

Is evolution ending
with humans or only
just beginning?



Australopithecus africanus
2-3 million years BC



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Chairman of the board of directors of Wyoming Financial (WERCS) in Casper, Wyoming, former member of the Wyoming State Legislature and professor of physiology and microbiology.

The John Templeton Foundation serves as a philanthropic catalyst for discoveries relating to the Big Questions of human purpose and ultimate reality. We support research on subjects ranging from complexity, evolution, and infinity to creativity, forgiveness, love, and free will. We encourage civil, informed dialogue among scientists, philosophers, and theologians and between such experts and the public at large, for the purposes of new insights and discoveries.

Our vision is derived from the late Sir John Templeton's optimism about the possibility of acquiring "new spiritual information" and from his commitment to rigorous scientific research and related scholarship. The Foundation's motto, "How little we know, how eager to learn," exemplifies our support for open-minded inquiry and our hope for advancing human progress through breakthrough discoveries.

2010 Capabilities Report

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THE JOHN TEMPLETON FOUNDATION has come a long way since my father opened its doors in 1987. Back then, the Foundation was just a three-person office on the second floor of a suburban Philadelphia garage. Times have changed, and so has the Foundation. Now in our third decade, and still growing, we steadfastly maintain our commitment to the dynamic, contrarian, forward-looking vision of the late Sir John Templeton.

“We have tried to make a much clearer link, for potential grantees and the public at large, between my father’s distinctive philanthropic vision and the grantmaking of the Foundation. We want to let Sir John be Sir John!”

and excitement about the future. We at the Foundation live by Sir John’s motto—“How little we know, how eager to learn”—and I am confident that in these pages, you will discover a range of initiatives through which humankind is learning more about itself and the astonishing universe that is our common home.



Dr. Jack Templeton
President and Chairman

Because Sir John was never satisfied with the status quo, we at the Foundation announced this year a comprehensive restructuring of our grantmaking system. We have tried to make a much clearer link, for potential grantees and the public at large, between my father’s distinctive philanthropic vision and the Foundation’s grantmaking. Put simply, we want to let Sir John be Sir John!

We divided the Foundation’s grantmaking into five Core Funding Areas: Science & the Big Questions, Character Development, Freedom & Free Enterprise, Exceptional Cognitive Talent & Genius, and Genetics. We established more than a dozen 2010 Funding Priorities, a set of particularly compelling topics on which we focused the attention of potential researchers, and we created a more efficient and user-friendly application process for potential grantees.

I am proud to present the 2010 Capabilities Report of the John Templeton Foundation. In these pages, you will glimpse the great variety of projects supported by the Foundation, and you will come to share, I hope, our passion



Our Philosophy of Grantmaking

Our high aspirations can be achieved only through the vision, passion, and action of extraordinary grantees around the world. We are in the business of actively “talent scouting” for people and projects of exceptional promise in our Core Funding Areas.

We are investors, not just donors.

We seek high-potential projects likely to generate a significant return on investment, in the sense of impact relative to the resources invested. This “return” belongs to our grantees and to the world, in the form of new discoveries and breakthroughs, new ways of looking at old problems.

We are especially interested in bold ideas that cross disciplinary boundaries to engage the Big Questions.

The division of labor and increasing specialization in most fields mean that some of the most interesting, difficult, and profound questions do not get addressed. We try to give great minds the space and resources to stretch their imaginations. We want to work with contrarians, with intellectual entrepreneurs.

We want our grantmaking process to be as rigorous, systematic, and un-bureaucratic as possible.

We have an obligation to be good stewards of the Foundation’s resources, so we work hard to ensure that we make fair and appropriate decisions. This requires detailed grant proposals and comprehensive expert review. At the same time, we have tried to design an application process that is as transparent and efficient as possible. We recognize and appreciate the “sweat equity” of grant applicants.

We aim to be a catalyst that transforms careers and sparks innovation.

We are fortunate to be able to assist many highly gifted people and distinguished institutions around the world. Whenever possible, we try to get involved early enough in people’s careers that we can make a big difference in their work and allow them to realize their fullest potential.

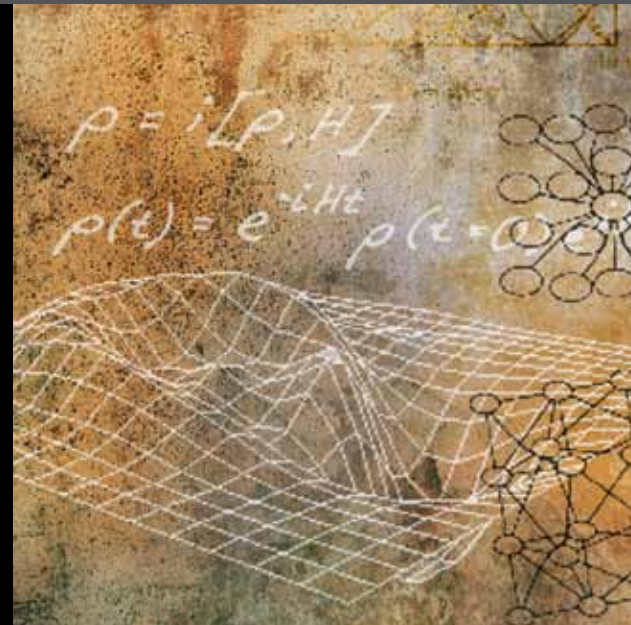
In the charter establishing his Foundation, the late Sir John Templeton set out his philanthropic intentions under several broad headings.

These **Core Funding Areas** continue to guide our grantmaking as we work to find world-class researchers and project leaders to share in our pursuit of Sir John's dynamic, contrarian, forward-looking vision.

www.templeton.org/what-we-fund/core-funding-areas

Our Core Funding Areas cover the full range of the Foundation's activities and grantmaking. Science & the Big Questions is the largest of these Core Funding Areas and is further divided into several subfields. The grants described in the following pages are a selection of the Foundation's giving and are not meant to be exhaustive. They show the breadth and range of the Foundation's work.

A number of topics—including creativity, freedom, gratitude, love, and purpose—can be found under more than one Core Funding Area. The Foundation welcomes projects that bring together these overlapping elements, especially by combining the approaches of different disciplines.



Science & the Big Questions



Character Development



Freedom & Free Enterprise



Exceptional Cognitive Talent & Genius



Genetics

“Possibly, we are a new beginning, the first creatures in the history of life on earth to participate consciously in the ongoing creative process.”

Sir John Templeton

SIR JOHN TEMPLETON STIPULATED that most of the Foundation’s resources would be devoted to research (and disseminating the results of research) about the “basic forces, concepts, and realities” governing the universe and humankind’s place in the universe. What did he mean by “basic forces, concepts, and realities”?

Sir John’s own eclectic list featured a range of fundamental scientific notions, including complexity, emergence, evolution, infinity, and time. In the moral and spiritual sphere, his interests extended to such basic phenomena as altruism, creativity, free will, generosity, gratitude, intellect, love, prayer, and purpose. These diverse, far-reaching topics define the boundaries of the ambitious agenda that we call the Big Questions. Sir John was confident that, over time, the serious investigation of these subjects would lead humankind ever closer to truths that transcend the particulars of nation, ethnicity, creed, and circumstance.

In posing the Big Questions, Sir John stressed the need for humility and openness, and he saw the possibility of important contributions from various modes of inquiry. He especially wished to encourage researchers in the natural and human sciences to bring their rigorous methods to bear on the sorts of subjects that he identified, but he was also enthusiastic about the insights that might come from new approaches in philosophy and theology. Whatever the field, he expected research supported by the Foundation to conform to the highest intellectual standards.

For Sir John, the overarching goal of asking the Big Questions was to discover what he called “new spiritual information.” This term, to his mind, encompassed progress not only in our conception of religious truths but also in our understanding of the deepest realities of human nature and the physical world. As he wrote in the Foundation’s charter, he wanted to encourage every sort of opinion leader—from scientists and journalists to clergy and theologians—to become more open-minded about the possible character of ultimate reality and the divine.

www.templeton.org/what-we-fund/core-funding-areas/science-and-the-big-questions

“We want scholars and scientists who think about the world one way to work with peers who may see things differently. Are there points of agreement? Are there ways for them to work toward a more complete picture of reality? This is what can be achieved when we reach across our familiar disciplines and ask the Big Questions.”

Dr. Jack Templeton
President and Chairman

The Foundation has honored Sir John’s vision of the Big Questions by supporting a wide range of research projects, as well as other activities of a more practical or educational purpose, in the following areas:

Mathematical & Physical Sciences

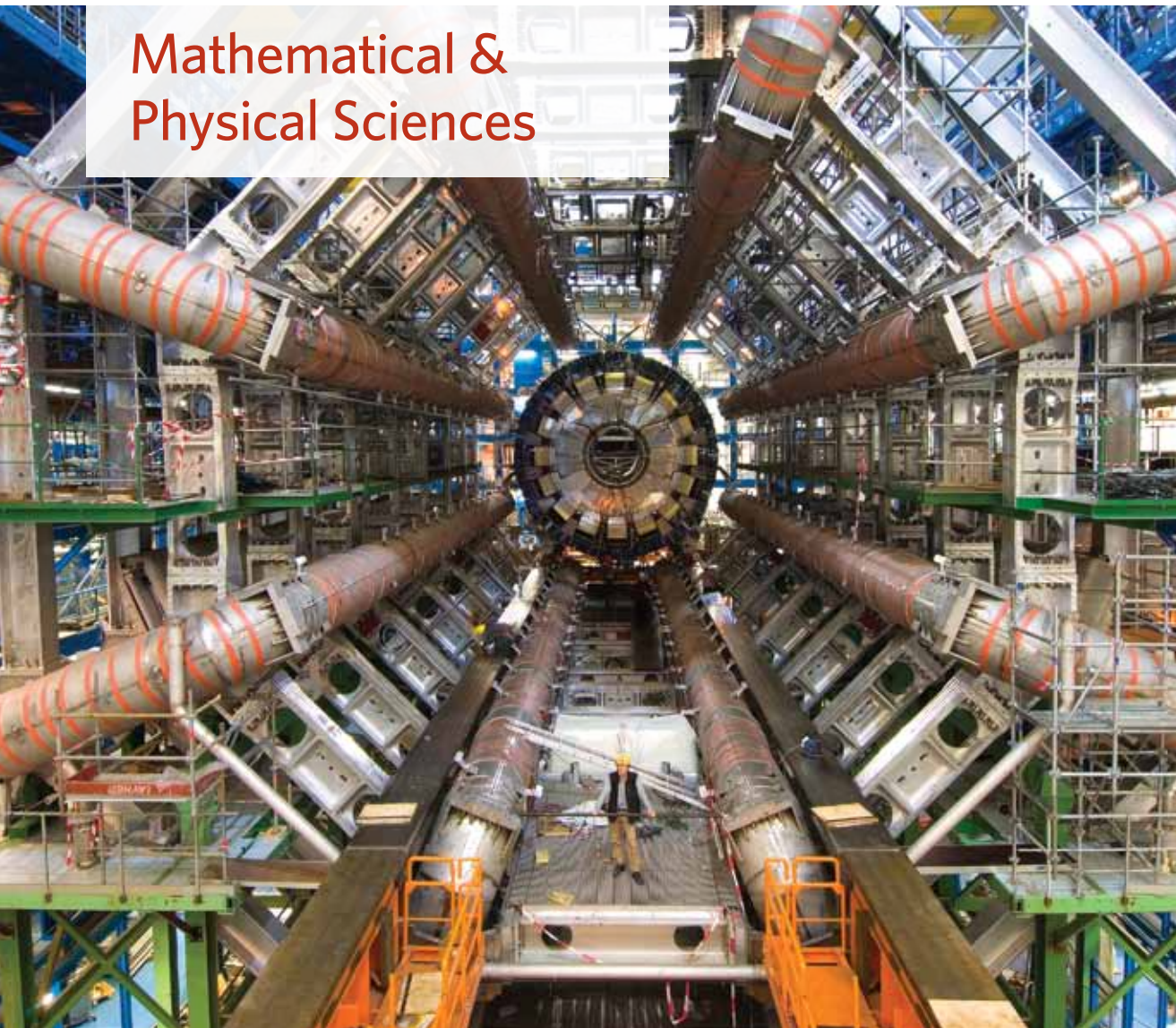
Life Sciences

Human Sciences

Philosophy & Theology

Science in Dialogue

Mathematical & Physical Sciences



On the Cutting Edge of Physics

MIT PHYSICIST MAX TEGMARK became a scientist because he wanted to explore Big Questions about the nature of reality. Now, as scientific director of the Foundational Questions Institute (FQXi), he is able to encourage and fund some of the world's most creative physicists and philosophers of physics. "The Foundational Questions Institute's goal is to support science in an unusual way. We like to push more cutting-edge, high-risk ideas," says Tegmark. Many mind-bending, speculative questions have entered the domain of physics in recent decades. FQXi's mission is to help scientists interested in exploring these issues to follow their curiosity, often into uncharted territory. Hyung Choi, a physicist and the Foundation's director

FQXi: Foundational Questions in Physics and Cosmology
Grant Amount: \$8,812,078
supports research grants, mini-grants, contests, and conferences.
www.fqxi.org

of mathematical and physical sciences, notes that few FQXi projects would receive funding from traditional sources because its work tends to push the boundaries

of physics "in a more metaphysical and philosophical direction." FQXi is even open to physicists with good ideas who work outside the mainstream. As FQXi's Anthony Aguirre, a University of California-Santa Cruz physicist, says, "There are people who are capable of doing interesting work but who aren't part of the establishment. They deserve attention and support too."



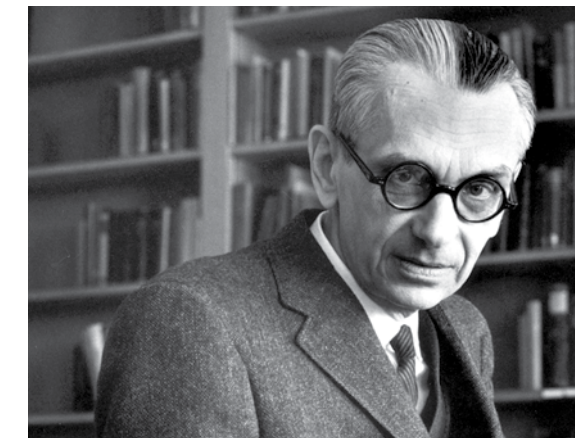
East and West Looking Skyward

IN 2009, THE FOUNDATION EMBARKED on its first major initiative in China, teaming with the National Observatories of the Chinese Academy of Science for a joint research program in astronomy, astrophysics, and cosmology. The program provides funding for proposals from Chinese scientists working in China on projects related to the Big Questions in space studies. The collaboration was announced at the 2008 New Vision 400 conference in Beijing, which marked the 400th anniversary of Dutch glassmaker Hans Lippershey's invention of the telescope. The conference and the research project that emerged from it celebrate the history of the telescope in advancing scientific discovery, which can take off in surprising directions

New Vision 400: Engaging Big Questions in Astronomy and Cosmology Four Hundred Years after the Invention of the Telescope
Grant Amount: \$1,819,480
www.nv400.org

when new technologies lead to new perspectives. University of Chicago astrophysicist Donald York, a co-administrator of the program (with Peking University astronomer Jiansheng Chen), says that the conference examined

different views of reality in Eastern and Western cultures. He expects the collaborative work being done by Chinese and Western scientists under the auspices of New Vision 400 to result in new ideas and new approaches to investigating the origins and purpose of the universe.



Pushing the Boundaries of Mathematics

THE GREAT LOGICIAN, MATHEMATICIAN, and philosopher Kurt Gödel (1906-78) made a specialty of investigating the most difficult regions of advanced mathematics. In recognition of his genius, and as part of a multi-year celebration of the 100th anniversary of his birth, the Kurt Gödel Society of Vienna announced in 2008 the first winners of five Kurt Gödel Centenary Research Fellowships. Winners of the stipends—two Ph.D. fellowships, two post-doctoral fellowships, and one unrestricted fellowship—were a globally diverse group of scholars doing visionary work in pure mathematics. The Gödel Fellowships are meant to support original research in the foundation of mathematics, a field that Dr. Jack Templeton, speaking to the Vienna colloquium, vowed

Gödel Centenary Research Prize Fellowship
Grant Amount: \$1,408,480
www.logic.at/goedel2006

would receive strong Foundation support. The fellowships are intended to carry forward the legacy of Gödel, whose

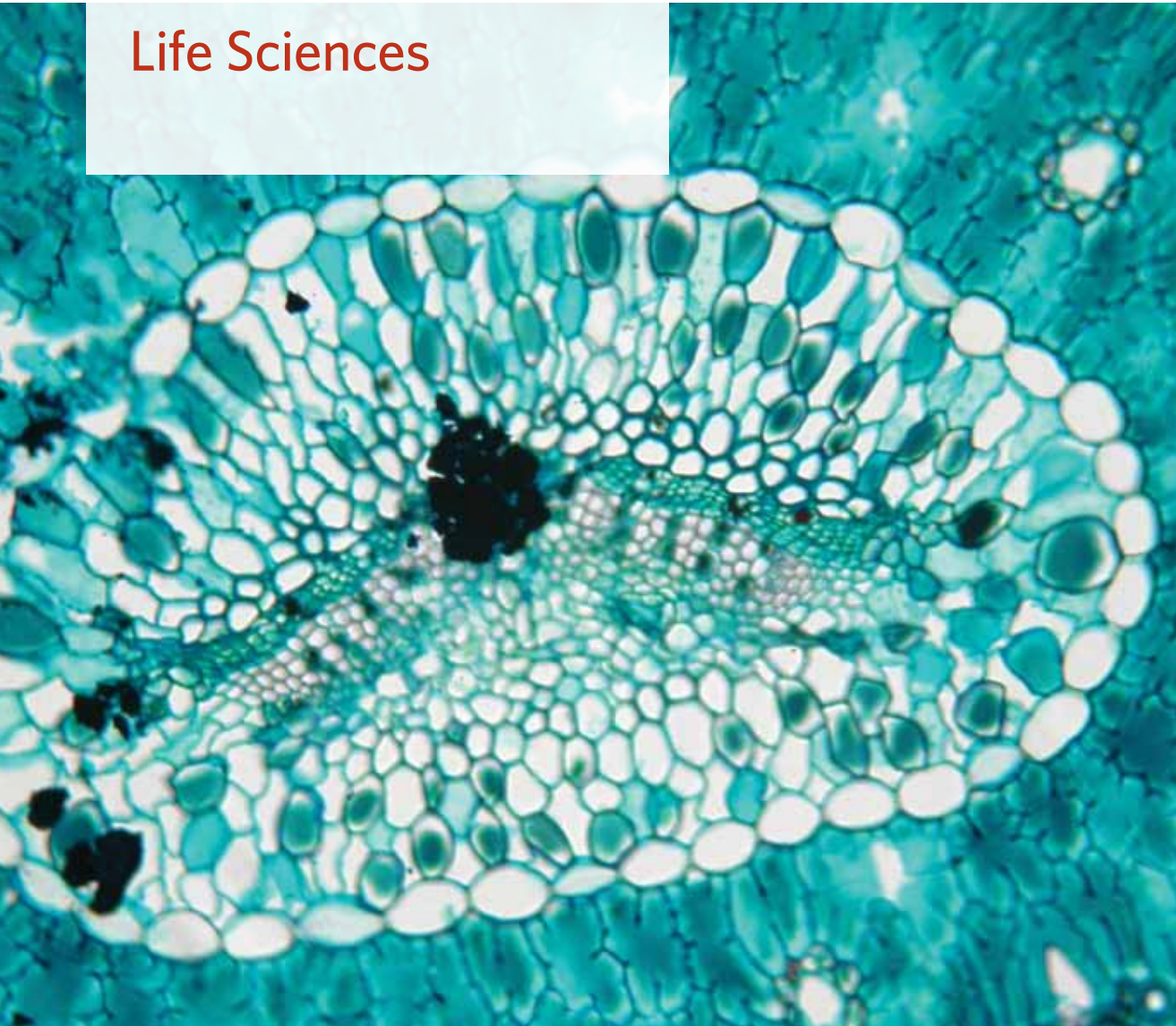
works exemplify deep insights and breakthrough discoveries in mathematical logic, with a profound impact on the philosophy of mathematics. As the Foundation's Hyung Choi put it, the Gödel Fellows are staking out new territory. "They are pushing the boundaries of math, and even its fundamental foundations and philosophical ends." The second Gödel competition is now under way, with the new fellows to be named in 2011.

"Sir John was clearly very interested in exploring the deepest questions about the ultimate nature of reality and time. He wanted to support rigorous scientific research on these questions, with no strings attached."

Max Tegmark
*Massachusetts Institute of Technology
Foundational Questions Institute*

The Foundation supports innovative projects that focus on foundational questions in mathematics or that seek a deeper understanding of the nature of reality within the realm of physics, cosmology, astronomy, chemistry, or other physical sciences. Projects that are unlikely to be supported by conventional funding sources are especially encouraged.

Life Sciences



The Next Revolution in Biology

“IN EVERY FIELD OF SCIENCE, when it’s successful, you think you understand all of it,” says Martin Nowak, Harvard University professor of mathematics and biology. “In classical mechanics,” he explains, “there was a time when physicists thought, ‘Well, that’s all there is. If I know the place of the particles in the universe, I can predict the future.’ But then came quantum mechanics and relativity theory. There was a total revolution.” Nowak is trying to launch another revolution, this time in evolutionary biology.

Under his tutelage, researchers will be able to explore some of the Foundational Questions in Evolutionary Biology (FQEB) that have yet to be answered. Evolution tells us how life developed over time, but it says nothing about how life originated. When, and how, did chemistry finally give rise to biology? And what are the natural laws of evolutionary change?

Established in 2009 to mark the Darwin double anniversary (Darwin’s 200th birthday and the 150th anniversary of the publication of *On the Origin of Species*), FQEB offers fellowships for scholars in a variety of fields whose work has significant philosophical implications for evolutionary biology and, more broadly, scientific understanding.

Foundational Questions in Evolutionary Biology (FQEB)
Grant Amount: \$10,500,000
www.fas.harvard.edu/~fqeb/

answered. Evolution tells us how life developed over time, but it says nothing about how life originated. When, and how, did chemistry finally

“Biologists began to realize some time ago that there is not only competition with individuals, there is also cooperation. So why would you help a competitor? Why would you pay a cost to benefit the competitor? This is the fundamental question in studying the evolution of cooperation.”

Martin Nowak
Harvard University
Foundational Questions in Evolutionary Biology



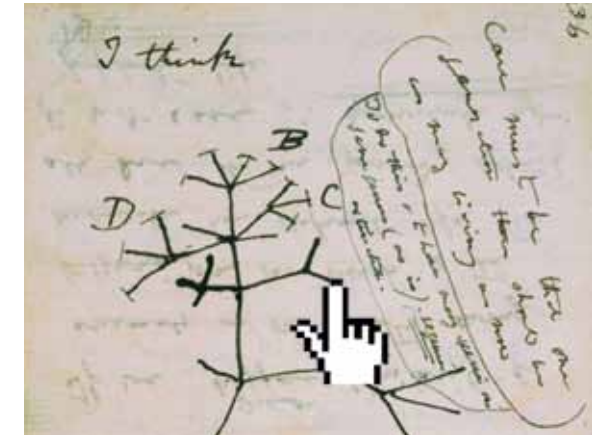
A Neolithic Time Machine

STANFORD ARCHEOLOGIST IAN HODDER describes it as “a great mound 70 feet high and about 750 feet wide, made up of mud-brick houses built on top of each other.” His anthropologist colleague Harvey Whitehouse calls it a “time machine.” They are talking about a Neolithic site called Çatalhöyük (pronounced cha-tal-HU-yuk) in central Turkey, where Hodder has been directing work since 1993. Thanks to Foundation support, he expanded his research to include scholars from a variety of disciplines, including anthropology, religious studies, philosophy, and sociology. Many houses on the 9,500-year-old site feature skeletons buried beneath the floors—clear evidence that there was ritual religious life among the inhabitants. Hodder’s team

Religion as the Basis for Power and Property in the First Civilizations: Analysis of the Findings at Çatalhöyük, Turkey
Grant Amount: \$2,353,250 supports two separate grants. Conclusions presented in four edited volumes and at a conference.
www.catalhoyuk.com

is trying to understand how the emergence of religion affected ideas of property and power in the earliest civilizations. Paul Wason, the director of life sciences at the Foundation, describes the Çatalhöyük project

as an important effort to solve an old conundrum: “Do religions change mainly to adapt to changes in other areas of culture? Or are there times when religions change for some other reason—such as being open to new knowledge and ideas—and so become the source of innovation in other aspects of civilization?”



Converging On The Web

IN 2010, CAMBRIDGE UNIVERSITY paleobiologist Simon Conway Morris used grant support from the Foundation to launch Map of Life, a comprehensive Web resource for students, academics, and other readers curious to learn more about evolutionary convergence, the idea that all life evolves toward similar adaptations, but through very different routes. Map of Life intends not only to inform the public about convergence, but also to remind them that while the fact of evolution is beyond dispute, evolution’s pathways are more constrained than is generally thought to be the case. Through this engagingly interactive and scientifically rich Internet site, Conway Morris and his Cambridge-based team are eager to raise the profile of convergence in public

The Map of Life: A comprehensive Web resource for evolutionary convergence
Grant Amount: \$983,253
www.mapoflife.org

discussion. “Convergence suggests, at least to some persons, that evolution is not a completely random, patternless process and that if you could rerun the history of life

it would not be unrecognizably different each time,” says Andrew Rick-Miller, a senior program officer at the Foundation. “For Sir John’s interest in big questions about purpose and meaning, including the possibility you could discern them in biological systems, the prevalence of convergence is potentially very fruitful.”

The Foundation supports projects investigating the evolution and fundamental nature of life, human life, and mind, especially as they relate to issues of meaning and purpose. Projects are welcome from a variety of disciplinary perspectives, including the biological sciences, neuroscience, archeology, and paleontology.

Human Sciences



The Foundation supports projects that apply the tools of anthropology, sociology, political science, and psychology to the various moral and spiritual concepts identified by Sir John Templeton. These include altruism, creativity, free will, generosity, gratitude, intellect, love, prayer, and purpose.



“Hot Religion” in Africa

IN 1900, THREE-QUARTERS OF AFRICANS identified themselves as followers of traditional African folk religion. Christianity and Islam were marginal faiths. Today, however, about 90 percent of Africans say they are either Christian or Muslim, according to a 2010 study by the Pew Research Center’s Forum on Religion and Public Life.

The Pew-Templeton study of nineteen sub-Saharan African nations provides an in-depth portrait of the continent’s religious trajectory. “There is no god-forsaking place in Africa,” says Luis Lugo, the Pew Forum’s director, who notes that Africa is, by far, the world’s most religious continent. The style of religion

The Pew-Templeton Survey of Religion in Africa
Grant Amount: \$793,000
www.pewforum.org/executive-summary-islam-and-christianity-in-sub-saharan-africa.aspx

practiced in Africa is “very intense, immediate and personal,” the report found. Lugo calls this “hot religion.” Despite widespread mutual tolerance, the survey documented plenty of tension between the two faiths, particularly along the fault line where the heavily Muslim north meets the heavily Christian south. The Africa survey is the second major study from the Pew-Templeton partnership. The first, issued in 2006, was a ten-country report on Pentecostal Christianity. Next up: a major study of global Christianity and a comprehensive survey of the Muslim world.



China’s Religious Turn

FAITH ABHORS A VACUUM—or so one might conclude from events in China since 1979, when the government lifted some of the restrictions on organized religion. “Religions have been growing, some really fast, especially Protestantism,” says Fenggang Yang, a sociologist and director of the Center on Religion and Chinese Society (CRCS) at Purdue University. Buddhism, Taoism, and Chinese folk religion have also experienced a revival. With support from the Foundation, scholars both inside and outside China will be exploring not only the causes of this growth but also its effects on Chinese society.

In 2010, Yang and his team called for research proposals on spirituality in China. Finalists submitted plans for empirical studies covering all five officially recognized Chinese religions—Buddhism, Taoism, Islam, Catholicism, and Protestantism—as well as Confucianism and folk religion. Winners will receive training on research methods and grants to support their work. China’s tumultuous economic and social transformation will crucially affect the history of the world in the 21st century. The CRCS project seeks to document and to explain how faith and spirituality are affecting this cultural revolution.

Chinese Spirituality and Society Program: A Research and Training Initiative
Grant amount: \$1,998,426 for RFP competition.
www.purdue.edu/crcs



Defining Wisdom

MODERN PEOPLE HAVE MORE INFORMATION than ever before at their fingertips. Yet they seem to be no more thoughtful or prudent than previous generations. This paradox lies at the heart of a research project called Defining Wisdom. Based at The University of Chicago, the four-year initiative examines the idea of wisdom from a variety of disciplinary perspectives. The project includes scholars of economics, philosophy, theology, neuroscience, classics, and psychology. John Cacioppo, who directs the university’s Center for Cognitive and Social Neuroscience, is overseeing the effort, in conjunction with the divinity school and the psychology department. “Science can give us answers to well-articulated questions, but it doesn’t really tell us which

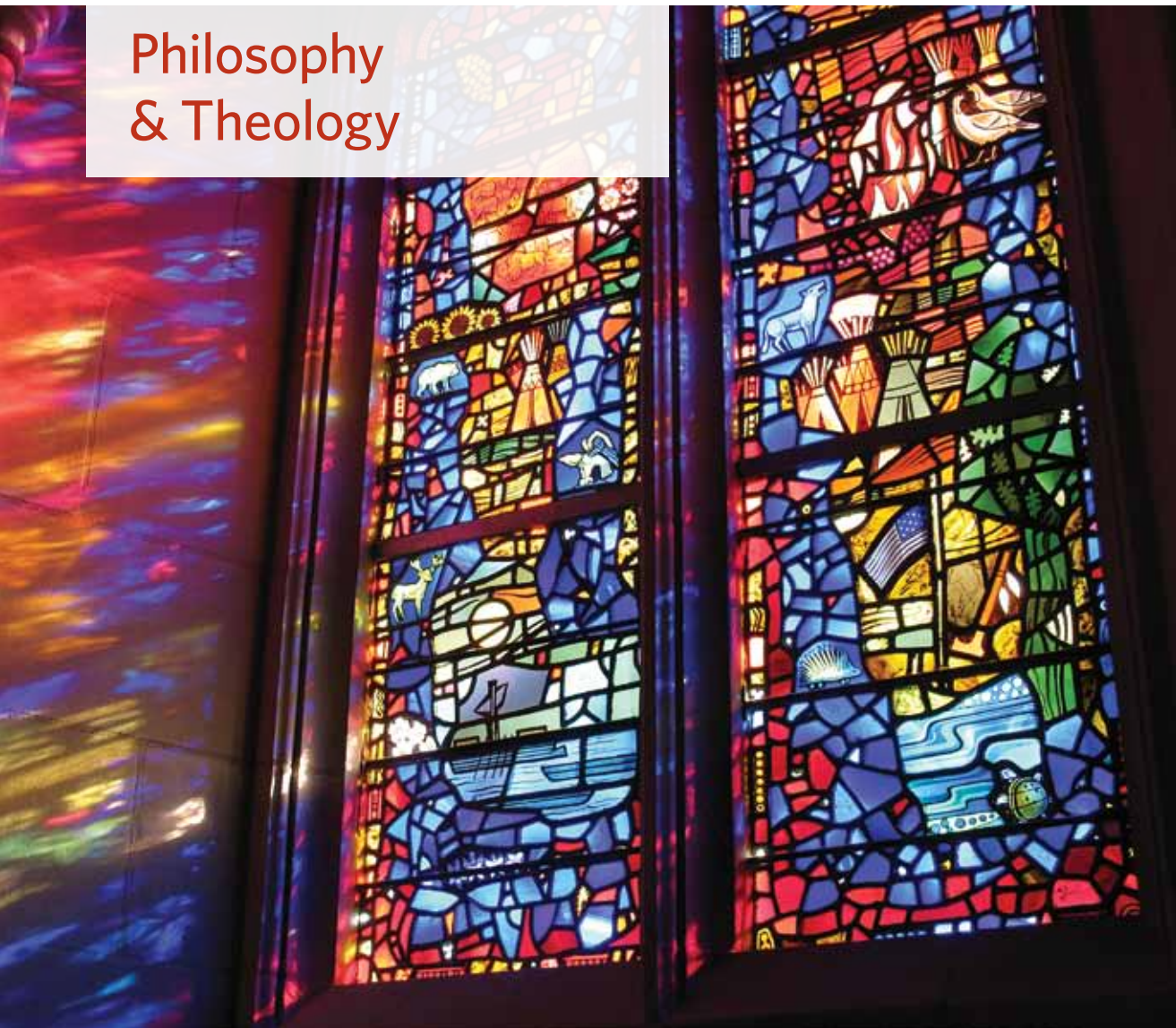
Defining Wisdom: Advancing New Knowledge on the Nature and Benefits of Wisdom
Grant Amount: \$2,962,617 supports 23 research programs.
www.wisdomresearch.org

are the right values,” he says. Wisdom research seeks to reappraise complex questions previously thought to be beyond science’s ken. The Defining Wisdom project was developed at the request of Sir John Templeton. According to the Foundation’s Barnaby Marsh, “Sir John recognized that there has been an explosion in human knowledge and that we have come to understand a lot of things better. But he was troubled by the fact that all this knowledge has not necessarily made us wiser.”

“Questions like wisdom and virtue cannot be addressed by solitary scientists. The implications and relevant evidence are simply too broad. It has to be studied by massively interdisciplinary scientific teams that include humanities scholars. That is a real opportunity for science in the 21st century.”

John Cacioppo
The University of Chicago
Defining Wisdom: Advancing New Knowledge on the Nature and Benefits of Wisdom

Philosophy & Theology



The Foundation supports projects that attempt to develop new philosophical and theological insights, especially (but not only) in relation to advances in scientific understanding.



The Puzzle of Free Will

DO HUMAN BEINGS POSSESS FREE WILL? The question has vexed philosophers and theologians for ages. In recent decades, science has had its say too. Neuroscientists point to research suggesting that the subconscious mind acts before the conscious mind, making it highly unlikely that humans have free will. Many social psychologists contend that free will is largely an illusion because environmental factors powerfully condition decision-making. But for philosopher Alfred Mele, the question is far from settled. A professor at The Florida State University, Mele has been studying the scientific and philosophical literature on free will for decades. Thanks to a four-year Foundation grant, Mele and his colleagues will be able

Free Will: Empirical and Philosophical Investigations
Grant Amount: \$4,401,589 supports research on science, theoretical, and theology underpinnings.
www.freewillandscience.com

to encourage scholars to probe even more deeply into the scientific, philosophical, and theological aspects of free will. Mele is especially eager to support proposals that transcend

boundaries between the sciences and the humanities and allow researchers to consider free will in a more holistic, empirically grounded context. Mele concedes that foundational questions in free will won't be solved in four years, but he nevertheless intends this project "to push us along the way so that we can speed up our understanding."

"If it were discovered that free will really is an illusion, we would have to learn to live with that news and its consequences. But I doubt that we will make any such discovery. Belief in free will has the attractive quality of being both true and morally beneficial."

Alfred Mele
The Florida State University
Free Will: Empirical and Philosophical Investigations



Character Counts After All

RECENT DECADES HAVE WITNESSED A REBIRTH of academic interest in character, especially in the fields of psychology, philosophy, and theology. Do character traits such as honesty and compassion really exist? If so, what is their underlying psychological nature? Are the virtues the most reliable guide to ethical theory? How can we improve individual character? Researchers are now applying new insights to investigate these and related questions—and at Wake Forest University, humanities professors have been pioneering an interdisciplinary approach. The Character Project, based in Wake Forest's philosophy department, endeavors to bring the combined approaches of the theology, psychology, and philosophy to the study of the Big Questions of character, which is central to human

The Character Project: New Frontiers in Psychology, Philosophy and Theology
Grant Amount: \$3,676,273 will support between 14-20 Request for Proposals.
www.thecharacterproject.com

flourishing. The Character Project includes a three-year research effort, as well as a funding competition to seed character research among younger scholars. Philosopher Christian Miller, who directs the

three-year program, says that character really is a key to unlocking the mysteries of the human personality. "When we think about how to understand human behavior," he says, "one of the first things we tend to mention is someone's character and character traits such as honesty, courage, or laziness." That is an old-fashioned concept that has new scholarly resonance today.



Tomorrow's Top Theologians

ADMINISTERED BY THE UNIVERSITY of Heidelberg's Research Center for International and Interdisciplinary Theology, the Theological Promise awards recognize rising talent in theology and related fields, with annual awards to the twelve young scholars who submit the best doctoral dissertation or first post-doctoral book related to the topic of God and spirituality. The contest is open to applicants from all religious traditions. Past winners have included scholars in theology, the natural sciences, ethics, history, and philosophy. A global panel of judges, under the direction of Heidelberg theologian Michael Welker, selects the best papers annually. Recent winners, each of whom receives a \$12,000 prize, include scholars writing about such diverse topics

John Templeton Award for Theological Promise
Grant Amount: \$2,153,000 awards 60 prizes over five years.
www.fit.uni-heidelberg.de/award

as deification in early Orthodox Christianity, Christian hope and humanism, love as a response to Nietzsche's critique of Christianity,

interdisciplinary approaches to understanding the development of Jewish law, religion and democracy, God and personality, and spirituality in the poetry of Elizabeth Barrett Browning. The winners, who hail from Europe, Asia, and North America, gather each spring in Heidelberg for a two-day colloquium. The Award program also gives each winner up to \$10,000 to support travel and lecturing.

Science in Dialogue



The Foundation has a strong interest in projects that bring one or more scientific disciplines into a mutually enriching discussion with theology and/or philosophy, whether for a scholarly audience or the public at large.



Big Science in the Big City

SINCE ITS FOUNDING IN 2008, the annual World Science Festival has drawn huge crowds during its June run in New York City. Over 183,000 people turn out for dozens of WSF events, including five Big Ideas series sponsored by the Foundation, a founding benefactor.

In 2010, Templeton-funded events included “Mind and Machine: The Future of Thinking,” which focused on the interweaving of human thought with technology. Another panel, “The Limits of Understanding,” discussed the epistemological implications of Kurt Gödel’s revolutionary theorems. A third panel, “Back to the Big Bang: Inside the Large Hadron Collider,” explored the possibilities of the world’s biggest physics machine.

The World Science Festival: Big Ideas Series
Grant Amount: \$1,350,000
www.worldsciencefestival.com

“Faith and Science” panel considered common ground between faith and science. And “Food 2.0: Feeding a Hungry World” pondered how advances in technology can help to increase food production.

Physicist and festival co-founder Brian Greene said that the public’s overwhelming response shows that “many people are searching for meaning. They want to know why we are here and how we got here. It’s wonderful to tap into these age-old questions and to give people a sense of where science can take us for answers.”

“The World Science Festival shows that there is an appetite for science as long as it is inspiring and compelling and understandable. It gives people a sense of connecting with some great ideas.”

Brian Greene
Columbia University
The World Science Festival



Meditation’s Practical Power

ADAM ENGLE ADVOCATES blending what he considers “first-person science”—knowledge based in the subjective experience of contemplative Buddhism—and “third-person science,” or knowledge derived from empirical observation. With grant support from the Foundation, Engle, who directs the Mind & Life Institute, hosts an annual summer retreat in which hundreds of laboratory researchers, scholars, and Buddhist practitioners come together to explore the intersection between contemplative religion and science. The Mind & Life Summer Research Institute focuses on the possibility of developing a secular, scientific foundation for introducing contemplative practices into public schools. The goal is not religious instruction, Buddhist or otherwise, but rather discovering ways to

Mind and Life Summer Research Institute and Francisco J. Varela Awards
Grant Amount: \$1,326,094
www.mindandlife.org

promote personal resilience and to decrease behavior that leads to educational and social failure. Scholars are slowly compiling a body of evidence showing that particular contemplative practices can lead to improved health, better cognitive and emotional skill development, greater happiness, and increased social harmony. “Sir John was very interested in how you can use your mind and character to change things,” said Andrew Rick-Miller, a senior program officer at the Foundation, adding that the Institute’s work to bridge the gap between religious practice and the scientific study of its effects is vital.



Krista Tippett on Being

WHEN KRISTA TIPPETT BEGAN her public radio show *Speaking of Faith* in 1999, skeptical producers said that questions about religion and meaning were too hard for the public to deal with. They were wrong. “The bigger the idea, the more engaged listeners would be,” Tippett said. Thanks in part to the ongoing Foundation support, Tippett has been able to introduce more of those ideas into public conversation. *Speaking of Faith*, changed its name to: *Krista Tippett on Being*. It is heard on over 200 public radio stations and globally via podcast. Because she finds strident argument within science and religion debates so unsatisfying, Tippett works hard, in her words, “to go behind the headlines.” Tippett’s 2010 book, *Einstein’s God*, collected her radio interviews

Speaking of Faith: New Conversations on Forgiveness, Spirituality and Health, Science and Religion, and Spiritual Development
Grant Amount: \$840,000
being.publicradio.org

with scientists. Far from making religion null and void, said Tippett, scientific discovery is driving theological inquiry to new places, and in some instances—such as forgiveness research—forcing believers to take their faith’s teachings more seriously. Tippett has spoken to a number of nonreligious scientists about spiritual meaning, and their answers reveal, she says, that “it is less and less important in these conversations whether scientists themselves are personally religious or not.”

Character Development

“Every moment of our life we are molding character, and it is our character that determines our destiny.”

Sir John Templeton



“WHEREVER WE FIND OURSELVES IN LIFE, whatever the circumstances, whatever habits may be influencing our decisions,” Sir John Templeton wrote, “we can transform each situation into a learning and growing experience. We can determine how to be the masters of our habits so that our habits can be useful servants to us.” For Sir John, such self-awareness and personal growth depended on a deeper understanding of the circumstances in which good character flourishes and of the roots of good character in human nature, whether understood from a scientific, philosophical, or religious point of view.

The Foundation supports a broad range of programs, publications, and studies focused on the universal truths of character development, from childhood through young adulthood and beyond. The qualities of character emphasized by Sir John in the Foundation’s charter include awe, creativity, curiosity, diligence, entrepreneurialism, forgiveness, future-mindedness, generosity, gratitude, honesty, humility, joy, love, purpose, reliability, and thrift.

We remain open to other possibilities for extending our activities in the area of character development, especially projects that deal with the crucial relationship between culture (as expressed in beliefs, values, and worldview) and behavior. As Sir John emphasized in the “Laws of Life” that he saw as the key to character development, “When you rule your mind, you rule your world.”

www.templeton.org/what-we-fund/core-funding-areas/character-development

“Character is at the heart of every major thing we do—how we define relationships, how we arrange the economy, how we treat each other internationally. It is related to respect for each other, human dignity. So I can’t think of anything to focus on that would have a bigger impact on virtually every aspect of life.”

Kent R. Hill

Vice President for Character Development

Character Development



Growing Up in Today's UK

"WE WANT TO FIND OUT WHAT MAKES these kids tick, in the sense of moral formation, character, values, and how they see themselves in the community." So said James Arthur, professor of education and civic engagement at the University of Birmingham in England at the 2007 launch of Learning for Life. A research project on the moral values of British youth, Learning for Life was supported by a three-year Foundation grant. It concluded in the fall of 2010 at the Oxford, England Templeton Foundation Board Meeting with the book launch of the final report, *Of Good Character*, which summarized the five research projects and offered practical insights into the character challenges facing young Britons —information that has been welcomed at

Learning for Life: Strengthening Character in the Civil Society of the United Kingdom
Grant Amount: \$2,973,874
www.learningforlife.org.uk

the highest levels of the British government. UK teens generally know right from wrong, researchers found, but often do not act on those convictions.

In one impoverished neighborhood, researchers found Muslims to be far more socially stable than non-Muslim whites. The team also discovered that primary school size makes a difference in moral development. "Sir John wanted people to think about these things empirically," said Kent Hill, vice president for character development at the Foundation. "He didn't want wishful thinking but hard research on where things are, so that we know what to do."



The Give and Glow Show

"THERE ARE 72,000 FOUNDATIONS IN AMERICA, and most people can't name one of them," says Michael Guillen, the chairman and president of Philanthropy Project, "but we can change that." Launched in 2007 with major support from the Foundation, Philanthropy Project aims to raise awareness about the extent and variety of philanthropic activity in America—and to inspire more Americans to get involved.

Guillen and his team launched a "give and glow" video series on AOL, engaging top film students to tell the stories of America's smaller philanthropies. And they are working on *Little Red Wagon*, a full-length feature movie. It is the story of Zach Bonner, who at

Promoting a Culture of Generosity
Grant Amount: \$10,000,000
www.aolnews.com/philanthropy

age 7 began to gather supplies for Floridians victimized by Hurricane Charlie. Using his little red wagon, he collected

and distributed the equivalent of 27 truckloads of provisions. Principal photography for *Little Red Wagon* began in May 2010, with an expected 2011 nationwide release.

Foundation president and chairman Dr. Jack Templeton sees practical value in these films. He hopes that they will encourage Americans to be "proactive rather than passive or fatalistic" in the face of their neighbors' suffering and need.



What Ever Happened to Thrift?

WHEN TIMES GET HARD, people naturally become more thrifty. That is commendable, but it is not how Sir John Templeton wanted our culture to think about thrift. He encouraged people to value thrift not as a temporary response to hardship but as a basic virtue.

In 2003, the Foundation approached David Blankenhorn and his colleagues at the Institute for American Values in New York with the idea of putting together a major initiative on thrift. Since then, with support from the Foundation, Blankenhorn has completed several projects related to thrift as both a contemporary social and cultural need and an American virtue of long standing.

Thrift and American Culture: Exploring the Science and Practice of Thrift
Grant Amount: \$1,207,550
www.americanvalues.org
www.newthrift.org

One of these projects, a 2008 report entitled *For A New Thrift*, examined America's "debt culture" and explained how a "thrift ethic" can serve the aims of social reform. Blankenhorn explains that thrift does not mean being miserly or cheap. Rather, it concerns "the ethics and practice of wise use" and derives from the idea of "thriving." With recent economic turmoil forcing many Americans to rethink their financial situation, Blankenhorn and his colleagues have found an increasingly receptive audience.

"Thrift means making the wisest use of all of our resources, whether money or time or health. It stems from the principle of stewardship, the ethic that what we have is not really ours alone but that we hold it in trust for the whole community. We therefore have a responsibility to use it well to promote thriving for us and the people who are dependent on us."

David Blankenhorn
President, Institute for American Values
Thrift and American Culture: Exploring the Science and Practice of Thrift



Finding Purpose in Encore Careers

IN OUR YOUTH-CENTERED CULTURE, Marc Freedman points out, social innovation is often considered the exclusive province of idealistic young strivers. Freedman, founder and CEO of the San Francisco-based group Civic Ventures, says we must change our age-bound profile of social entrepreneurs. For the past four years, Civic Ventures has given out the Purpose Prize to men and women over the age of 60 who are taking on society's biggest challenges in their "encore careers." Since the program was launched with funding from the John Templeton Foundation and Atlantic Philanthropies, more than 200 social entrepreneurs have become Purpose Prize fellows, and almost 50 have been Prize winners, landing up to \$100,000 to support their innovative work.

The Purpose Prize: A Prize for Social Innovators Over the Age of 60
Grant Amount: \$8,148,322
www.encore.org/prize

These are people like Tim Hill, who is helping to resurrect the depressed economy in his rural North Carolina region by using the Internet to link farmers with chefs who want to buy their produce. California psychiatrist Judith Broder founded an organization to offer free, confidential psychotherapy to members of the armed services and their families. And Ohioan Ann Higdon started charter schools to help dropouts find a second chance in life by learning a trade.



Merit Beyond the Badges

IN 1910, CHICAGO PUBLISHER W.D. BOYCE started the Boy Scouts of America, which has served over 100 million American boys in the last century. As Scouting began its second hundred years this year, a Baylor University social science research team launched, with Foundation support, a major study of the movement. The goals? To provide an in-depth sociological profile of former Scouts, and to investigate the impact Scouting had on their character development and journey through life. Researchers hope to determine if the movement produced men who were happier, healthier, more virtuous, more civic-minded, and more successful in their careers. Initial findings are expected by the end of 2010, with complete findings due in 2012. Baylor

Merit Beyond the Badges: Eagle Scouts in Later Life
Grant Amount: \$992,000
www.isreligion.org/2010/04/hello-world

sociologist Byron R. Johnson, who co-directs the study with colleague Rodney Stark, reports that Scouting officials hope the research tells them how to stay relevant to boys in the 21st century. Preliminary data indicate the Scouts are doing surprisingly well, and that negative headlines of recent years are misleading. "Over 40 percent of American men we've surveyed participated in Scouting at some point in their lives," says Johnson. "That was far more than we expected."

Freedom & Free Enterprise



“Freedom fosters competition which yields progress.” Sir John Templeton

FOR SIR JOHN TEMPLETON, WEALTH CREATION was no accident of history, whether for the nations of the West or for the billions of people struggling for basic necessities in the developing world. Human societies could experience general prosperity, he believed, only when they recognized and established broad principles of freedom, competition, and personal responsibility. For him, individual freedom was the indispensable foundation of economic, social, and spiritual progress.

As one of the most successful investors of modern times, Sir John understood the enormous contribution that free markets and entrepreneurship could make to material improvement. As a student of classical liberalism, from Adam Smith to Milton Friedman, he also saw that, without economic freedom, individual freedom was fragile and vulnerable. The Foundation honors this profound vision by supporting a range of programs intended to liberate the initiative of individuals and nations and to establish the necessary conditions for the success of profit-making enterprise.

www.templeton.org/what-we-fund/core-funding-areas/freedom-and-free-enterprise

“Sir John saw the entrepreneur as the archetype of the free, creating, dynamic individual—the kind of person whose activities bring all sorts of benefits to the rest of society. Crucially, it is by pursuing a profit that the entrepreneur benefits himself, his family, and the people around him.”

Mauro De Lorenzo
Vice President for Freedom and Free Enterprise

Freedom & Free Enterprise



India's Path Forward

"THE INDIAN ECONOMY IS AT A CROSSROADS," says Columbia University's Jagdish Bhagwati, a leading authority on free trade and globalization. "India is moving from the completion of conventional economic reforms, such as removing industrial licensing requirements," to what he calls "second-generation reforms" in areas like health care and education. Just how Indian leaders should proceed is a question that Bhagwati and his Columbia colleague Arvind Panagariya will examine over the next few years. The two scholars have launched the Program on Indian Economic Policies at Columbia Business School. Leading university and think tank researchers in the U.S. and India will participate in the program's work, which is ultimately meant to inform and

influence policy in India. *Program on Indian Economic Policies: Free Trade, Democracy, and Entrepreneurial Development*
Grant Amount: \$3,500,000
www4.gsb.columbia.edu/chazen/indianeconomy

consequential than that of any other in the developing world because of the durability of Indian democracy. The project is a good fit for the Foundation," he said, "because it reflects Sir John's belief that freedom and free enterprise, taken together, are the best way to prevent poverty in future generations."

Pioneers of Prosperity

ANDREAS WIDMER BELIEVES that the expansion of entrepreneurship, not foreign aid, is the key to raising the standard of living in the developing world. Widmer, a co-director of the Massachusetts-based Social Equity Venture (SEVEN) Fund, traveled to Rwanda for the presentation of the 2008 Pioneers of Prosperity Africa Awards. The SEVEN Fund, whose core funding comes from the Foundation, helped to pick the six companies that received \$350,000 in prize money, including grand prize winner Superflux International Limited, a Nigerian printing company. Other winners included a Ugandan cleaning company and a Kenyan private health-care provider. The point of the competition, said Michael Fairbanks, the SEVEN Fund's other co-director, is to

"create role models—entrepreneurs who are building great companies, employing people, and eradicating poverty." In 2009, the Foundation supported the creation of a Pioneers of Prosperity Award for Central America. This year, the first winner of the \$100,000 regional prize was announced: Aduanera de Nicaragua, or ADENICA, an import-export logistics firm. Said Fairbanks: "People in industrialized nations don't need to tell poor countries what to do: all we need to do is find great entrepreneurs and give them rocket fuel."

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"Every region, whether poor or rich, has several forms of capital. The most important of these are the ones that you cannot see or measure: institutional knowledge and cultural assets. In other words, do you attach meaning to your life? Do you feel fatalistic and revere the past? Or do you feel self-determined and look forward to the future?"

Michael Fairbanks
Co-director SEVEN Fund
Pioneers of Prosperity



What Is Microfranchising?

BANGALORE'S SPOT CITY TAXI, an Indian business that started small in 1999, has become a major microfranchising success story. Why did SPOT work when so many other franchises in the "frontier markets" of sub-Saharan Africa and South Asia barely get off the ground? A 2010 research report by Dalberg Global Development Advisers provides some answers. Dalberg researchers found that familiarity with local conditions makes home-grown chains better positioned to operate in frontier markets. Plus, in microfranchising, the rule seems to be: *Keep it simple*. Because they are less dependent on favorable legal and policy environments, small franchises can be more agile in negotiating complex bureaucracies.

Steve Beck, the principal investigator on the project, was startled to discover how little research there was on microfranchising. The final version of the microfranchising report received the IFA Educational Foundation's Arthur Karp Research Award "for the best research paper on a subject of relevance and practical usefulness to the franchising community." The report is in keeping with the Foundation's commitment both to developing enterprise-based solutions to the problem of poverty and to making sure those solutions actually work.

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Getting Prizes Right

PRIZE-GIVING IS HARDLY A NEW TOOL for sparking competition and technological innovation. In 1714, the British Parliament established the Longitude Prize, which inspired the clockmaker John Harrison to develop the marine chronometer, thus greatly improving high-seas navigation. The Food Preservation Prize established by Napoleon resulted in the invention of the canning techniques that are still used today. What has changed, according to a 2009 report, "*And the winner is...: Capturing the promise of philanthropic prizes*," by McKinsey & Company's Social Sector Office, is the breadth and ambition of the international prize-giving sector.

Today there are 219 prizes worth more than \$100,000, with a total purse of some \$375 million. More than a quarter of them have been created since 2000, in part because of the rise of younger philanthropists, who tend to be more entrepreneurial in their giving. Whatever the model, the report concludes, successful prizes generally "match a clear goal with a relatively large number of potential solvers who are willing to absorb some risk." The report also emphasizes the importance of prize design, the selection process, and post-award activities—steps too often overlooked by enthusiastic newcomers to the sector.

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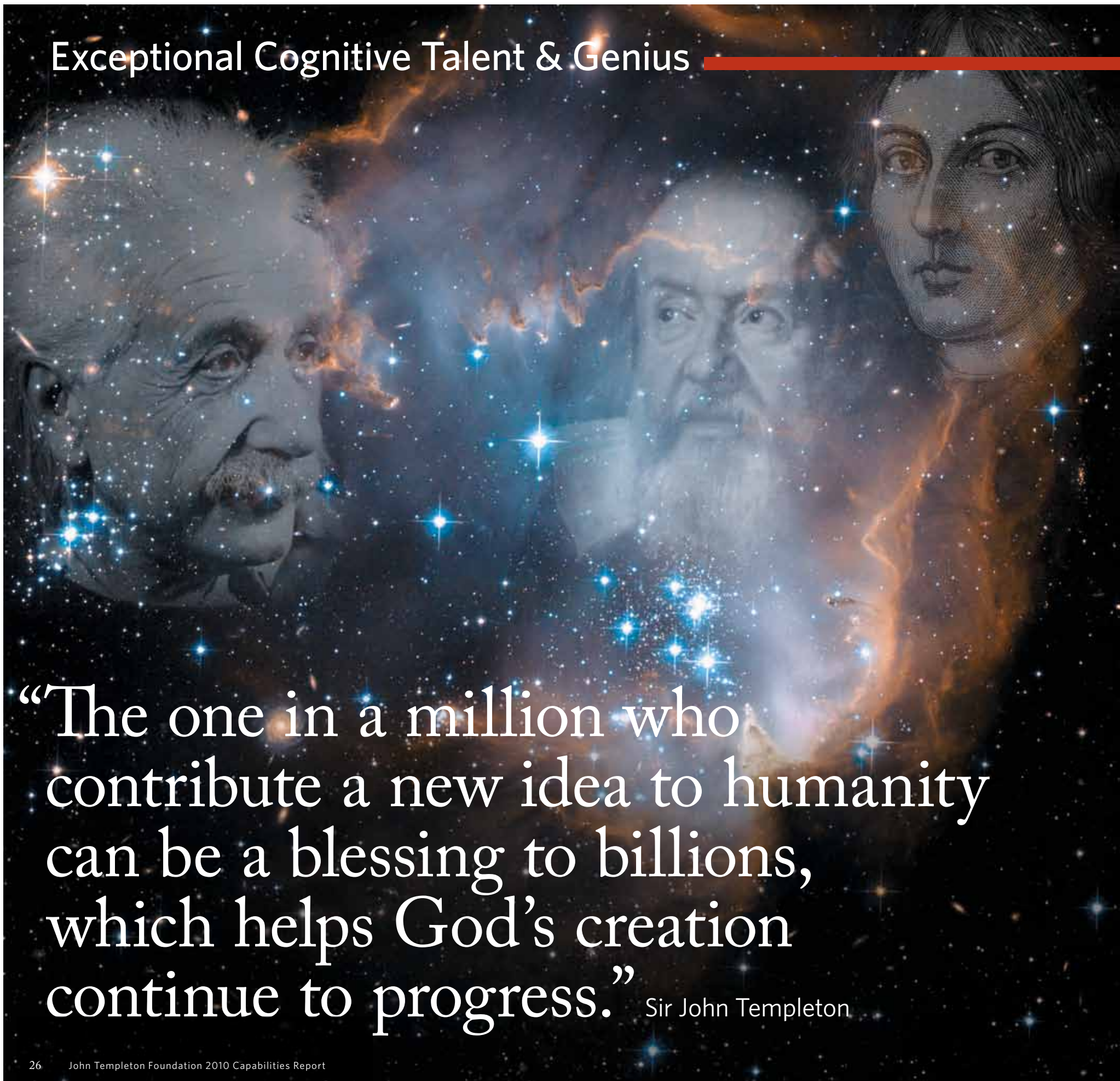
Abolitionism Today

WHEN MOST PEOPLE THINK OF SLAVERY, they imagine Africans brought in chains to antebellum America. But modern slavery is far more complex than the chattel servitude familiar to us from the history books. It includes debt-bondage, involuntary domestic servitude, sex trafficking, and shocking varieties of child enslavement. Free the Slaves promotes practical, effective, and sustainable strategies to end slavery worldwide, and also celebrates heroes of the latter-day global anti-slavery movement. At the organization's annual Freedom Awards ceremony, grassroots anti-slavery activists from around the world receive cash awards for their efforts combating domestic bondage in their homelands. Recent winners have come from India,

Cambodia, and Pakistan, where the poor—especially women and children—often endure enforced servitude. Winners were recognized for their work as part of grassroots anti-slavery organizations or as former slaves who used their freedom to help liberate others trapped in bondage. Free the Slaves also awards two Anne Templeton Zimmerman Fellowships, named in memory of Dr. Jack Templeton's sister, a physician and activist on behalf of international religious freedom and slavery abolition. Winners of the fellowships recently included two American activists who work to free sex slaves.

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Exceptional Cognitive Talent & Genius



“The one in a million who contribute a new idea to humanity can be a blessing to billions, which helps God’s creation continue to progress.” Sir John Templeton

“HISTORY ABOUNDS WITH STORIES of great minds that have gifted humanity with wonderful discoveries and inventions,” Sir John Templeton wrote. “Each discovery or invention began as a ‘seed idea’ in an open and receptive mind.” As Sir John saw it, genius was perhaps the greatest engine of material and spiritual progress and could be understood as a kind of transcendent spark, a way for human beings “to be helpers in the acceleration of divine creativity.”

In pursuing Sir John’s aims, the Foundation has made a strong commitment to identifying and nurturing young people who demonstrate exceptional talent in mathematics and science. In the U.S., we have supported accelerated learning for students capable of working well beyond their grade level, and we have funded a number of important national studies of the issue. Internationally, the Foundation has sponsored academic training and competitions for students who show extraordinary potential but whose talents might not otherwise be developed, especially because of their economic circumstances or insufficient educational support.

www.templeton.org/what-we-fund/core-funding-areas/exceptional-cognitive-talent-and-genius

“Sir John was very enthusiastic about the prospect of nurturing and recognizing and educating people who could be the next Columbus or Galileo or Copernicus. He wanted to identify individuals who could help humanity to see the world in new ways and to accelerate progress—to enable realities that we can’t even dream of today.”

Barnaby Marsh
Senior Vice President, Management and Strategic Initiatives & Managing Director, Philanthropic Leadership Network



Mathematical Creativity in China

CHINESE STUDENTS MAY HAVE a reputation for excelling in mathematics, but Shing-Tung Yau of Harvard University worries that young people in his home country are falling behind. “There are many bright and hardworking students in China,” he explained, “but due to government policy and the established education system, there is enormous pressure to do well in standardized examinations. Deep thinking and scientific creativity are often sidelined or simply ignored.” Winner of the prestigious Fields Medal and chairman of the mathematics department at Harvard, Yau has launched an ambitious project to help stimulate mathematical creativity among Chinese students. Modeled after the long-standing Westinghouse competition in the U.S.,

Mathematics Competition for Chinese High School Students
Grant Amount: \$1,210,000
www.yau-awards.org

the Shing-Tung Yau High School Mathematics Awards is unlike other math competitions. It does not pose pre-determined answers. Rather, it is a research-based competition. Students must devise an original issue for investigation and then create the mathematical tools necessary to address their topic. Yau hopes the program will encourage schools in China to think about how to integrate creativity and original research into curricula. He believes the contest is key to establishing “the importance of other measures for success” beyond mere test-taking.

A Web Spot for the Highly Gifted

ARISTOTLE HAD PLATO, MOZART HAD HAYDN, and now, thanks to a website developed by Johns Hopkins University, highly gifted math and science students have a mentor too. Cogito (www.cogito.org) offers these talented kids under the age of 18 the chance to develop their interests and to receive encouragement from working scientists and scholars. On Cogito, they can learn about topics ranging from global warming to bioethics to nanotechnology, explore the intersection of science and the arts, find recommended websites and webcasts, and get access to many other academic resources—all for free. Cogito also provides them with the chance for international social networking with their peers.

Cogito.org: A Website and Online Community for Young People Gifted in Mathematics and Science
Grant Amount: \$2,497,972
www.cogito.org

Carol Blackburn, who helped to develop the website at the university’s Center for Talented Youth, says that the desire of accelerated students to establish relationships with other kids who can relate to them intellectually is a prime reason for Cogito’s success. “We’ve been working with high-ability students for 25 years, and we’re thrilled with the opportunity to get to work with them in an interactive environment. Cogito is a place where they can find the intellectual discussions they are hungry to have.”

“We didn’t even have a name initially. It came about because Sir John Templeton thought there should be a website that extremely gifted students from around the world could go to for programs and opportunities, and to learn about and meet other exceptionally talented young people like themselves.”

Carol Blackburn
Project Manager, Center for Talented Youth
Johns Hopkins University
Cogito.org



Budapest: The Golden Years

JOHN VON NEUMANN (1903-1957) was one of the 20th century’s greatest mathematicians, but he was by no means the only intellectual superstar to emerge from Hungary. Indeed, even a cursory glance at the history of the small Middle European nation reveals that Hungary has produced geniuses far out of proportion to its size. What fertile soil produced such an extravagant flowering of human creativity within two extraordinary generations? Are there lessons for the rest of the world? An October 2007 symposium sponsored by the Foundation and held at Princeton University gathered twelve scholars to discuss the life of von Neumann and others within the Hungarian context, with special attention to *fin-de-siecle* Budapest, Hungary’s capital. A

Budapest: The Golden Years Early 20th Century Mathematics Education in Budapest and Lessons for Today
Grant Amount: \$63,539
www.princeton.edu/piirs/von_neumann_event

conference white paper concluded that while genius is mostly innate, not created, the nation’s demanding education system, and Budapest’s lively culture worked in tandem to encourage the brightest to live up to their potential. We cannot reproduce the conditions of early 20th century Budapest by design, the symposium recognized, but it is possible to focus on the pedagogical and social factors that made Hungary a beacon of intellectual greatness.



High Achievers Left Behind

ASSESSMENT TESTING OF THE SORT required by the No Child Left Behind (NCLB) education reform program has been associated with a dramatic improvement in the achievement of the lowest-performing American students. But testing’s apparent effect on the nation’s top students has been very different; their scores have stagnated. What’s more, teachers report that under NCLB and similar state programs, they are pressured to spend dramatically more time on low-achieving students, even though they believe all students deserve equal attention. These are among the key findings of *High-Achieving Students in the Era of NCLB*, a multiyear, five-part investigation conducted by the Thomas B. Fordham Institute.

High Achieving Students in the Era of No Child Left Behind
Grant Amount: \$464,340
www.edexcellence.net/detail/news.cfm?news_id=732&cid=

The study collected evidence that the egalitarian thrust of NCLB was penalizing the brightest students. Teachers reported that those falling through the cracks were often intelligent, talented children from poor families who lacked parents willing and able to advocate for them or to provide extracurricular enrichment. It is a tragedy for these children, investigators concluded, citing anecdotes from teachers who have seen their most gifted students struggle and fail for lack of support.

“Who knows how many great writers, how many great thinkers, how many great scientists are lost to us because of inattention. It doesn’t matter whether it’s a wealthy or a very poor school district. There is talent everywhere, and all of that talent needs to be marshaled and recognized.”

Steve Farkas
Consultant to the Thomas B. Fordham Institute
High-Achieving Students in the Era of NCLB

“The future of genetic research, its application in medicine, agriculture, and industry, for the benefit of humankind is tremendously promising.”

Sir John Templeton

RESEARCH IN GENETICS was a longstanding interest of Sir John Templeton, who saw the field's extraordinary potential for explaining the deepest principles of life's evolution and for providing large-scale, transformative breakthroughs in fields like medicine and agriculture. He was particularly interested in how major advances in genetics might serve to empower individuals, leading to spiritually beneficial social and cultural changes.

The Foundation's engagement with this Core Funding Area is still in its early stages, and we are not currently accepting unsolicited proposals on genetics. The only near-term opportunity for support in this area is through our forthcoming 2011 Funding Priority, "Can Genetically Modified Crops Help to Feed the World?" The Foundation's initial investments in genetics can be seen in the grants listed on the next page, and we look forward to developing a broader grant portfolio, in keeping with Sir John's great hopes for the field, in the year's ahead.

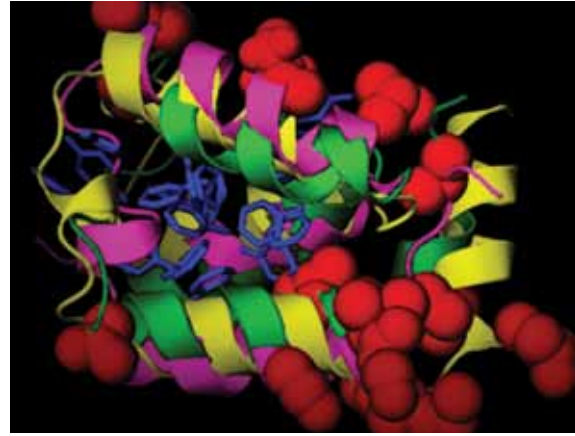
www.templeton.org/what-we-fund/core-funding-areas/genetics

“If we can show that the emergence of a new cell type is underwritten by a causally cohesive mechanism, then we shall give back to organismic life, in its various forms, its dignity as an irreducible part of reality.”

Günter Wagner

Yale University

Genetics and the Origin of Organismal Complexity



Sequencing the Genome—Fast

IMAGINE HAVING A PERSONAL medical plan designed from your own genetic information. Your doctor could tell you about your particular disease susceptibilities and help you design a strategy for avoiding or lessening the impact of future illness. Medicines could be tailor-made to suit your own genetic profile. That capability promises to transform our entire health-care system, but it is a long way off. Sequencing an individual genome—the entire DNA of an organism—is time-consuming and prohibitively expensive. The Archon Genomics X Prize is a \$10 million competition that asks researchers to devise a way to radically decrease the cost and increase the speed of genome sequencing. The competition will reward the first team to build a device capable of

Validation of Genomic Sequencing from the Archon X PRIZE for Genomics (AGXP)
Grant Amount: \$720,000
genomics.xprize.org

accurately sequencing 100 genomes within 10 days or less, at a cost of no more than \$10,000 per genome. Because the particular order of chemical elements in a genome is extremely important, and the human genome so vast, the winning team will have to demonstrate an extraordinary degree of accuracy. But the team of scientific entrepreneurs that makes it happen will win the X Prize—and open the door for a new era of medicine.

The Origin of Organismal Complexity

GÜNTER WAGNER ACKNOWLEDGES that his scientific research has philosophical ambitions. Wagner, a Yale University evolutionary biologist, has written of his project: “If we can show that the emergence of a new cell type is underwritten by a causally cohesive mechanism, then we shall give back to organismic life, in its various forms, its dignity as an irreducible part of reality.” The object of his work is to understand how creative processes work in organic evolution, in particular how novel body parts originate. “The difficulty in understanding innovation or novelties,” says Wagner, “is to understand how new body parts arise and become basically independent entities in evolutionary modification.” Of his five-year initiative, Wagner says

Genetics and the Origin of Organismal Complexity
Grant Amount: \$2,759,737
pantheon.yale.edu/~gpwagner

the ultimate goal is to understand how genetic mechanisms lead to higher levels of organization over evolutionary time. There are Big Questions to answer, he says, but we now have the technological means to answer them. His research aim sounds esoteric to some scientists, Wagner admits, but this only compels him to be rigorously scientific. “Philosophical ambitions are often frowned upon among scientists,” he says, “and that is why we have to strike a balance between the two.”

The Genetics of High Cognitive Abilities

WE KNOW A GREAT DEAL ABOUT the relative genetic and environmental influences on average intelligence and on learning disabilities but far less about the role of genes in exceptional cognitive ability—what we might call genius, or innate talent. Directed by Robert Plomin, a research geneticist at King’s College London, the Consortium on the Genetics of High Cognitive Abilities (GHCA) project is conducting the first systematic research on the genetics of genius. Plomin and his GHCA collaborators have found, among other things, that family environment has a significant but relatively modest influence on high cognitive ability, which is far more explainable through genetic factors. In other words, extreme cognitive ability can apparently be

The Genetics of High Cognitive Abilities
Grant Amount: \$924,292

cultivated by a favorable environment, but it is unlikely that even the best environment will produce a genius. They have also found evidence suggesting—though not yet proving—that exceptional cognitive ability is on a continuum with the normal range of intelligence and subject to the same genetic and environmental influences. The GHCA Consortium is now collecting DNA from some of the brightest children in America, continuing the search for the genes behind the heritability of genius.

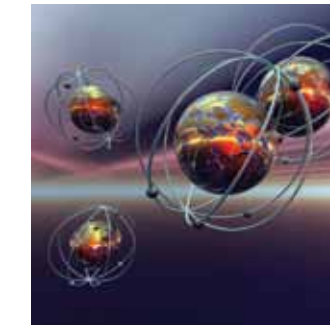
2010 Funding Priorities

For 2010, the Foundation designed several funding opportunities that asked researchers and other project leaders to focus their attention on a group of particularly compelling topics. These 2010 Funding Priorities challenged grant-seekers to develop proposals that specifically addressed one or more Big Questions under the following headings.

www.templeton.org/what-we-fund/funding-priorities

Quantum Physics and the Nature of Reality

Quantum mechanics, one of science’s most successful theories, is believed by many to underlie all natural phenomena. After eight decades, however, a complete understanding of the theory’s physical principles and implications still eludes us. Many believe that quantum physics poses a serious challenge to philosophical ideas such as determinism and local realism.



Quantum physics is currently going through a fruitful period, partly due to the rapid development of the new field of quantum information. Many significant new ideas have been proposed, and important experiments are under way. This is an opportune time to explore the foundations of quantum physics and, in so doing, the very nature of reality.

Foundational Questions in the Mathematical Sciences

Mathematics, the language of nature, provides the basis for modern scientific discovery.

It has always been integral to research in the physical sciences, engineering, and information technology. But today mathematical modeling and meta-mathematical explorations are transforming research in a range of other fields. Mathematics may hold the key to unlocking the deep mysteries of such subjects as creativity, information, complexity, emergence, intelligence, and the limits of knowledge.

We have chosen to focus on two large issues. The first concerns Gödel’s Incompleteness Theorems, which remain the subject of great scholarly discussion. In a related vein, the Foundation also encourages scholarly inquiry into the promise and limits of artificial intelligence (AI). Three decades ago, there was great optimism about the quest for AI. Today, however, the subject has largely faded from public view, not only because the field encountered new problems, but also because researchers discovered that older ones were harder to solve than anyone imagined.



With this funding priority, we aim to spark ambitious interdisciplinary research



Culture, Biology, and Human Uniqueness

Culture is perhaps the single most important fruit of human evolution because it lies at the root of what makes human beings unique. Culture mediates our relationships with other people, with the environment, with the spiritual world, and with abstract or imagined worlds like mathematics and the future.

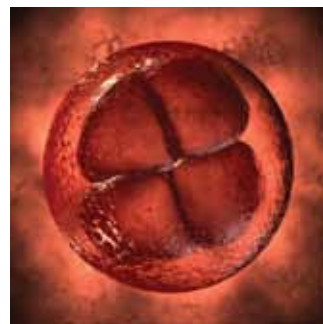
Examining socially learned patterns of behavior (as culture can be defined) presents an especially promising contemporary approach to questions of human particularity. Exciting recent research has demonstrated that various other animals live in part by cultural traditions that vary from group to group within a species. Studies related to claims of human uniqueness are now prominent in many fields—though, like the parable of the blind men and the elephant, researchers rarely manage to see the whole human being.

2010 Funding Priorities

in biology, economics, law, political science, psychology, ethnology, anthropology, and related fields.

The Science and Significance of Complexity

Over the past quarter century, progress has been made in studying complex systems, from insect colonies to financial markets to the human brain. These advances have often been directly linked to the availability of powerful computational tools that permit researchers to probe vast amounts of data and to run large-scale simulations and models. Intriguing correlations have been discovered across a range of fields.



But the precise meaning of complexity remains elusive. Though we have come to understand some key properties of complex systems, including network structure, robustness, modularity, and adaptive dynamics, we still have few unifying concepts. Nor have we established a precise and universally accepted measure of complexity.

Our intention is to encourage researchers who are focused on specific levels of the natural hierarchy—classical and quantum physics, chemistry, molecular and evolutionary biology, cognitive science, human societies—to expand the scope of their work and to seek out collaborative opportunities with researchers in other fields.

How Does Spirituality Promote Health?

In recent years, many studies have confirmed the strong correlation between health and spirituality. An important next step for research on spirituality and health is to begin to identify the underlying chemical, physiological, or immunological mechanisms causing this correlation. With this broader conceptual horizon, the field could build on its current emphasis on coping with illness, contributing more substantially to discussions about the full range of factors that contribute to human health, healing, and wholeness.

We hope to encourage researchers to develop



innovative modes of questioning, since the possibility for breakthrough discoveries has been limited in part by the kinds of available data. Surveys with good questions on health have often had poor measures of spirituality, and good studies of spirituality have been hamstrung by poor health-related questioning.



Understanding Awe and Wonder

The experience of awe and wonder has been celebrated in literature and scripture, depicted in art, and attested to in the experiences of countless individuals. It is the characteristic human response to any number of larger realities, from the beauty and violence of the natural world, to tremendous feats of body and mind, to our perceived encounters with the divine. Awe and wonder express our longing and our uncertainty, our fascination and our terror. They point to the transcendent and to the limits of being human.

With the growth in scholarly and popular discussions

about spirituality and its relationship to religion, the Foundation believes that now is a prime moment for the rigorous exploration of these understudied dimensions of human experience. We hope to better define awe and wonder; to explore their contribution to the development of spiritual awareness, wisdom, and inspiration; and to examine their relationship to curiosity, intellectual advancement, and spiritual progress.

Religious Leadership in an Age of Science

In recent years, the subject of science and religion has moved from the classroom and the laboratory into the popular arena, generating a vigorous dialogue in both secular culture and within religious communities. Unfortunately, few formal mechanisms exist for exposing religious leaders either to science itself or to new scholarship in science and religion. Institutions that train religious leaders rarely have faculty who discuss such topics or coursework that covers them.

The Foundation recently launched a program aimed at remedying this deficiency for religious leaders in Protestant communities in the United States. We now seek to fund similar endeavors by other religious organizations. This Funding Priority is open to all non-Protestant religious traditions in the U.S., as well as to all religious traditions,



including Protestants, in other nations or regions of the world.

Finding Free Will

The notion that human beings possess free will is fundamental to the world's ethical and religious systems and is deeply embedded in our self-conception. Free will allows us to engage in self-directed and intentional activity, which in turn makes us moral agents, responsible for our actions. Recent research in a number of fields, however, has challenged the reality of free will. Neuroscientists claim to have shown, for example, that the genesis of action in the brain begins well before conscious awareness of that action. And social psychologists have suggested that human behavior arises not from



conscious beliefs but from behavioral scripts activated by particular environmental conditions. Both scenarios point to free will as an illusion of human self-perception.

We encourage researchers to investigate both our limits and our potential as moral agents by focusing on free will as a product of human evolution and on the ways in which free will could be enhanced by education and active moral formation and diminished by certain biological, psychological, or social conditions.



What Sparks Cognitive Creativity?

Cognitive creativity—producing an idea or behavior that is both novel and useful—is important throughout the living world. Despite the popular image of the lone genius with a flash of insight, such creativity is more likely to involve a complex of conditions and processes than a simple trait or activity. It may not even be a unitary phenomenon; there is evidence that the conditions fostering creativity in mathematics

and the sciences differ from those in other fields.

Could it be that different kinds of cognitive creativity and innovation are different phenomena in terms of origins and processes? This funding priority aims to encourage research on the sources of creativity, its precursors in biological processes, and the social and cultural conditions that foster it.

Moral Formation

Most people are acutely aware that the values we acknowledge in principle are often not lived out in our daily lives. Hypocrisy and weakness of will are all too familiar. But what accounts for this “moral gap”—our inability to translate beliefs about what is truly and overridingly moral into consistent action?



But more is at stake than just learning how to live by our convictions. We have to learn how to develop convictions and dispositions that are intrinsically good. The challenge is not just to close the “moral gap” but to realize our fullest potential to love,

forgive, show compassion, and be grateful. This Funding Priority is meant to encourage scholarship, research, and education on fundamental issues of moral character and personal integrity.



From Beliefs to Virtuous Behaviors

A great deal of recent work in psychology, philosophy, and cognitive science argues that human actions are determined primarily by unconscious mental processes. In these accounts, there is little or no role for personal beliefs, deliberative reasoning, or traditional notions of vice and virtue. In the psychologist Jonathan Haidt's memorable image, the conscious mind is like a young boy riding the elephant of the unconscious.

But is this the full story? To what extent, and under what circumstances, do conscious processes, including beliefs, control behavior? Sir John Templeton was convinced that human beings are capable of consciously shaping their own values and, thereby, their perceptions of the world and their engagement with it. This

Funding Priority underwrites empirical research to explore and test this proposition.

Thrift and Thriving

The recent global financial meltdown has highlighted the devastating consequences of indebtedness and overspending at the individual, institutional, and governmental levels. It has also renewed interest in thrift as an essential component of financial stewardship. Restoring a culture of thrift, based on principle not just on necessity, has become an urgent social need.



The Foundation wishes to encourage a greater understanding of the moral and spiritual dimensions of thrift; to support new, culturally astute approaches to teaching the habits and philosophy of thrift; and to shift public discourse so that thrift can be viewed as a key factor in producing the resiliency necessary for human thriving and institutional and social health.



Private Gain and the Public Good

Adam Smith was perhaps the most profound theorist of how private gain can serve the public good. But the current financial crisis has raised serious concerns about Smith's classic formulation. Some have renewed a familiar narrative equating free enterprise with greed, from which the public needs to be protected by the state. Others have pointed to the origins of the financial crisis in both intemperate government policies and rash private-sector strategies.

The Foundation hopes to spark research and practical action related to the cultural and ethical values essential to free enterprise and free societies. These would include, in particular, the values of honesty, thrift, and trust.



“What is the best way to live? How large is God? How are finite beings related to the infinite? What was God’s purpose in creating the universe? How can we be helpful? These ageless questions can inspire people today just as they have inspired people throughout the ages, linking the human soul to philosophy and to the love of wisdom.”

Sir John Templeton

THE TEMPLETON PRIZE HONORS A LIVING PERSON who has made an exceptional contribution to affirming life’s spiritual dimension, whether through insight, discovery, or practical works. Established in 1972 by the late Sir John Templeton, the Prize aims, in his words, to identify “entrepreneurs of the spirit”—outstanding individuals who have devoted their talents to expanding our vision of human purpose and ultimate reality. The Prize celebrates no particular faith tradition or notion of God, but rather the quest for progress in humanity’s efforts to comprehend the many and diverse manifestations of the Divine.

Men and women of any creed, profession, or national origin may be nominated for the Templeton Prize. The distinguished roster of previous winners includes representatives of Christianity, Judaism, Islam, Hinduism, and Buddhism. The Prize has been awarded to scientists, philosophers, theologians, members of the clergy, philanthropists, writers, and reformers, for work that has ranged from the creation of new religious orders and social movements to humanistic scholarship to research about the origins of the universe.

What these remarkable people have shared is a commitment to exploring one or more of the Big Questions at the core of the John Templeton Foundation’s mandate. All have been seekers of wisdom, humbled by the complexity of the human condition but determined to chart a path forward with their ideas and deeds. Some Templeton Prize laureates have demonstrated the transformative power of virtues like love, forgiveness, gratitude, and creativity. Others have provided new insights into scientific or philosophical problems relating to infinity, ultimate reality, and purpose in the cosmos. Still others have used the analytical tools of the humanities to provide new perspectives on the spiritual dilemmas of modern life. The Prize seeks and encourages breadth of vision, recognizing that human beings take their spiritual bearings from a range of experiences.

The qualities sought in a Templeton Prize nominee include creativity and innovation, rigor, and impact. The judges seek, above all, a substantial record of achievement that highlights or exemplifies one of the various ways in which human beings express their yearning for spiritual progress. Consideration is given to a nominee’s work as a whole, not just during the year prior to selection.



Bernard d’Espagnat

2009 Templeton Prize laureate

Bernard d’Espagnat, a French physicist and philosopher of science, has explored the philosophical implications of quantum physics and opened new vistas on the definition of reality and the potential limits of knowable science. D’Espagnat was a major player in the physics research community during a revolutionary period of exploration and development in quantum mechanics, specifically on experiments testing the “Bell’s inequalities” theorem. Professor Emeritus of Theoretical Physics at the University of Paris-Sud, he understood the philosophical importance of these new physics-based insights into the nature of reality. Much of his work centers on what he calls “veiled reality,” a hidden yet ultimate reality beyond time, space, matter, and energy—concepts challenged by quantum physics as possibly mere appearances. His writings and lectures on fundamental questions such as “What information does science really give us?” have provoked widespread debate.



Francisco J. Ayala

2010 Templeton Prize laureate

Francisco J. Ayala, an evolutionary geneticist and molecular biologist, has vigorously opposed the entanglement of science and religion while also calling for mutual respect between the two. A naturalized American who moved from Spain to New York in 1961 for graduate study, he is the Donald Bren Professor of Biological Sciences at the University of California, Irvine. He has equated efforts to block religious intrusions into science with “the survival of rationality in this country.” To that end, in 1981 he served as an expert witness in a pivotal U.S. federal court challenge that led to the overturning of an Arkansas law mandating the teaching of creationism alongside evolution. In 2001, George W. Bush awarded him the National Medal of Science. Even as he has warned against religion’s intrusion into science, Ayala, a former Dominican priest, has also championed faith as a unique and important window through which to understand matters of purpose, values, and the meaning of life.

The Big Questions Essay Series

Does moral action depend on reasoning?

Not really.	Michael Gazzaniga	4
Yes and no, happily.	Rebecca Newberger Goldstein	8
No, it does not!	Arif Ali Nayef	12
Only if we're free.	Afred Mele	16
It depends...	Stanley Fish	19
Yes, if...	Christine M. Korsgaard	23
Less than it should.	Joshua D. Greene	27
Reason isn't enough.	Jonathan Sachs	31
Yes, within limits.	John F. Kilbram	35
Not so much.	Janah Lehrer	39
Not entirely...	Jean-Benoit Elstain	42
Yes and no.	Antonio Damasio	46
Yes, by nature.	Robert P. George	50

JOHN TEMPLETON FOUNDATION
SUPPORTING SCIENCE—INVESTING IN THE BIG QUESTIONS

TO STIMULATE BROADER THOUGHT AND DISCUSSION about the Big Questions, the Foundation has produced a series of essays on themes at the heart of Sir John Templeton's philanthropic vision. This ongoing conversational project has included some of the world's top thinkers. For each Big Question, contributors address a perennial and much-disputed subject and bring to bear—in civil, elegant prose—a range of different perspectives. By assembling this symposium and inviting the public to join in, the Foundation intends to spark a wider conversation that transcends the familiar positions usually found in such debates. We aim to turn discourse on the Big Questions in a more thoughtful, considered direction.

The Foundation publicizes each new series with advertisements in leading mass media, including newspapers, high-profile intellectual journals, and online publications. We make the essays available on the Foundation's website and publish them as booklets, free upon request, as a resource available to students, teachers, parents, public officials, scientists, clergy, and anyone else engaged with the great issues of human nature and purpose.

The most recent Big Question series asked "Does moral action depend on reasoning?" The goal of the essays was to spark public conversation about the origins and nature of moral intuition and the extent to which we consciously control our moral behavior. It can be found at: www.templeton.org/reason.

Previous installments of the Big Questions series can be found online at the following addresses:

- Does the universe have a purpose? www.templeton.org/purpose
- Will money solve Africa's development problems? www.templeton.org/africa
- Does science make belief in God obsolete? www.templeton.org/belief
- Does the free market corrode moral character? www.templeton.org/market
- Does evolution explain human nature? www.templeton.org/evolution



To read these essays in their entirety, or to receive a printed version, visit www.templeton.org/market

JOHN TEMPLETON FOUNDATION
SUPPORTING SCIENCE—INVESTING IN THE BIG QUESTIONS
THIS IS THE FOURTH IN A SERIES OF CONVERSATIONS AMONG LEADING SCIENTISTS, SCHOLARS, AND PUBLIC FIGURES ABOUT THE "BIG QUESTIONS." TO JOIN THE CONVERSATION, PLEASE VISIT WWW.TEMPLETON.ORG/MARKET.

Humble Approach Initiative

“This is the humble approach: an open mind, a willingness to admit there might be alternative truths just as valuable as ours, and the fortitude to compete with others—to search, to discover, and to create the societies and religions of the future.”

Sir John Templeton

FOR SIR JOHN TEMPLETON, HUMILITY was not merely a personal virtue but a fundamental approach to the advancement of knowledge. “If we become increasingly humble about how little we know,” he once said, “we may be more eager to search.” Humility is the beginning of wisdom. Socrates, revered today as one of humanity’s greatest sages, was thought wise precisely because he knew what he did not know. True intellectual curiosity requires intellectual humility. No person who believes he or she knows everything (or everything worth knowing) will trouble to search out the thoughts and experiences of others.

In this spirit, the Humble Approach Initiative (HAI) brings together a small group of scholars and scientists from various disciplines to discuss a particular theme. Under the direction of Senior Scholar Mary Ann Meyers, each workshop lasts three days and is led by a program chair. Since 1998, the Foundation has convened 38 Humble Approach symposia, exploring such rich themes as the multiverse and string theory, the science of complexity, the significance of mathematics, new frontiers in psychoneuroimmunology, and the nature of personhood.

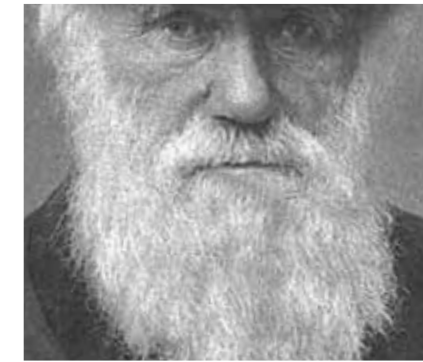
Though the HAI symposia are designed to facilitate the exchange of ideas for their own sake, publishing houses are often very interested in the content of the papers presented at them. To date, twenty HAI symposia have resulted in books from publishers such as Oxford University Press, Cambridge University Press, William B. Eerdmans, and Springer.



Faith, Rationality, and the Passions

*Wolfson College, University of Cambridge
January 11–13, 2010*

Scholars gathered to examine the relationship of religious faith, reason, and emotion. The symposium examined not only how the great philosophers and theologians have thought about the nexus of these topics, but also how the three elements might be reconsidered in light of new discoveries in neuroscience and other disciplines.



Understanding Moral Sentiments from a Darwinian Perspective: An Exploration of the Roots and Complexity of Ethical Judgment

Harvard University, November 20–22, 2009

This symposium considered Adam Smith’s influential *Theory of Moral Sentiments* (1759), in light of Charles Darwin’s *On the Origin of the Species*, published exactly 100 years later. Scientists, social scientists, and philosophers wrestled with Smith’s still fundamental question: Why do we regard certain actions or intentions with approval and condemn others?



Light from Light: An Exploration of a Theme Linked to Core Issues in Science and Theology

Istanbul, Turkey, April 27–29, 2009

Scholars and scientists gathered to share insights on the physics and metaphysics of light. In all the world’s religions, light has served as a metaphor for ultimate reality. The Abrahamic faiths, in particular, associate God with uncreated, primal light, but the link between divinity and light also exists in archaic Greek literature and philosophy. Conferees explored the link between light’s physical properties and its use as a metaphor.



“Homo Symbolicus”: The Dawn of Language, Imagination, and Spirituality

Cape Town, South Africa, January 16–19, 2009

The recovery of 75,000-year-old shell beads and engraved ochre at Blombos Cave, about 200 miles east of the meeting site, suggests that Stone Age people understood symbolism. Scholars came together to discuss some of the most intriguing questions emerging from these finds. The discoveries may help scientists to understand the origin and evolution of language, symbolic behavior, and the capacity for spiritual culture among the earliest humans.

Recent Humble Approach Symposia Books

Becoming Human: Innovation in Prehistoric Material and Spiritual Culture
Cambridge University Press, 2009

Downward Causation and the Neurobiology of Free Will
Springer Publishing Company, 2009

Games, Groups, and the Global Good
Springer Publishing Company, 2009

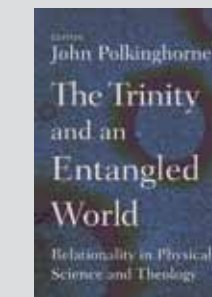
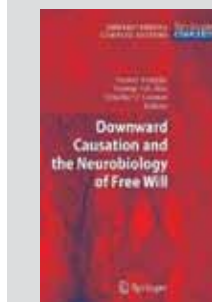
The Trinity and Entangled World: Relativity in Physical Science and Theology
William B. Eerdmans Publishing Co., 2010

The Information Puzzle: Matter, Bits, and Meaning
Cambridge University Press, 2010

The Parody of Disability: Response to Jean Vanier and L’Arche Communities from Theology and the Sciences
William B. Eerdmans Publishing Co., 2010

Free Will and Consciousness: How Might They Work?
Oxford University Press, 2010

Rethinking Human Nature
William B. Eerdmans Publishing Co. (forthcoming)





TEMPLETON PRESS

“Sir John believed that we always had to look forward. In the Templeton Press charter, he says that we are to disseminate mission-driven information and ideas ‘in any form or medium now known or hereafter devised.’ He knew that innovations like the internet would be central to our work.”

Susan Arellano

Editor-in-Chief, Templeton Press

IN THE 13 YEARS SINCE ITS INCEPTION, Templeton Press has published more than 100 books on topics including altruism, business and spirituality, character development, science and religion, and spirituality and health. But in the fall of 2008, the Press took a big leap forward when New York publishing veteran Susan Arellano took the reins as editor-in-chief, with a mandate to revitalize its list. As a longtime editor at prestigious imprints like Basic Books, the Free Press, and Yale University Press, Arellano published books written by leading researchers in psychology, neuroscience, religion, and related disciplines. During her years as a literary agent, she represented top academics and journalists writing books in these fields. “When I came on board, the first thing I did was to read the Templeton Press charter,” Arellano says. “Sir John believed that we always had to look forward. In the Templeton Press charter, he says that we are to disseminate mission-driven information and ideas ‘in any form or medium now known or hereafter devised. He knew that innovations like the internet would be central to our work.” That statement gave me the license to develop projects in a way that would both enhance the book and reach way beyond the book.”

Arellano’s first “book and beyond” project was *New Threats to Freedom*, an essay collection edited by Adam Bellow, one of publishing’s most gifted editors. Bellow put together an all-star lineup of hard-to-categorize thinkers—David Mamet, Christopher Hitchens, Shelby Steele, and Anne Applebaum, to name a few—to describe what they see as the newest challenges to liberty. Some leaped into already raging debates on issues such as Islamic law in the West, the rise of transnationalism, and the regulatory state. Others turned their attention to less obvious threats, such as the dogma of fairness, the failed promises



of the blogosphere, and the triumph of behavioral psychology. The way that Arellano packaged and marketed *New Threats to Freedom* signaled a new and more vigorous direction. “In many respects,” she says, “the book is just a part of a broader dissemination campaign, which includes traditional media—radio and TV interviews with contributors, book reviews, book excerpts in magazines and newspapers—but also a major online campaign, including the newthreatstofreedom.com website.”

The website is not just an advertisement for the book. It also includes interactive elements, such as a contest asking bloggers to write essays on subjects not covered in the book. The book’s marketing campaign included podcasts and an online video panel discussion with some of the volume’s contributors, which drew comments in the blogosphere. The Press also turned to social media sites like Facebook to draw attention to the title. “As we look to the future, and as electronic publishing grows, we’ll be developing ever more sophisticated dissemination packages,” Arellano says. “I anticipate a time when books, video, and reader-viewer responses are fully integrated into one electronic package.”



An Interview With Susan Arellano, Editor-in-Chief, Templeton Press

Your mission includes broadening the focus of Templeton Press. The forthcoming book *Generation WTF* by author Christine Whelan has a title that will startle some readers. What is it about?

Generation WTF takes lessons on virtues such as thrift, self-control, perseverance, honesty, and purpose, which is the stuff of classic self-help literature, and remixes it for a new generation. Everything from the cover, to the two-color interior, to the text, to the title was developed in consultation with young people themselves, who gave us their feedback on both the book’s content and its packaging. Consider the title phrase “WTF.” It’s an expression of frustration that resonated strongly with our young reviewers because it captured their feelings as they face an uncertain future of fewer jobs and in some cases large student debt. But the book turns a crude negative expression into a positive one. In our usage, “WTF” has a dual meaning as expressed in the book’s subtitle, which promises practical, realistic advice on how to achieve a “Wise, Tenacious, and Fearless You.” As we move to the marketing stage, we’ll again be drawing on the WTFers to help promote the ideas in the book through a full range of social media, at which their generation is expert.

That is not the only upcoming Templeton Press title addressing popular concerns, right?

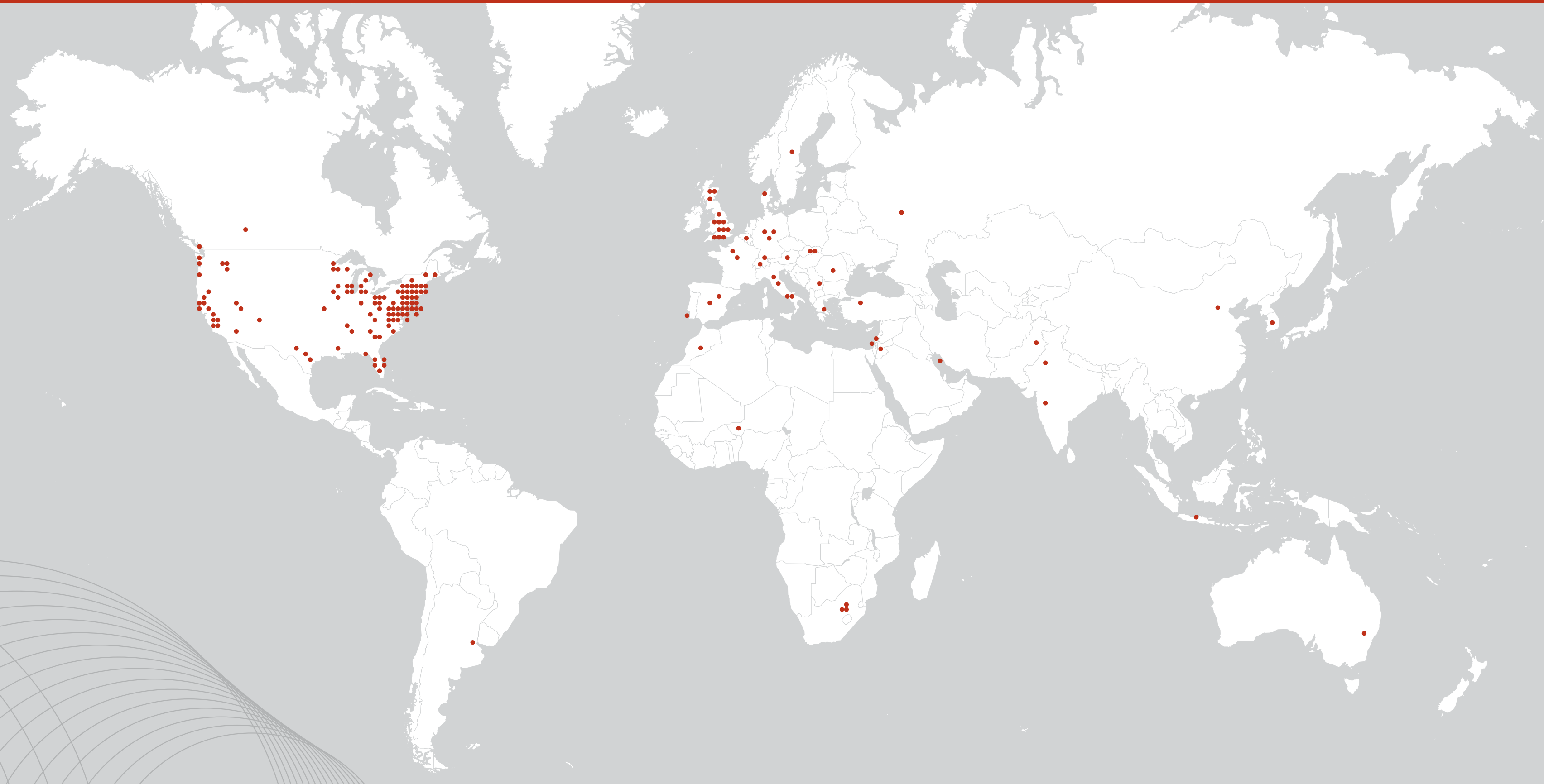
Right. Another book in the virtues category we’ll publish next spring is *Acculturated*, a collection of essays on virtue and pop culture edited by Naomi Riley and Christine Rosen. We often think of

popular culture as a degrading influence, but might it, at least sometimes, serve to reinforce virtue—and if so, how? This is the question we posed to some cultural critics and others. The result: a great collection of pieces by people like essayist Caitlin Flanagan, who writes on apocalyptic themes in teen literature, TV producer Paul Corrigan on the history of the situation comedy and modern virtues, and writer Judy Bachrach on death and dying in pop culture. It’s important to take pop culture seriously because for so many people, pop culture is culture. It’s the only culture to which they are exposed, and it’s ever-present.

Will Templeton Press continue to publish scholarly, research-oriented titles as well?

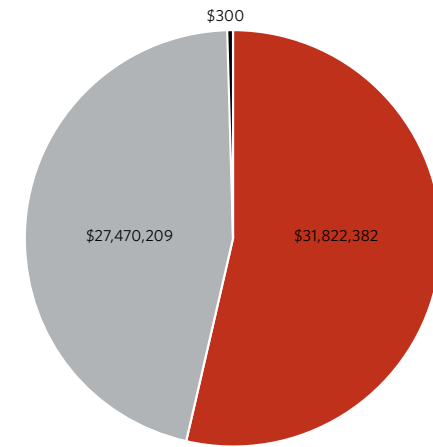
Absolutely. For example, we’re developing a book series with Hyung Choi, the Foundation’s director of mathematical and physical sciences, called *Foundational Questions in Science*. Each book will address the philosophical assumptions behind research on core concepts in mathematics, physics, and cosmology. The primary goal of the series is to provide future researchers with a sufficient and substantive understanding of the Big Questions like, “Is the cosmos in time or outside time?,” “Can quantum mechanics be applied to the whole of the cosmos?,” and “Can science come up with the ‘ultimate’ explanation of the cosmos?” We’re hoping to help scientists determine what new research might be undertaken to advance our understanding of these topics.

Templeton Grants Around the World



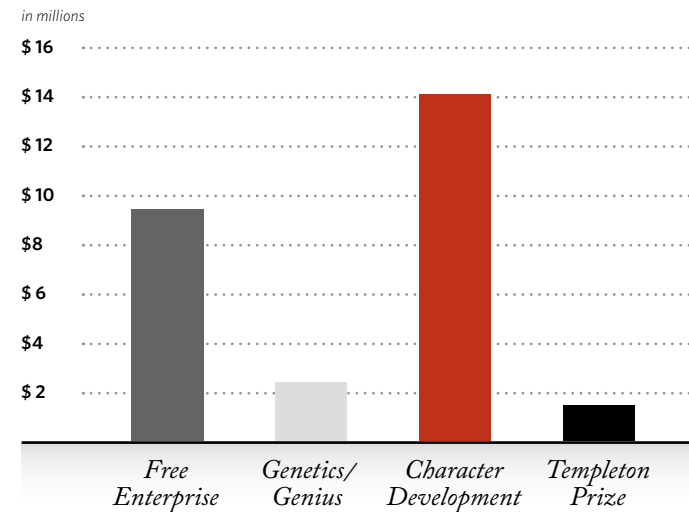
Foundation Payout for 2009

- *Science and the Big Questions*
- *Founder's Other Favorite Charities*
- *Other Charitable Purposes*



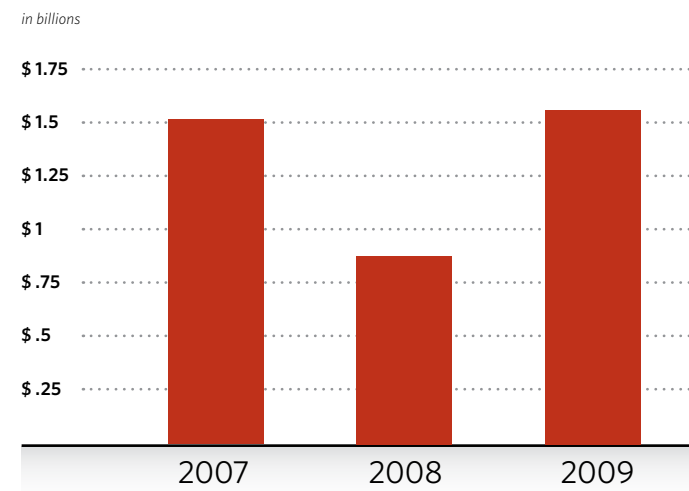
This chart summarizes the total Foundation pay-out for 2009. The Foundation's charter specifies three funding areas in its purpose statement: *Science and the Big Questions*, *Founders Other Favorite Charities*, and *Other Charitable Purposes*. This chart reflects a breakdown of actual cash expenditures for each of the three.

Founder's Other Favorite Charities



Within the *Founder's Other Favorite Charities* funding area, the Founder identified four specific target areas. They are shown on this graph, and the associated bar reflects the actual cash payment for each.

Foundation Assets



The figures in this bar graph summarize all of the assets of the Foundation's investment portfolio, including realized gains (losses) on investments, dividends, interest, and contribution income. They are net of monies expended for charitable activities, qualifying distributions, and administration expenses.

Credits

Design

Cause Design Co.

Cover Illustration

Hugh Symes/Mendola Artist Representatives

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JOHN TEMPLETON FOUNDATION

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