer in "Concert for The Queen" in celebration of Queen Elizabeth II's Diamond Jubilee.

As a musician, producer, director and advocate for education, he is an enthusiastic user of technologies in both his professional and personal lives. In recognition of his ability to harness technology to enhance entertainment, creativity and communication, Intel Corporation appointed will.i.am as Director of Creative Innovation in 2011.

In collaboration with The Coca-Cola Company, will.i.am is on a mission to elevate the importance of recycling and to turn waste into a valued commodity through his EKOCYCLE brand. Launched in July, 2012, EKOCYCLE will give consumers more stylish options when shopping for fashion apparel, accessories and sporting goods that incorporate recycled plastic bottles and aluminum cans.

With a commitment to inspire kids to stay in school and go to college to become the leaders of tomorrow, will.i.am advocates regarding the importance and power of a good education through his i.am angel foundation's i.am scholarship. The i.am scholarship provides future leaders and innovators with comprehensive financial assistance to complete post-secondary education. The i.am angel foundation is also active in the U.K. through a STEM education and computer skills joint initiative with The Prince's Trust.

Recognized and honored by numerous industry organizations, will.i.am is the recipient of multiple Grammy Awards, a Latin Grammy Award, an Emmy Award, two NAACP Image Awards, a VH1 Do Something Award, the BMI President's Award and a 2008 Webby Award.

## C. K. WILLIAMS

C. K. Williams (born Charles Kenneth Williams on November 2, 1936) is an American poet, critic and translator. Williams has won nearly every major poetry award. *Flesh and Blood* won the National Book Critics Circle Award in 1987. *Repair* (1999) won the 2000 Pulitzer Prize for Poetry, was a National Book Award finalist and won the Los Angeles Times Book Prize. *The Singing* won the National Book Award, 2003 and in 2005 Williams received the Ruth Lilly Poetry Prize.

C. K. Williams grew up in Newark, New Jersey and graduated from Columbia High School in Maplewood. He later briefly attended Bucknell University and graduated from the University of Pennsylvania. While at Penn he studied with the romantic scholar, Morse Peckham, and spent a great deal of time in the circle of young architects who studied with and worked for the great architect Louis Kahn. In an essay, "Beginnings," he acknowledges Kahn's dedication and patience as essential to his notion of the life of an artist.

Williams lived for a period in Philadelphia, where he worked for a number of years as a part-time psychotherapist for adolescents and young adults, a ghost-writer and editor, then began teaching, first at the YM-YWHA in Philadelphia, then at several universities in Pennsylvania, Beaver College, Drexel, and Franklin and Marshall. He subsequently taught at many other universities, including Columbia, NYU, Boston University, the University of California, both at Irvine and Berkeley, before finally becoming a professor at George Mason University, then moving in 1995 to Princeton University, where he has taught poetry workshops and translation ever since.

He met his present wife, Catherine Mauger, a French jeweler, in 1973, and they have a son who is now a noted painter, Jed Williams. He has a daughter from an earlier marriage, Jessie Burns, who is a writer. He lives half the year near Princeton, and the rest in Normandy in France.

He is a member of the American Academy of Arts and Letters.

His first book, *Lies*, was published in 1969, and since then he has published many collections of poetry, culminating in his *Collected Poems*, of which Peter Campion wrote in *The Boston Globe*: "Throughout the five decades represented in his new *Collected Poems*, Williams has maintained the most sincere, and largest, ambitions. Like Yeats and Lowell before him, he writes from the borderland between private and public life....[His poems] join skeptical intelligence and emotional sincerity, in a way that dignifies all of our attempts to make sense of the world and of ourselves. C. K. Williams has set a new standard for American poetry."

Another collection, *Wait*, appeared in 2010, and another, *Writers Writing Dying*, will come out in 2012.

He has written a memoir, *Misgivings*, which appeared in 2000, a collection of essays, *Poetry and Consciousness*, 1999, and a critical study of Walt Whitman, *On Whitman*, 2010. A new collection of essays, *In Time: Poets, Poems and the Rest*, will be published in 2012.

Williams is also an acclaimed translator, notably of Sophocles' *Women of Trachis* and Euripides' *The Bacchae*, as well as of the Polish poet Adam Zagajewski and the French poet Francis Ponge.

He has also published several children's books.



### APES

One branch, I read, of a species of chimpanzees has something like territorial wars, and when the...army, I suppose you'd call it, of one tribe prevails and captures an enemy, "Several males hold a hand or foot of the rival so the victim can be damaged at will."

This is so disquieting: if beings with whom we share so many genes can be this cruel, what hope for us? Still, "rival," "victim," "will"—don't such anthropomorphic terms make those simians' social-political conflicts sound more brutal than they are?

The chimps Catherine and I saw on their island sanctuary in Uganda we loathed. Unlike the pacific gorillas in the forest of Bwindi, they fought, dementedly shrieked, the dominant male lorded it over the rest; they were, in all, too much like us.

Another island from my recent reading, where Columbus, on his last voyage, encountering some "Indians" who'd greeted him with curiosity and warmth, wrote, before he chained and enslaved them, "They don't even know how to kill each other."

It's occurred to me I've read enough—at my age all it does is confirm my sadness. Surely the papers: war, terror, torture, corruption—they're like broken glass in the mind. Back when I knew I knew nothing, I read all the time, poems, novels, philosophy, myth, but I hardly glanced at the news, there was a distance between what could happen and the part of myself I felt with: now everything's so tight against me I hardly can move. The *Analects* say people in the golden age weren't aware they were governed; they just lived.

Could I have passed through my own golden age and not even known I was there? Some gold: nuclear rockets aimed at your head, racism, sexism, contempt for the poor. And there I was, reading. What did I learn? Everything, nothing, too little, too much... Just enough to get me here: a long-faced, white-haired ape with a book, still turning the page.

### C. K. WILLIAMS

## EDWARD WILSON



Edward Osborne Wilson is a world leading biologist and internationally recognized as one of the planet's most articulate authorities on the interrelatedness of knowledge disciplines and of life systems.

He is acknowledged for two interdisciplinary scientific disciplines (island biogeography and sociobiology), three unifying concepts for science and the humanities jointly (biophilia, biodiversity studies, and consilience), and one technological advance in the study of global biodiversity (the Encyclopedia of Life).

A native of Alabama, Wilson grew up in Mobile and received his bachelor's and master's degrees in biology from The University of Alabama (1949, 1950) and his doctoral degree in biology from Harvard University (1955).

Wilson has received more than 100 awards for his research on ants and biodiversity and for his writings addressed to both scientific and non-scientific audiences. He has received two Pulitzer Prizes in general non-fiction for his books *On Human Nature* (1979) and *The Ants* (1991); the Crafoord Prize from the Royal Swedish Academy of Sciences; the International Prize of Biology of Japan; and the Nonino and Serono Prizes for Letters and Sciences of Italy.

His work in the sciences, letters, the environment and conservation earned him prominence in the annals of the 21st Century. He was named one of the 25 most influential Americans by *Time* magazine and one of the world's 100 leading intellectuals by *Foreign Policy* magazine. He is the author of 28 books including the recent novel, *Anthill*, set in the woods of South Alabama; *The Social Conquest of Earth*; the soon-to-be-released profile of his boyhood hometown, *Why We Are Here: Mobile and the Spirit of a Southern City*.



## DAMIAN WOETZEL

Damian Woetzel was a Principal Dancer at New York City Ballet and frequently performed internationally as a guest star and visiting artist with numerous companies including the Kirov Ballet and American Ballet Theatre, until his retirement from the stage in 2008. Woetzel currently serves as the Director of Arts Programs for the Aspen Institute, the Artistic Director of the Vail International Dance Festival, and as the Founding Director of the Jerome Robbins New Essential Works Program. Woetzel is also active as a director and producer outside these roles. Among his recent projects, Woetzel produced and directed an arts salute to Stephen Hawking at Lincoln Center for the World Science Festival, and directed the first performance of the White House Dance Series, which took place in the East Room of the White House and was hosted by First Lady Michelle Obama. Woetzel also works with Yo-Yo Ma on his Silk Road Connect program in the New York City Public Schools, and has twice directed culminating year-end performances; at the Museum of Natural History in 2010, and for the Central Park SummerStage series in 2011. Woetzel was appointed to the President's Committee on the Arts and Humanities by President Obama in 2009. In July 2012, Woetzel was honored with the inaugural Gene Kelly Legacy Award—an award jointly created by the Dizzy Feet Foundation and the Estate of Gene Kelly in honor of the 100th anniversary of Kelly's birth—for his contributions to the arts as a ballet star and director of dance and music performances.

In June 2011, Woetzel was named the Director of Arts Programs at the Aspen Institute. Under Woetzel's direction, the Aspen Institute Arts Program brings together leading artists, arts managers, sponsors, government officials

and patrons. Through these collaborations, the Program seeks to generate, exchange, and develop ideas and policies in order to encourage vibrancy and dynamism in all artistic realms, and to enrich civic culture in ways only the arts can.

Among the events curated by the Aspen Institute Arts Program under Woetzel's direction:

In November 2011, Woetzel curated the inaugural US-China Forum on the Arts and Culture in Beijing, in partnership with Asia Society and the Chinese People's Association for Friendship with Foreign Countries. The four day forum was the first in a series of cultural exchanges seeking to strengthen mutual understanding between Americans and Chinese through panel discussions, lectures, film screenings, museum tours, dinners and performance. American and Chinese artists and cultural representatives engaged in the forum included Joel Coen, Meryl Streep, Yo-Yo Ma, Alice Waters, Liu Ye, Ge You and others. Woetzel also directed a Public Forum in partnership with the Public Theater titled "Does Culture Make Us Who We are," hosted by Anne Hathaway with guests including Bill Irwin, David Brooks and Oskar Eustis.

In March 2012, Woetzel produced a panel with Howard Gardner, the Hobbs Professor of Cognition and Education at the Harvard Graduate School of Education, and Dr. Ellen Winner, Professor of Psychology at Boston College, and Senior Research Associate at Project Zero, examining the current state of the arts in education. Woetzel also hosted renowned artists Eric Fischl and Chuck Close in a conversation about artists and their audience at the Mary Boone Gallery in New York.

In June 2012, the Arts Program for the first time curated multiple sessions at the Institute's premiere public program, the Aspen Ideas Festival. For nineteen sessions, Woetzel brought renowned artists, policymakers, arts administrators as well as leading Chinese cultural representatives for discussions, film screenings and cultural exchanges focusing on how the arts impact society. Sessions included "Culture and Conflict" with Palestinian-born ballroom star and educator Pierre Dulaine and Dutch composer Merlijn Twaalfhoven; a conversation between renowned producer Julie Taymor and former Disney CEO and current Aspen Institute Arts Program chair Michael Eisner; "Radical Creative Spaces" with architect Elizabeth Diller; "Arts and the City: Making Cities Sing" with Rocco Landesman, Dennis Scholl, Darren Walker and Richard Florida; among many others.

Since 2006, Woetzel has been the Artistic Director of the summer Vail International Dance Festival, where he presents dance performances and commissions. He has instituted a number of initiatives as director, including bringing the educational arts program "Celebrate The Beat"—the Colorado associate of Jacques d'Amboise's National Dance Institute—to the Vail Valley, to reach local underserved children in the public schools.

Under Woetzel's direction, the festival has received wide acclaim for its innovation and growth as a nationally recognized showcase for dance, featuring such performances as the debut of *Morphoses*/The Wheeldon Company, and the launch of New York City Ballet MOVES. The annual International Evenings of Dance galas have become renowned for Woetzel's curation of first-time partnerships across companies and countries, as well as the presentation of young, emerging stars making their debuts in new repertory. In August 2012, *The New York Times'* Alastair Macaulay wrote that the 2012 Vail International Dance Festival presentations "were distinguished above all by catholic taste and brilliant programming. They merit superlatives" and that the International Evenings I gala "was simply the best gala I have attended in decades." Writing the same week, Wendy Perron of *Dance Magazine* compared Woetzel to the legendary impresario Serge Diaghilev, and praised Woetzel for engaging and educating audiences through spoken introductions to each work, and for his commitment to collaboration with live musicians.

Woetzel has also instituted a series of "UpClose" performances: lecture-demonstration events which combine rehearsal, performance and commentary by Woetzel and special guests. Recent UpClose performances have included: "UpClose: Stravinsky by Balanchine," an examination of the legendary collaboration between George Balanchine and Igor Stravinsky, co-hosted by Woetzel and New York City Ballet Master-in-Chief Peter Martins (2012); "UpClose: Premieres," which provided a first look at a series of works created in Vail by choreographers including Christopher Wheeldon and Emery LeCrone during the weeks of the 2011 Vail International Dance Festival; among many others.

In 2009 and 2010, Woetzel produced and directed the World Science Festival Gala Performances at Lincoln Center's Alice Tully Hall. For the 2010 event he created an arts salute to science honoring the theoretical physicist Stephen Hawking, featuring performances by Yo-Yo Ma, John Lithgow, and Kelli O'Hara among others.

In the fall of 2009, Woetzel helped create and began directing the Jerome Robbins Foundation's New Essential Works (NEW) Program, which supports choreographers and dance companies during the current financial crisis by giving grants to enable the production of new works.

In 2009, Woetzel launched as curator and director the new Studio 5 performance series at New York's City Center, which features in-depth examinations of today's most compelling dance artists and companies highlighted by in-studio performances and demonstrations. In 2009-2012, guests included David Hallberg, Christopher Wheeldon, Victoria Clark, Rob Berman, Angel Corella, Wendy Whelan, Edward Villella, among others; topics of discussion ranged from musical theatre to collaboration; and featured companies included American Ballet Theatre, the Paul Taylor Dance Company and Dance Theater of Harlem.

In June of 2010 Woetzel piloted "Arts Strike," a new effort to have celebrated artists engage educators and students, schools and communities, highlighting and sharing the unique power of the arts to empower, enrich and educate. The first events have taken place in Vail, Chicago, and Los Angeles, and have all featured Woetzel with Yo-Yo Ma in schools, engaging with students and their teachers to promote learning through the arts.

Woetzel works with Yo-Yo Ma on his Silk Road Connect program in the New York City Public Schools. In June 2010, Woetzel directed the culminating year-end event which took place at New York's Museum of Natural History, and featured the participation of the Silk Road Ensemble and 450 sixth-grade students. In June 2011, the culminating year-end event opened the Central Park SummerStage series. Titled "Night at the Caravanserai: Tales of Wonder," the performance again featured hundreds of sixth-grade students from New York-area public schools, Ma with his Silk Road Ensemble, vocalist Bobby McFerrin, the soprano Emalie Savoy, actor Bill Irwin, and author Jhumpa Lahiri, among others.

In April 2011, Woetzel organized an "arts strike" at Inner-City Arts in downtown Los Angeles with Yo-Yo Ma, The Silk Road Ensemble, and Memphis Jooker Charles "Lil Buck" Riley. The event included a demonstration and workshop for more than one hundred elementary school students from the Los Angeles Unified School District. Highlighting the event was a first-time duet directed by Woetzel between Ma and Lil Buck, who performed a Memphis Jookin' version of The Dying Swan with Ma accompanying on the cello; the performance was immortalized in a video shot by Spike Jonze which reached over one million views within weeks.

In the fall of 2010, Woetzel was a visiting Lecturer at Harvard Law School, where he co-taught a course on Performing Arts and the Law with Jeannie Suk.

Woetzel was the artistic director of the New York State Summer School for the Arts School of Ballet from 1994-2007.

Woetzel was a Principal Dancer at New York City Ballet from 1989 until his retirement from the stage in 2008. At New York City Ballet, Woetzel had works created for him

by Jerome Robbins, Eliot Feld, Twyla Tharp, Susan Stroman, and Christopher Wheeldon among others, and danced more than 50 featured roles in the Company's repertory, including: George Balanchine's: *Agon*, *Coppelia*, *Prodigal Son*, *Slaughter on Tenth Avenue*, *Stars and Stripes*, *Swan Lake*; and Jerome Robbins': *Afternoon of a Faun*, *Fancy Free*, *Dances at a Gathering*, *A Suite of Dances*, and *West Side Story Suite*.

Woetzel originated featured roles in: Eliot Feld's *The Unanswered Question and Organon*, Peter Martins' *Jeu de Cartes* and *The Sleeping Beauty*, Jerome Robbins' *Ives, Songs and Quiet City*, Susan Stroman's "The Blue Necklace" from *Double Feature*, Twyla Tharp's *The Beethoven Seventh*, Christopher Wheeldon's *An American in Paris*, *Carousel (A Dance)*, *Evenfall*, *Morphoses*, and *Variations Sérieuses*. Woetzel also originated roles in ballets by Kevin O'Day, Richard Tanner, and Lynne Taylor-Corbett, among others.

Woetzel appeared in Dance in America's presentation of "Dinner with Balanchine," dancing Union Jack and Stars and Stripes. In October 1998, Mr. Woetzel appeared as one of the stars of the Cole Porter musical *Jubilee* in a special benefit performance at Carnegie Hall, during which he sang as well as danced. In May 1999, he starred as Prince Siegfried in Peter Martins' *Swan Lake* on the PBS national telecast "Live from Lincoln Center." Woetzel also appeared in the 2002 nationally televised *Live from Lincoln Center* broadcast "New York City Ballet's Diamond Project: Ten Years of New Choreography" on PBS and in the May 2004 *Live from Lincoln Center* broadcast of "Lincoln Center Celebrates Balanchine 100." Woetzel starred as the Cavalier in the film version of George Balanchine's *The Nutcracker™*, released in the winter of 1993.

During his career, Woetzel frequently performed internationally as a guest star and was a visiting artist with numerous companies including the Kirov Ballet and American Ballet Theatre. In his guest appearances, Woetzel danced principal roles in classics such as *Don Quixote*, *Giselle*, and *La Bayadere*, among others.

Woetzel has choreographed a number of ballets for New York City Ballet, among other companies. For New York City Ballet, he choreographed *Ebony Concerto* to Stravinsky, and *Glazounov Pas de Deux* to the composer's *Les Ruses d'Amour*. Woetzel also choreographed the "Polovtsian Dances" for New York City Opera's production of *Prince Igor*, and in 1998, he choreographed and starred in a new version of *An American in Paris* ballet for Marvin Hamlisch's Gershwin Centennial Gala.

Woetzel is the recipient of a Choo San Goh award for new choreography. He serves on the Artists Committee of the Kennedy Center Honors and as a judge for the Astaire Awards. He has also served as a juror for the Princess Grace Awards. Woetzel is a frequent speaker on the arts and arts policy. Woetzel was the 2008 Harman-Eisner Artist in Residence of the Aspen Institute, and in 2011, he became a member of the Knight Foundation's National Arts Advisory Committee. Woetzel also serves on the boards of directors of New York City Center, The Clive Barnes Foundation and The Sphinx Organization, and served on the recent Harvard Task Force on the Arts. In November 2009, President Obama appointed Woetzel to the President's Committee on the Arts and Humanities. In July 2012, Woetzel was honored with the inaugural Gene Kelly Legacy Award—an award jointly created by the Dizzy Feet Foundation and the Estate of Gene Kelly in honor of the 100th anniversary of Kelly's birth—for his contributions to the arts as a ballet star and director of dance and music performances.

Woetzel holds a Master in Public Administration Degree from Harvard's Kennedy School of Government.

Woetzel has been married to Heather Watts since 1999.

## STEPHEN WOLFRAM

Stephen Wolfram has been responsible for three revolutionary developments: the *Mathematica* computation system, *A New Kind of Science*, and the Wolfram|Alpha computational knowledge engine.

Wolfram was educated at Eton, Oxford and Caltech, receiving his Ph.D. in theoretical physics at the age of 20. Wolfram's work on basic science led him to a series of fundamental discoveries about the computational universe of possible programs. Summarized in his best-selling 2002 book *A New Kind of Science*, these discoveries have not only launched major new directions in basic research, but have also led to breakthroughs in scientific modeling in physical, biological and social domains—as well as defining a broad new basis for technology discovery.

Launched in 1988, *Mathematica* has revolutionized the way technical computation is done, and has been responsible for countless advances over the past two decades. Starting from a set of fundamental principles devised by Wolfram, *Mathematica* has continually grown, integrating more and more algorithmic domains, and spawning such technologies as the Computable Document Format (CDF).

Building on *Mathematica* and *A New Kind of Science*, Wolfram in 2009 launched Wolfram|Alpha—an ambitious, long-term project to make as much of the world's knowledge as possible computable, and accessible to everyone. Used every day on the web and through apps by millions of people around the world, Wolfram|Alpha defines a fundamentally new kind of computing platform that is turning science-fiction computer intelligence into reality.

In addition to his scientific and technical achievements, Wolfram has been the CEO of Wolfram Research since its founding in 1987. Under Wolfram's leadership, Wolfram Research has become one of the world's most respected software companies, as well as a powerhouse of technical and intellectual innovation, and a major contributor to education and research around the world.



## WILL WRIGHT

William Ralph "Will" Wright (born January 20, 1960, in Atlanta, Georgia) is an American video game designer and co-founder of the game development company Maxis, now part of Electronic Arts. In April 2009, he left Electronic Arts to run "Stupid Fun Club", an entertainment think tank in which Wright and EA are principal shareholders.

The first computer game Wright designed was *Raid on Bungeling Bay* in 1984, but it was *SimCity* that brought him to prominence. The game was released by Maxis, a company Wright formed with Jeff Braun, and he built upon the game's theme of computer simulation with numerous other titles including *SimEarth* and *SimAnt*.

Wright's greatest success to date came as the original designer for The Sims games series. The game spawned multiple sequels and expansions and Wright earned many awards for his work. His latest work, *Spore*, was released in September 2008 and features gameplay based upon the model of evolution and scientific advancement. The game sold 406,000 copies within three weeks of its release.

He was born as William Ralph Wright on January 20, 1960, in Atlanta. He is of French, English, Italian, and Native American descent.

After graduating at 16 from Episcopal High School, he enrolled in Louisiana State University, transferring two years later to Louisiana Tech. Beginning with a start at an architecture degree, followed by mechanical engineering, he fell into computers and robotics. He excelled in subjects he was interested in—architecture, economics, mechanical engineering, and military history—but was held back by his impractical goals such as language arts. His earlier dream of space colonization remained, and was joined by a love for robotics. After another two years at Louisiana Tech, in the fall of 1980, Wright moved on to The New School in Manhattan. He lived in an apartment over Balducci's, in Greenwich Village, and spent his spare time searching for spare parts in local electronics surplus stores. After one year at the New School, Wright returned to Baton Rouge without his degree, concluding five years of collegiate study.

During a summer break from college, he met his first wife Joell Jones, an artist currently living in California, on vacation to her hometown of Baton Rouge. In an interview published in February 2003, Will claims that games were absorbing so much of his time, he decided that perhaps making games was the way to go. Wright's first game was the helicopter action game *Raid on Bungeling Bay* (1984) for the Commodore 64.

Wright found that he had more fun creating levels with his level editor for *Raid on Bungeling Bay* than he had while actually playing the game. He created a new game that would later evolve into *SimCity*, but he had trouble finding a publisher. The structuralist dynamics of the game were in part inspired by the work of two architectural and urban theorists, Christopher Alexander and Jay Forrester.

"I'm interested in the process and strategies for design. The architect Christopher Alexander, in his book *A Pattern Language* formalized a lot of spatial relationships into a grammar for design. I'd really like to work toward a grammar for complex systems and present someone with tools for designing complex things."

Wright, in an interview with *The Times*, expressed belief that computers extend the imagination, and posits the emergence of the "metabrain", stating:

"Any human institutional system that draws on the intelligence of all its members is a metabrain. Up to now, we have had high friction between the neurons of the metabrain; technology is lowering that friction tremendously. Computers are allowing us to aggregate our intelligence in ways that were never possible before. If you look at *Spore*, people are making this stuff, and computers collect it, then decide who to send it to. The computer is the broker. What they are really exploring is the collective creativity of millions of people. They are aggregating

human intelligence into a system that is more powerful than we thought artificial intelligence was going to be."

In 1986, he met Jeff Braun, an investor interested in entering the computer game industry, at what Wright calls "the world's most important pizza party." Together they formed Maxis the next year in Orinda, California. *SimCity* (1989) was a hit and has been credited as one of the most influential computer games ever made. Wright himself has been widely featured in several computer magazines—particularly *PC Gamer*, which has listed Wright in its annual 'Game Gods' feature, alongside such notables as Roberta Williams and Peter Molyneux.

Following the success of *SimCity*, Wright designed *SimEarth* (1990) and *SimAnt* (1991). He co-designed *SimCity 2000* (1993) with Fred Haslam and in the meantime Maxis produced other "Sim" games. Wright's next game was *SimCopter* (1996). Although none of these games were as successful as *SimCity*, they further cemented Wright's reputation as a designer of "software toys"—games that cannot be won or lost. In 1992, Wright and his family moved to Orinda, California.

Wright has a great interest in complex adaptive systems and most of his games have been based around them or books that describe them (*SimAnt*: E.O. Wilson's *The Ants*, *SimEarth*: James Lovelock's *Gaia Theory*, *SimCity*: Jay Forrester's *Urban Dynamics and World Dynamics*, *Spore*: Drake's Equation and *The Powers of Ten*). Wright's role in the development of the concepts from simulations to games is to empower the players by creating what he dubs "possibility spaces", or simple rules and game elements that add up to a very complex design. All Maxis, and later games that Wright had a hand in designing, adhere to these design principles.

Maxis went public in 1995 with revenue of US\$38 million. The stock reached \$50 a share and then dropped as Maxis posted a loss. Electronic Arts bought Maxis in June 1997. Wright had been thinking about making a virtual doll house ever since the early 1990s, similar to *SimCity* but focused on individual people. Originally conceived of as an architectural design game called *Home Tactics*, Wright's idea changed when someone suggested the player should be rated on the quality of life experience by the homeowners. It was a difficult idea to sell to E.A., because already 40% of Maxis's employees had been laid off.

When Wright took his idea to the Maxis board of directors, Jeff Braun says, "The board looked at *The Sims* and said, 'What is this? He wants to do an interactive doll house? The guy is out of his mind.'" Doll houses were for girls, and girls didn't play video games. Maxis gave little support or financing for the game. Electronic Arts, which bought Maxis in 1997, was more enthusiastic. Wright's games are so different from E.A.'s other releases that it was hard to imagine the two being united in the same enterprise. But the success of *SimCity* had already established Sim as a strong brand, and E.A., which by then, fifteen years after its founding, was becoming a Procter & Gamble-style brand-management company, foresaw the possibility of building a Sim franchise.

E.A. published *The Sims* in February 2000 and it became Wright's biggest success yet. It eventually surpassed *Myst* as the best-selling computer game of all time and spawned numerous expansion packs and other games. He designed a massively multiplayer version of the game called *The Sims Online*, which was not as popular as the original. By November 2006, *The Sims* franchise had earned E.A. more than a billion dollars.

In a presentation at the Game Developers Conference on March 11, 2005, he announced his latest game *Spore*. He used the current work on this game to demonstrate methods that can be used to reduce the amount of content that needs to be created by the game developers. Wright hopes to inspire others to take risks in game creation.

As for his theories on interactive design, Wright says the following:



"Well, one thing I've always really enjoyed is making things. Out of whatever. It started with modeling as a kid, building models. When computers came along, I started learning programming and realizing the computer was this great tool for making things, making models, dynamic models, and behaviors, not just static models. I think when I started doing games I really wanted to carry that to the next step, to the player, so that you give the player a tool so that they can create things. And then you give them some context for that creation. You know, what is it, what kind of kind of world does it live in, what's its purpose? What are you trying to do with this thing that you're creating? To really put the player in the design role. And the actual world is reactive to their design. So they design something that the little world inside the computer reacts to. And then they have to revisit the design and redesign it, or tear it down and build another one, whatever it is. So I guess what really draws me to interactive entertainment and the thing that I try to keep focused on is enabling the creativity of the player. Giving them a pretty large solution space to solve the problem within the game. So the game represents this problem landscape. Most games have small solution landscapes, so there's one possible solution and one way to solve it. Other games, the games that tend to be more creative, have a much larger solution space, so you can potentially solve this problem in a way that nobody else has. If you're building a solution, how large that solution space is gives the player a much stronger feeling of empathy. If they know that what they've done is unique to them, they tend to care for it a lot more. I think that's the direction I tend to come from."

Wright believes that simulations as games can be used to improve education by teaching children how to learn. In his own words:

"The problem with our education system is we've taken this kind of narrow, reductionist, Aristotelian approach to what learning is. It's not designed for experimenting with complex systems and navigating your way through them in an intuitive way, which is what games teach. It's not

really designed for failure, which is also something games teach. I mean, I think that failure is a better teacher than success. Trial and error, reverse-engineering stuff in your mind—all the ways that kids interact with games—that's the kind of thinking schools should be teaching. And I would argue that as the world becomes more complex, and as outcomes become less about success or failure, games are better at preparing you. The education system is going to realize this sooner or later. It's starting. Teachers are entering the system who grew up playing games. They're going to want to engage with the kids using games."

Wright will appear as a character in the video game Mr. T, where he will team up with Mr. T to fight Nazis.

Wright was given a "Lifetime Achievement Award" at the Game Developers Choice Awards in 2001. In 2002, he became the fifth person to be inducted into the Academy of Interactive Arts and Sciences' Hall of Fame. Until 2006, he was the only person to have been honored this way by both of these industry organizations. In 2007, the British Academy of Film and Television Arts awarded him a fellowship, the first given to a game designer.

He has been called one of the most important people in gaming, technology, and entertainment by publications such as *Entertainment Weekly*, *Time*, *PC Gamer*, *Discover* and *GameSpy*. Wright was also awarded the *PC Magazine* Lifetime Achievement Award in January 2005.

In 1980, along with co-driver and race organizer Rick Doherty, Wright participated in the U.S. Express, a cross-country race that was the predecessor to The Cannonball Run. Wright and Doherty drove a specially outfitted Mazda RX-7 from Brooklyn, New York to Santa Monica, California in 33:39, winning the illegal race. Wright only competed once in the race, which continued until 1983.

Since 2003, in his spare time, Wright has collected leftovers from the Soviet space program, "including a 100-pound hatch from a space shuttle, a seat from a Soyuz... control panels from the Mir", and the control

console of the Soyuz 23, as well as dolls, dice, and fossils. During E3 2004 he passed off an old lapel pin commemorating the Soviet space program to a reporter.

"I'm uncollecting. I buy collections on eBay, and I disperse them out to people again. I have to be like an entropic force to collectors, otherwise all of this stuff will get sorted."

He once built competitive robots for BattleBots with his daughter, but no longer does so. As of November 2006, Wright still had remnant bits of machined metal left over from his BattleBots days strewn about the garage of his Oakland home. Wright was a former Robot Wars champion in the Berkeley-based robotics workshop, the Stupid Fun Club. One of Wright's bots, designed with the help of Wright's daughter Cassidy, "Kitty Puff Puff", fought against its opponents by sticking a roll of gauze onto its armature and circling around them, encapsulating them and denying them movement. The technique, *cocooning*, was eventually banned.

Following his work in BattleBots, he has taken steps into the field of human-robot interactions.

"We build these robots and we take them down to Berkeley and study the interactions that people have with the robots," says Wright. "We built this newer one that has a rapid-fire pingpong cannon. It will fire about 10 per second. So we give people this plastic bat and we say, 'It's set up to play baseball. Do you want to play baseball? It's going to shoot a little ball and you try to hit it.' And all of a sudden it's like da-da-da-da, and it's pelting them with balls."

After building his reputation as one of the most important game designers in the world, Wright in 2009 left Maxis, the Electronic Arts owned studio he founded. His first post-E.A. venture was the Stupid Fun Club.

In October 2010, Current TV announced that Will Wright will produce a new show for the network. The program, entitled Bar Karma, began airing in February 2011.

In October 2011, Will Wright became a member of the Board of Directors of Linden Lab, the creators of Second Life.

## JOSHUA WURMAN



I grew up in Pennsylvania, bereft of any really meaningful opportunities to experience severe weather, hurricanes, even real deep snow. As a youth, I tried to impress friends and girls with my home weather station and insect collection. These efforts, among other factors, kept me well out of the running for homecoming king. Naturally, I moved on to a party school, the Massachusetts Institute of Technology (MIT) to search for a better social life. But hating schoolwork, I rushed through it, earning my MS at only 21. Then after some aimless additional years in school I dropped out for three years, working for the Air Force on nuclear winter computer simulations and other cheery subjects. Returning to MIT, I earned my Doctorate and moved to Colorado to work at the National Center for Atmospheric Research (NCAR) on bistatic radar networks, a new type of weather radar system that I had invented. However, after seeing real High Plains thunderstorms close up, and tornadoes, I got distracted and conceived of building a network of big, fast scanning radars that could drive right up to tornadoes and fires, inside hurricanes, and into other nice weather. The DOW program was born, and I moved down to Oklahoma to be a professor for a few years, chase tornadoes and hurricanes, file patents, teach and write papers. In the middle of this, I traveled to Asia

on a research project and met my wife operating a weather radar on an island off the coast of Hong Kong and conned her into believing that Oklahoma was just like Hong Kong. After receiving tenure and the implied lifetime sentence at the university, I did the sensible thing: I quit and moved back to Boulder and founded my own non-profit research institution, the Center for Severe Weather Research (CSWR). My wife and I run CSWR, manage the DOWs as National Science Foundation (NSF) Facilities, and conduct research programs such as the VORTEX2 study and hurricane studies. We have four young children who, so far, show no unhealthy obsessive interests in tornadoes, hurricanes or radars. I've just finished the VORTEX2 tornado study (<http://vortex2.org>), which is the largest tornado research mission ever, funded mostly by NSF, employing about 120 scientists and crew in 50 vehicles. We had 11 radars, 4 balloon trucks, UAVs, 40 deployable instruments, 13 mobile mesonets, photogrammetry and microphysics teams, damage survey teams, basically more of anything that used to study tornadoes scientifically. Just imagine the lines for fuel and bathrooms in small-town gas stations. During WWW, I'll be keeping a nervous eye out for any hurricanes threatening to make landfall. If a hurricane looms, I'll be leading my team into the eye.

## **TELEPRESENCE CONVERSATIONS** TENTATIVE

### **MAO YUSHI**

Chinese economist, 2012 Milton Friedman Liberty Award.

(He wrote an online column criticizing the communist and totalitarian policies of Mao Zedong (Chairman Mao) in China, attacked by Maoists in China.)

<http://www.cato.org/special/friedman/yushi/index.html>

### **YAO MING**

Retired Chinese basketball player who last played

for the Houston Rockets of NBA; investor.

### **TAN DUN**

Grammy, Oscar, and Grammy awarding winning

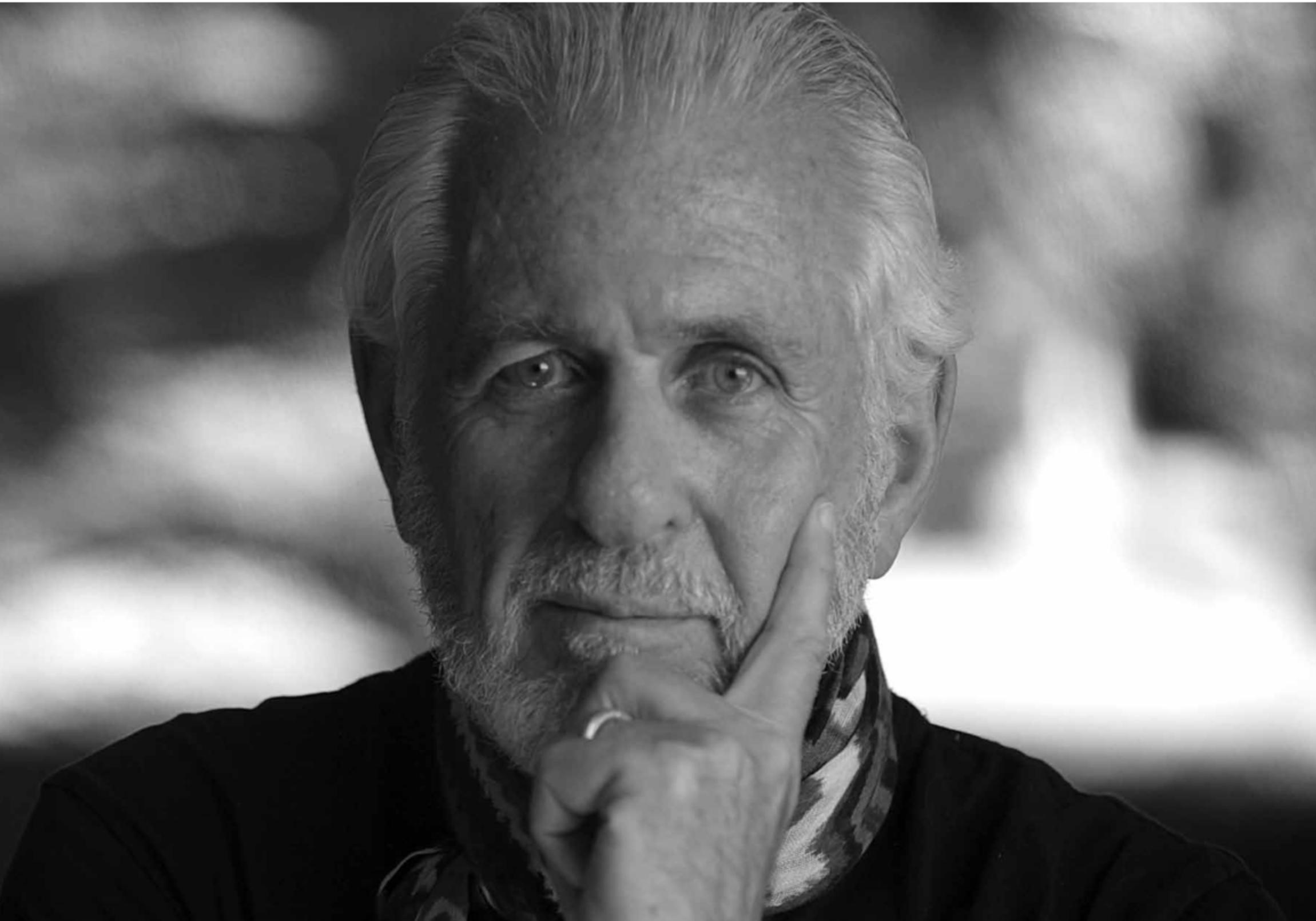
Chinese contemporary classical composer

[http://en.wikipedia.org/wiki/Tan\\_Dun](http://en.wikipedia.org/wiki/Tan_Dun)

### **ZHANG YONG HE**

Chinese-American architect, former head of architecture

at MIT.

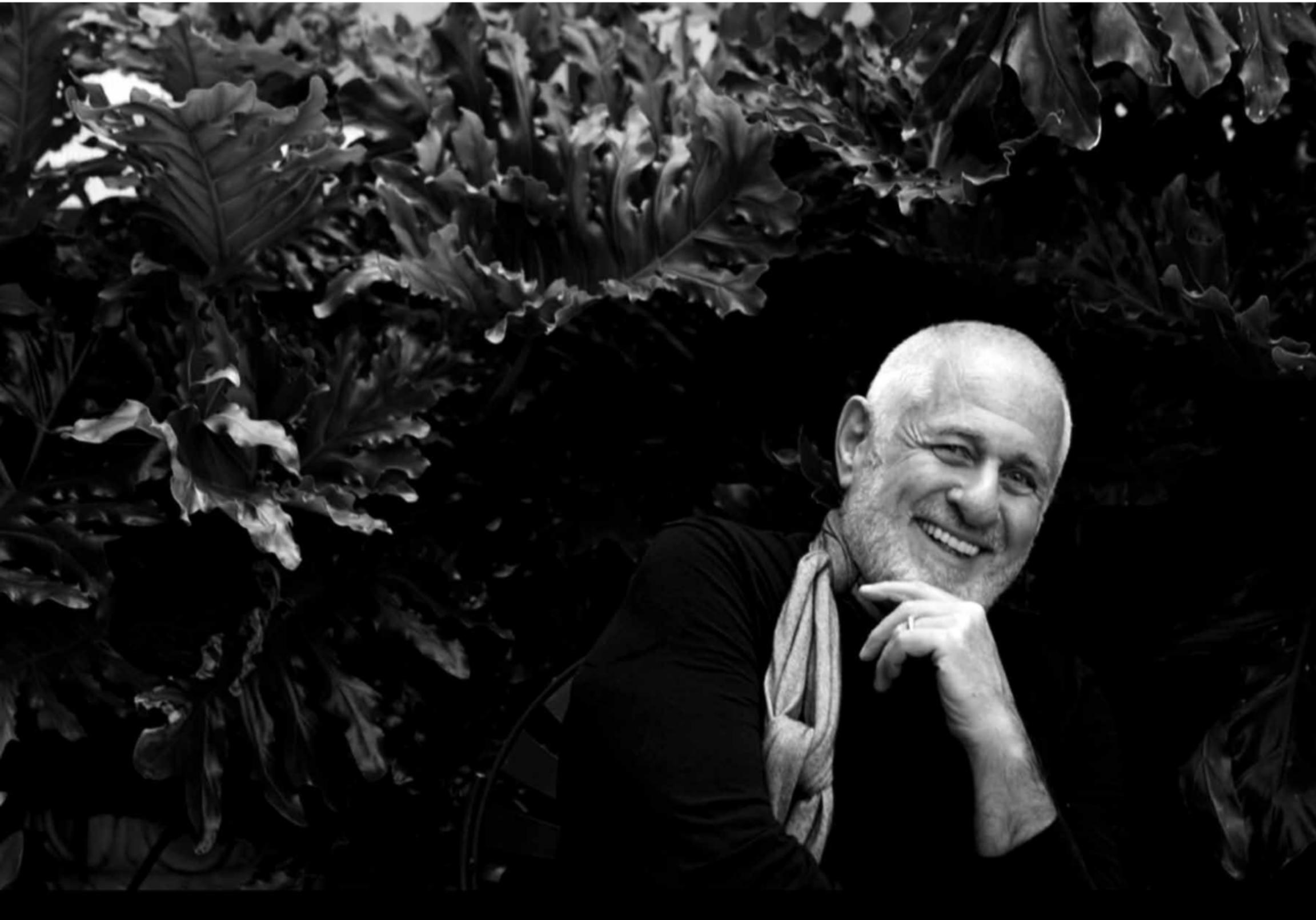


## RICHARD SAUL **WURMAN**

Described by *Fortune* magazine as an “intellectual hedonist” with a “hummingbird mind,” Richard Saul Wurman seeks ways to make the complex clear. Recognizing at an early age that his ignorance is his greatest asset, he has made it his mission to sort through the abundance of information that is available on every topic, and design the techniques to make it understandable.

In doing so he has continually sought to put himself in the presence of extraordinary people, including (all now all deceased), Francis Crick, Richard Feynman, Jonas Salk, Eva Zeisel, Louis I. Kahn, Charles Eames, Frank Stanton and Schuyler van Renssalaer Cammann, and Arnold Toynbee. There are many others. The only two bosses he had who didn’t fire him were Lou Kahn and Charlie Eames.

As a result, Wurman has had many lives: as an author (83 books); FAIA Architect, 13-year partner in Murphy Levy Wurman Architects; cartographer (mapped 1/3 of the Mayan city of Tikal and current project 19.20.21.); teacher (Cambridge University, England; Princeton; Washington University, St. Louis; University of Southern California; University of California Los Angeles; City College of New York, and Dean, Cal Poly School of Design); urban designer (recipient of MIT’s Kevin Lynch award in urban design); graphic designer (AIGA Gold Medal, membership in AGI and inducted into the Art Directors Hall of Fame); information theorist (*Information*



*Anxiety, Follow the Yellow Brick Road*) and in medicine (6 books on healthcare and creator and chairman of TEDMED, 1995–2010), and as a conference convener. The path of this journey has been paved by one surface: his curiosity.

The acknowledged father of Information Architecture, Wurman has written, designed and published 83 books on a range of topics, while creating conferences and new mapping projects. All contribute to a greater understanding of complex information. They spring from his particular brand of innovation: doing the opposite of what is rote or expected.

Wurman published his first two books in 1962. The first featured models of 50 world cities all constructed on a uniform scale, the other was the first book to be written on Louis Kahn. In 1967 he co-authored the first comparative statistical atlas of major American cities. His latest book is called *33: Understanding Change & the Change in Understanding*. It chronicles the adventures and musings of the eccentric main character, the Commissioner of Curiosity and Imagination.

Wurman created the *ACCESS* city guides, using graphics and logical editorial organization to make places such as New York, Tokyo, Rome, Paris and London understandable to visitors. Other volumes he created focus on topics such as baseball, football and the 1984 Olympics, the latter with over 3.2 million copies sold. His road atlases employed similar techniques that elucidate U.S. geography and transportation

networks. In addition he completed many one-off projects, such as his book *Twin Peaks Access*, which he co-authored with David Lynch. Several of his books are in the permanent collection of the Museum of Modern Art, New York.

Wurman began his career in conferences in 1972 when he chaired the International Design Conference in Aspen. He then co-chaired the first Federal Design Assembly in 1973 and the national AIA Conference in 1976. With each of these he changed the fundamentals of how gatherings were run. All these helped his creative molding of TED, TEDMED, and eg, the Entertainment Gathering.

Wurman created the TED conference in 1984, which he chaired through the 2002 meeting. TED brings together many of America's clearest thinkers in the fields of technology, entertainment and design. He created the eg conference in 2006 and the TEDMED conference in 1995, which he chaired through 2010. Other conferences he created and chaired include California 101, TEDSELL, TEDNYC, TED4Kobe in Japan and TEDCity in Toronto.

Now in 77, Wurman continues to quell his restlessness with a series of new projects. The WWW Conference will be an active gathering of some of the brightest thinkers of our time discussing the complexity of emerging patterns on our planet in improvised conversation – intellectual jazz. In partnership with Esri and @radical.media, 19.20.21. is a major cartographic

initiative that endeavors to standardize a methodology for comparative urban data. His Urban Observatory project aims to establish, for the first time ever, a series of live and changing electronically connected urban observatories around the world.

Wurman received both his B.Arch. and M.Arch. degrees with highest honors from the University of Pennsylvania in 1959. While there, he was awarded the Arthur Spayd Brooks Gold Medal, the Thornton Oakley Award for Achievement in Creative Art, 2 Chandler grants and two graduate fellowships. He has also been awarded a Guggenheim Fellowship in Architecture and Design, three honorary doctorates, two Graham Fellowships and numerous grants from the National Endowment for the Arts. He is the 2012 Lifetime Achievement Award recipient given by The Smithsonian Cooper-Hewitt National Design museum. He was recently given the Gold Medal for Outstanding Contribution to Public Discourse by Trinity College Dublin, an honor shared in the past by Archbishop Desmond Tutu and Aung San Suu Kyi.

Wurman currently lives in Newport, RI with his wife, novelist Gloria Nagy, and their three yellow Labradors, Abraham, Isaac and Jacob. They have four children and six grandchildren.

## MEMO TO PARTICIPANTS re: CONVERSATIONS

As most of you are aware, I created TED in 1984 and chaired it through 2002. During that time I created TEDMED in 1995 and the eg Conference in 2006. For all those meetings I developed an 18-minute talk and a series of rules called the *TED Commandments*.

Several of you have asked 'well what are the new guidelines as they relate to the WWW Conference'?

- 1** Participants have all been sent the schedule listing the person with whom they have been paired, attached again below.
- 2** If you go to the participants page on the web site, you can click on that person's name and link to his or her biographical information.
- 3** I have developed a list of 30 different premises or postulations that will begin you in improvised conversation.
- 4** I have tried this and it works.
- 5** You will be facing each other on comfortable couches and not the audience.
- 6** There will be approximately 150 people in the audience, which will be comprised of fellow participants, guests and individuals invited by sponsors.
- 7** Absolutely no preparation is necessary.
- 8** You will not be selling a book, charity, project or religion.
- 9** As long as the conversation holds my attention and my perceived attention of the audience, you will be in conversation. At the conclusion, I will with reasonable politeness call up the next two individuals.
- 10** If the conversation is fabulous but goes on so long as to potentially cause us to miss our lunch, I will also end it and the two of you can continue it over lunch.
- 11** There will be no lectern but there will be a side table for a cup of coffee or glass of water.
- 12** There is no strict time schedule but I will attempt to keep the order of the final schedule.
- 13** On occasion I might take the liberty part way into a given conversation to add a third person, another participant or simply another member of the audience, whom I know can add constructively to the conversation.
- 14** The entire meeting will be filmed as inconspicuously as possible from the far left and right of the stage and with one small camera in the audience.
- 15** At this moment there are no plans to live-stream any of the conference. There will be an app with access to a server to hold the conversations. It is planned that this will be available on 1 December and will include a running line of translation into several languages.
- 16** The app will also contain a large body of curated personal information about you. Further explanation about this will come to you next week.
- 17** I have personally worked out the breaks, lunches and dinners and I believe they will be of the highest quality and in rooms that will delight you, both at Esri and at The Mission Inn.
- 18** Obviously there is a lot of risk about the conversations, particularly the quality, spontaneity, clarity, improvisation and surprise.
- 19** The goal is to find some threads that have not emerged before as you speak with your partner, which will encapsulate a type of honesty and a non-predicted path in response to each other.
- 20** This has happened in my several tests of this idea.
- 21** To repeat, I am endeavoring to make the filming, ambiance, location and lack of press all focus on your comfort and the quality of your experience. This above all is my concern and my goal.
- 22** Improvised conversation in this manner is a new form but a wonderful conversation is perhaps the oldest human media for creative discourse. So in that sense, this is a **great leap backwards**.
- 23** It will be a wonderful salon and an absolutely immersive experience with extraordinary people.

## MEMO TO PARTICIPANTS re: FUTURE APP

I trust each of you has read my 24-point memo called *WWW Conference Conversation Guidelines* with 24 points that I believe give the spirit of the meeting itself. I've had excellent response from many of you as well as from sponsors and attendees. This memo addresses the outcome of the conference, in other words, what I do with the filming of these approximately 30 conversations.

- 1** It will be filmed in black and white by a team directed by Jon Kamen and Sidney Beaumont of @radical.media, and John Halloran of John Halloran Associates.
- 2** It will be unedited. There will be a camera on each of the individuals in conversation, as well as a long camera on the three of us sitting on stage.
- 3** Michael Smolens and David Orban of dotSUB will then translate it into perhaps 10 languages and add a running translation in English, which will address the language needs of 90% plus of the world's population.
- 4** This will live on a server and be accessed by an app that has a release date at this juncture of 1 December. The app will also contain a great deal of additional information on each of the presenters.
- 5** The additional curated stuff—photos, videos, and links is what this memo is focused on.
- 6** Scrollmotion has already done two extraordinary versions of the organization and design of this app. They have offices in San Diego and New York City.
- 7** There will be a series of unique videos on which I will comment later, made where appropriate of you in situ.
- 8** The video of the entire conference of course can be accessed by pairings of speakers from a list and viewed as you would at the conference showing individuals in improvised conversation. However, one could also double click on a single name and go into this visual biography of each of the participants.
- 9** The demo can be found at <http://vimeo.com/user7992663/review/47187545/29ddec526f0> The password is WWW. It shows an extremely brief version of C. K. Williams, the Pulitzer Prize winning poet, in which you cannot only see a bio, for which we will ask a major expansion, but also photographs of the covers of a few of his 11 books. We would also like to have all of his books, which you will be able to order from the app, some outtake videos, not from the conference but from other sources that we would identify, and that you will identify, as well as, in the case of C. K. Williams, many pages, a few shown here, of his personally edited writings of his poetry—something you can't find on YouTube, a presentation or in a book, or perhaps anywhere but this app.
- 10** The idea of this app is to get a behind the scenes, behind the curtain, personalized journey through each individual, which will also have a list of links to suggested articles, reviews, YouTubes and other material that will fill out this visual biography.
- 11** This is an important point: if you Google Richard Wurman, you come up with perhaps 450,000 citations. The number changes daily. This would amount to 40,000+

pages, which of course nobody looks at. Basically it's junk big data, and people mostly focus on one article and a wikipedia entry. The attempt here is to have the first primitive development of a platform for beginning to assuage some curiosity in the beginning of looking at a visual biography of at least these 50 people. If the platform works it's scalable. That's the idea of a new modality. If it works for people perhaps it will work for healthcare and other subjects.

- 12** I'm putting together a team of people consisting of Ali Smolens, who will help curate some of the materials for many of you, Paul Kandarian, a magazine writer friend of mine from Rhode Island, and three others plus Blaise Zerega, CEO of FORA.tv who has agreed to make some original, simple videos such as Frank Gehry walking around his office showing and discussing models of buildings that he has not built, or variations of for instance the 8 Spruce Street tower in New York or hopefully Craig Venter's laboratories in a walk-through, E.O. Wilson's offices, etc. etc.
- 13** So this is a request for the following: please start thinking about the stuff that you've never shown: everything from baby pictures, pictures of your pets, pictures of your office, pictures of your home, things that make you real. Multiple photographs of yourself, perhaps a strip of photographs of you taken in a photo booth at an amusement park that you have in a drawer. Writings that you've done that show your edits, something that shows you're real, human, and shows your process. Pictures of your laboratories. Agree to have somebody do a 5- or 10-minute walk through with you in your office or your lab or your place of work or your architectural studio. Videos or DVDs that for example I know Moshe Safdie has which he makes to describe what a building will look like in computer graphics to a client. I know he has a fantastic one of an apartment house in Singapore. And I'm sure Bjarke has similar things that he generally does not release. Covers of books about you, covers of books by you. A list of articles that you think critically describes you and links to YouTubes or other videos or other citations that you think and you have curated yourself that make you particularly interesting, not the half a million available on line. Julie Taymor must have lots of stuff as well as David Blaine.
- 14** We hope to have this put together, along with the entire conference, for release by 1 December and promote it immediately after Thanksgiving with the help of IDG, Flipboard (Mike McCue), Esri, IIR and others. I am going to ask for your cooperation out in Redlands at the conference and I will have additional copies of this and the other memo to give you when you register.

- 15** Attached are technical specifications for those of you who understand them yourself. Otherwise please show them to somebody in your office under the age of 30 who automatically understands them, who could help us translate whatever you send us in a usable format. I don't understand them myself but I'm sure some of you have a better handle on this than I do. These will make the process smooth and efficient and within budget.



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