

Schedule

Thursday, April 25, 2013

7:30 am–8:30 am	Registration & Continental Breakfast
8:30am–8:45 am	Welcome and Forum Introduction –William Linton
8:45am–9:45 am	The Nature of Creative Intelligence –David Krakauer, D. Phil.
9:45am–10:45 am	Are Intelligence and Creativity the Same or Different as Far as the Brain is Concerned? –Rex E. Jung, Ph.D.
10:45 am–11:15 am	Break
11:15am–12:15 pm	The Neuroscience of Creativity, Flow and Openness to Experience –Scott Barry Kaufman, Ph.D.
12:15 pm–1:30 pm	Lunch
1:30pm–3:00 pm	Creative Concentration: How Science helps me understand Art –Lynda Barry
3:00 pm–3:30 pm	Break
3:30pm–4:30 pm	Panel Discussion: L. Barry, R. Jung, S. Kaufman & D. Krakauer Moderator: Steve Paulson
4:30 pm–6:00 pm	Reception
6:30pm–8:00 pm	Hosted Dinner Conversations (pre-registration required)

Friday, April 26, 2013

7:30 am–8:30 am	Registration & Continental Breakfast
8:30am–8:45 am	Day Two Overview –William Linton
8:45am–9:45 am	Can Psychedelics Accelerate Scientific Problem Solving: The Research and the Possibilities –James Fadiman, Ph.D.
9:45am–10:45 am	Shamanism 2.0: The Creative Imagination in the Age of Neuroscience and Hypermedia –Erik Davis
10:45 am–11:15 am	Break
11:15am–12:15 pm	The Future of Creativity and the Creativity of the Future –Alfonso Montuori, Ph.D.
12:15 pm–1:30 pm	Lunch
1:30 pm–2:30 pm	Creativity and the Power of Kindness –Matthieu Ricard
2:30 pm–2:45 pm	Break
2:45 pm–3:45 pm	Panel Discussion: E. Davis, J. Fadiman, A. Montuori & M. Ricard Moderator: Steve Paulson
3:45 pm–4:15 pm	Closing Meditation –Matthieu Ricard
4:15 pm–5:00 pm	Dessert Reception

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Further Studies
in Human Consciousness

Creative
Insight

12th Annual
International Bioethics Forum
Madison, WI | April 25–26, 2013

Creative Insight

Designed for the general public and bringing together a diverse group of renowned presenters, the Forum focuses on the sharing of scientific research and the consideration of related social and ethical issues. Many questions related to creativity will be explored, including:

- From the perspectives of neuroscience, psychology, the arts and other disciplines, what do we know about the creative process and the state of human consciousness?
- Are there techniques and environments that effectively develop and nourish creativity in all of us?
- What is the impact of science and technology on the creative process?

Presenters

Lynda Barry
Cartoonist, Artist, Author and Speaker | Rock County, WI

Erik Davis
Cultural Critic, Scholar, Freelance Journalist and Lecturer | San Francisco, CA

James Fadiman, Ph.D.
Adjunct Full Professor, Sofia University | Palo Alto, CA

Rex E. Jung, Ph.D.
Assistant Professor, Department of Neurosurgery, University of New Mexico | Albuquerque, NM

Scott Barry Kaufman, Ph.D.
Adjunct Assistant Professor of Psychology, New York University | New York, NY

David Krakauer, D. Phil.
Director, Wisconsin Institute for Discovery | Madison, WI

William Linton
Chairman and CEO, Promega Corporation | Madison, WI

Alfonso Montuori, Ph.D.
Professor and Department Chair, Transformative Studies Ph.D. and Transformative Leadership M.A., California Institute of Integral Studies | San Francisco, CA

Steve Paulson (Moderator)
Executive Producer, *To The Best of Our Knowledge*, Wisconsin Public Radio and Public Radio International | Madison, WI

Matthieu Ricard
Buddhist Monk, Shechen Tennyi Dargyeling Monastery | near Kathmandu, Nepal

Abstracts (in order of presentation)

The Nature of Creative Intelligence
David Krakauer, D. Phil.

What are the ingredients of creative thought, and over the course of evolution, how has intelligence transformed the nature of life on earth? I shall attempt to span the 4.5 billion year history of earth without losing sight of the decades-long lives of a small number of creative geniuses. I shall argue that explanations for creative intelligence fall into two camps—those emphasizing rational computation (what Popper would call the Platonic, Hegelian, Neoclassical model), and those emphasizing collective experiments (the Darwinian, Bayesian, Hypothetico-deductive model). In the age of intelligent machines (a very recent innovation in human history, less than 50 years old), the Darwinian-collective model is being accelerated beyond recognition, suggesting the possibility of radical change in the nature of education, research and society.

Are Intelligence and Creativity the Same or Different as Far as the Brain is Concerned?
Rex E. Jung, Ph.D.

The scientific research regarding creativity is accelerating, particularly as neuroimaging technology is brought to bear upon this incredibly complex human capability. However, there are some vexing questions that persist from the “folk psychology” that preceded more systematic studies of this ability, namely: 1) does one have to be crazy to be creative?, 2) does one have to tap into the “right hemisphere” in order to be creative?, and 3) does one have to be a “genius” (i.e., highly intelligent) in order to be creative? These are all valid questions, with grains of truth exhibited in the extant literature; however, as I will outline in my talk, they are holding us back from a deeper understanding of creative cognition (along with numerous other “neuromythologies”). We must strive to take the best that science has to offer, to understand this enormously complex organ that is the human brain, while always remaining humble as to the very beginning steps that we are taking regarding the complex brain-behavior interplay that comprises our place in the world.

The Neuroscience of Creativity, Flow and Openness to Experience
Scott Barry Kaufman, Ph.D.

In recent years, a flurry of research has emerged on the neuroscience of altered states of consciousness. In this talk, I’ll review the common biological substrates of flow, absorption, openness to experience, and unusual experiences. In discussing common biological and behavioral linkages among these various mental states, I’ll present a map of the cognitive terrain of the inner stream of consciousness and discuss implications for our understanding of so-called mental disorders such as schizophrenia and bipolar disorder and discuss the contributions of these mental processes to the heights of human creativity.

Creative Concentration:
How Science helps me understand Art
Lynda Barry

What is an image? It’s what imagination is made of, but that doesn’t get us far. It’s like saying a cell is what a person is made of. We know images aren’t physical entities, but we also know that when they are combined and presented in a certain order they can result in a physical reaction that is so strong it looks like we are being electrocuted. This is what happens when we hear a great joke or read a terribly sad novel. Something without a physical body has managed to hit us anyway and with such force that we crack up, we break down, we’re blown away. Nearly everyone has a book that moved them and even changed their lives, but what’s doing the moving and the changing? The term ‘the arts’ is a recent name for an old human tendency to arrange images in certain ways, like an arrangement of cells that come to contain something that can be transferred from one body to another, something like energy that can outlive us and move across great spans of time. Emily Dickinson has been dead for over a hundred years, but Poem #530 is knocking me out today. I believe this power, this energy we have come to call ‘the arts’ has a biological function, and I wonder what it might be.

Poem #530

*You cannot put a Fire out –
A Thing that can ignite
Can go, itself, without a Fan –
Upon the slowest Night –
You cannot fold a Flood –
And put it in a Drawer –
Because the Winds would find it out –
And tell your Cedar Floor –*

Emily Dickinson c.1862

Can Psychedelics Accelerate Scientific Problem Solving: The Research and the Possibilities
James Fadiman, Ph.D.

Those who work with psychedelics mainly study therapeutic, recreational and spiritual experiences. However, certain psychedelics, when taken in a focused set and setting appear to facilitate the solution of technical as well as theoretical scientific problems. There is a small body of published research, a number of published anecdotes (including Noble Prize winners Crick and Mullis and entrepreneur Steve Jobs) and a vast body of folklore that appears to validate this possibility. Markoff and others have argued that the personal computer revolution is but one example of this confluence of scientists and psychedelics. It has been shortsighted that the scientific establishment has not thoroughly reviewed and explored techniques, which may improve the quality or rate of commercial applications and academic investigations. We will review the evidence and consider the implications.

Shamanism 2.0: The Creative Imagination in the Age of Neuroscience and Hypermedia
Erik Davis

Though the “imagination” is no longer considered a rigorous psychological category, it remains an evocative and analytically useful framework for understanding and conceiving the human capacity to dream, receive inspiration, weave shared cultural worlds, and experience deeply meaningful and even numinous visions. Offering a brief history of the imagination in the modern era, I will suggest that the individual and collective imagination has regularly been reframed and redeployed in the changing light of psychology, technology and popular religious practices from around the globe. Assessing the future of the creative imagination in an era deeply marked by neuroscientific accounts and intense technological mediation, I will offer the vision of an “enchanted disenchantment” based on a reflexive shamanic paradigm that re-embeds the creative imagination in the public world of objects and material practices.

The Future of Creativity and the Creativity of the Future
Alfonso Montuori, Ph.D.

Creativity is not what it used to be. The last 30 years have seen a remarkable change from “lone genius” creativity to much more networked, grass-roots, collaborative forms of creativity. The who, how, where, why, and when of creativity are all changing rapidly. At the same time, there is an emerging shift in the sciences from a

machine view of the world to a view in which creativity is central. In this talk I will discuss some of the key elements of the future of creativity, and explore some of the considerable social and personal implications.

Creativity and the Power of Kindness
Matthieu Ricard

In order for creativity to develop, the mind needs to be free from the automatic and habitual thinking that runs around in circles. The mind needs to remain in a state of openness, lucidity, flexibility, clarity and wisdom to allow it to stop superimposing its own projections onto reality.

A new understanding can spring forth from within this state of freedom. Such insights may pertain to scientific discovery, to artistic creation, or to new ways of dealing with life’s challenging situations.

A mind resting in a state of lucid openness may also lead to a clearer understanding of the nature of mind itself. It may cause us to see whether or not there is a truly existing, separate “self.” Such direct investigation helps us to experience the world in a different light and acknowledge the interdependent nature of all phenomena and our shared humanity. It is highly creative to break through the boundaries of the narrow bubble of self-centeredness and let our mind expand toward unconditional loving-kindness and compassion.

The power of kindness and care is also the most creative way to address the challenges of our times, and reconcile three different time scales and different types of preoccupations: the economy in the short-term, life satisfaction in the mid-term, and environment in the long-term. With creative caring we can generate a “positive economy”, build up “Gross National Happiness” and be fully considerate of the future generations who will inherit this planet from us. A creative mind has the insight to recognize this and the audacity to apply it.

Creativity in education is to get rid of entrenched theories and explore with fresh eyes, asking basic questions such as “What do we really expect from education?” Education should produce good human beings, but it seems like most of the educational systems do not directly aim at achieving this goal.

To be creative in education would entail devising new skillful ways to achieve this aim. This may require a quantum leap toward teaching human values, to truly help children to develop mindfulness, altruistic love and tolerance, and therefore, to create a more compassionate society.