WesleyNexus













Dear WesleyNexus Colleague:

Fall always seem to bring a full schedule of events in our churches, so that we often seem to be overwhelmed with activities – all of which precedes the madness of the Christmas season. 2015 appears to be no different. So we have to pick and choose, and we at WesleyNexus hope that you are including some reading, some discussion, some events within the scope of the science & religion dialogue as we all mature in our faith. Those of us participating in the Science & Religion Sunday class at Metropolitan Memorial, the national United Methodist Church in Washington DC, across the street from The American University, have been discussing "The Brain" in a series that began at Labor Day and will stretch through the end of the year. We call the discussion series "Head, Heart and Spirit."

The background and source material has been organized for us by Dr. Alexandra McPherron, for many years a research scientist at the National Institutes of Health in Bethesda and now the principal research scientist at nearby MYO Therapeutics. This 15-week discussion series has already addressed issues like "The Healthy Brain," "Mechanisms of Learning and Memory," "Location of Language," "Free Will and Determinism," and "The Drive toward Complexity." In subsequent sessions we will be focusing on topics such as Creativity, Personal Identity, Tangled Wires, The Science of Lying, Transcendent Spiritual Experiences, Empathy & Compassion, and The Ethics of Cognitive Enhancement. About half the participants in the class are members of Metropolitan Memorial, but others are coming from the wider community, and we welcome any who might be in Washington this Fall to drop in on Sunday mornings at 10:00. Specific information can be found in the weekly "Update" on the church website: http://www.nationalchurch.org/Learning/Adult.

As we at WesleyNexus are planning additional programs for the coming year, all of which are open to the public – to anyone who wants to engage in the science & religion dialogue. As we mention each month, we find our goals exceed the funds needed to support new activities. So, we continue to ask for your support. THANK YOU TO THOSE OF YOU WHO ACTUALLY SENT RECENT CONTRIBUTIONS. We want to stress that all funds that we collect are spent on maintaining our web presence, sponsoring programs, distributing the newsletter and promoting activities of other organizations within the science and religion space. All contributions are acknowledged for tax reporting purposes either through PayPal receipt or by letter. Please consider supporting us with a contribution either through the PayPal DONATE link below, or, by sending a check to:

WesleyNexus, Inc. 24500 Fossen Road Damascus, MD 20872



Thanks in advance for your support.

Rick, Maynard, and the rest of the WesleyNexus Board of Directors

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PBS: The Brain

Though a coincidence, the above-mentioned discussion series coincides with the a new PBS series on "The Brain" which features each week a new episode by neuroscientist David Eagleman. This fascinating TV event explores the wonders of the human brain in an epic series in six episodes that reveals the ultimate story of us, why we feel and think the things we do. It is seen on most PBS stations around the country on Wednesday evenings, in most cases



following the regular weekly NOVA program. If you missed segment one last week, you can still go to the PBS home page, click on the icon/picture of the Brain, and watch the first episode as a podcast. Episode One provided basic information about brain structure and function and included much information that has become widely accepted over the last forty years (though for many in the viewing public it comes as "new" information). As is usual, PBS has published a companion volume The Brain: The Story of You, in which we assume Dr. Eagleman documents the researches who have preceded him, something that is not possible for him to do in the television episodes. Dr. Eagleman is a neuroscientist, New York Times bestselling author and a Guggenheim Fellow. He holds joint appointments in the Departments of Neuroscience and Psychiatry at Baylor College of Medicine in Houston, Texas. Dr. Eagleman's areas of research include time perception, vision, synesthesia, and the intersection of neuroscience with the legal system. He directs the Laboratory for Perception and Action, and is the founder and director of the Initiative on Neuroscience and Law. He is the author of several neuroscience books, including Incognito: The Secret Lives of the Brain and Indigo Blue: Discovering the Brain of Synesthesia. He has also written an internationally bestselling book of literary fiction, Sum, which has been translated into 28 languages and was named a Best Book of the Year by Barnes and Noble, New Scientist, and the Chicago Tribune. Dr. Eagleman writes for The Atlantic, New York Times, Discover Magazine, Slate, Wired, and New Scientist.

Episode One in this series, 'What is Reality?' begins with the astonishing fact that this technicolor multisensory experience we are living is a convincing illusion conjured up for us by our brains. Eagleman explained how electrochemical signals travel through dense networks of neurons. The brain scans through this non-stop incoming stream of information in search for patterns which become our reality. Eagleman takes viewers on an extraordinary journey that explores how the brain, locked in silence and darkness, without direct access to the world, conjures up the rich and beautiful world we all take for granted. In the outside world there is no color, no sound, no smell. These are all constructions of the brain. Instead, there is electromagnetic radiation, air compression waves, and aromatic molecules all of which are interpreted by the brain as color, sound and smell. We met the men and women whose experiences of reality reveal important clues about how the brain constructs our own reality, including the Alcatraz prisoner who was locked in the notorious 'Dark Hole' for 29 days, and yet experienced richly colorful moments of reality. We met a man who is blind despite the fact that he has eyes that can now see. His story reveals that it's the brain that sees, not our eyes. A woman with schizophrenia, whose psychotic episodes were her reality, emphasized the fact that whatever our brains tell us is out there, we believe it. Eagleman also explores time, and takes a look at how – and why -- the brain alters its perception of time, depending on the situation we find ourselves in. Time, it turns out, is not an absolute to the brain. Each one of our brains is different, and so is the reality it produces. What is reality? It's whatever your brain tells you it is.

In episode two, 'What Makes Me?', we will learn how our personality, memories and sense of self all emerge from neural activity; a look at how personality, emotions and memories are encoded in the brain; and how the process of becoming continues throughout one's life. Eagleman explores the question of how the brain gives rise to our thoughts, emotions, our memories and personality. Philosophers and great thinkers have for millennia pondered the question of how physical stuff can give rise to mental processes. Last century, the new field of neuroscience joined the discussion.

Episode three is called, "Who is in Control?" Here we learn how the unconscious brain controls much of who we are and what we do. Eagleman explores the great deception that greets us each morning when we awake: it feels as though we are in conscious control of our lives but the truth is that we are not. Instead almost every action, every decision, every belief that we hold is driven by parts of the brain that we have no access to.

In episode four, called "How do I Decide?" we will see how the brain navigates the myriad of conscious and unconscious decisions we make daily. The human brain is the most complex object we've discovered in the universe, and every day much of its neural circuitry is taken up with the tens of thousands of decisions we need to make. 'How do I decide?' is a journey through the unseen world of decisions, and how they get made. In episode five, "Why Do I Need You?" we see how the human brain depends on other brains to thrive and survive. Eagleman explores how this neural interdependence begins at birth, and invites a group of babies to a puppet show to showcase their ability to discern who is trustworthy, and who isn't. In the final episode, "Who Will We Be?" we journey into the future as Eagleman asks what's next for the human brain, and for our species. Mother nature has evolved a brain that is eminently flexible, able to rewire itself according to whatever environment it finds itself in, which means that as technological advances continue apace, our technology is on a crash course with our biology. We discover serious questions arising with the prospect of a "transhuman" future.

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Other Events of interest:

Modern Cosmism Conference Dates: October 10, 2015 Location: New York, NY



On October 10, approximately sixty persons from many cities in the United State and Canada gathered at the Society for Ethical Culture in New York City for the first Cosmism conference in North America. Sponsored by the Cosmism Foundation, the event brought together a variety of speakers and discussants to focus on developing technologies that will impact our future individualities and our societies. What is Cosmism? According to Dr. Vlad Bowen, executive director of the Cosmism Foundation, Cosmism is the integral, optimistic theory of human evolution where concepts of truth, reality and happiness will be deeply revised. Issues addressed at this conference included mind-uploading, super intelligence, artificial consciousness, conditional immortality, and the merging of the human body with technology. Presenters included Dr. Jeremiah Ostriker, astrophysicist and professor of astronomy at Columbia University, Dr. Giulio Prisco, former senior manager at the European Space Agency, Dr. Randal Koene, former director of the department of neuroengineering at the Fatronik-Tecnalia Institute in Spain, and, among others, Dr. Jay Friedenberg, professor of Psychology and director of the Cognitive Science program at Manhattan College. Dr. Ben Goertzel, Chairman of the AI company Novamente, raised fundamental questions about our continuing evolution, and suggested that we will soon dramatically reduce material scarcity on the planet, we will exceed the traditional promises of religion, and we will need to develop new ethics based on joy,

growth and freedom. Several of us in the audience raised questions about the assumptions concerning a new ethical system based on a merged humanity and technology, acknowledging that we should be about building new social concepts based on the richness of religious perceptions and imagination. In a synthetic reality and a world driven by quantum computing, the church should be thinking about these new states of individual and collective awareness. Discussions at the conference raised such questions as: can non-biological hardware support the full flowering of consciousness? Within the concept of cosmic evolution, what will be the role of intelligent life? Will we actually be able to create super-intelligent agents with feelings and consciousness? What are the actual limits of artificial capacities and functional simulations? What are the ethical implications in the effort to genetically enhance the human? Are there exceptions to the principle of causality? Other conference presenters touched on phenomena such as the anthropic principle in our cosmic history, the black hole information paradox, the implications of multidimensional space, dark matter and the arrow of time, and the challenges of cyber immortality. Overall, the conference felt like a ten-hour mind warp, but serious Christians need to engage these questions and the scientists who are devoting research resources and millions of dollars on the technologies of the future. More information on these questions and future presentations can be found at http://www.cosmism.com/foundation.html.

On a related item of interst, Dr. Philp Galinsky, who spoke at the Transhumanism Conference that we reported in the August newsletter, has turned his presentation into a documentary style film shared on YouTube: Development and Advancement of Neurotechnologies for Freedom and Brain Health; https://youtu.be/wDOkg-ggYc. It contains all of the parts presented at the Juniata College conference, and also contains about 20 minutes of a deeper dive into neurotechnologies which are changing our most fundamental human characteristics, including our malleable sensory connections to the surrounding world, our irrational tendency to react with violence when faced with difficult fears, and our capacity for freely willed behavior.

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UPCOMING EVENTS

EXCITING EVENT! For any of you who are or might be in the DC area on October 28, please come and hear Nancy Ellen Abrams talk about her book, "A God That Could Be Real" in person. Also there will be her husband, Joel R. Primack, astrophysicist at University of California Santa Cruz, who just received the 2016 Leo Szilard award, for his ground-breaking work studying dark matter. And please SPREAD THE WORD to any clergy (all faiths) or scientists (NIH, for instance) in the DC metro area, and all other interested lay persons.

Nancy Ellen Abrams on: "A GOD THAT COULD BE REAL" Beacon Press, 2015 Wednesday, October 28 at 7:30pm Washington Ethical Society 7750 – 16th Street NW, (202) 882-6650 in Washington, District of Columbia



Limited Parking on site, additional parking on surrounding streets

Nancy Abrams, an attorney, philosopher of science and lecturer at UCSC, brings a long-term interest in science policy, having worked for an international law firm, a European environmental think tank, the Ford Foundation and the Office of Technology Assessment at the U.S. Congress. She has consulted with the governments of Sweden, California and Wisconsin, with ExxonNuclear, and others. She and husband Primack team-taught a course over a decade at Santa Cruz called "Cosmology and Culture," which won

awards from the American Council of Learned Societies and the Templeton Foundation. Abrams and Primack also co-authored a prize-winning article on "Quantum Cosmology and Kabbalah," plus numerous other articles on science policy, space exploration, and cultural implications of current cosmology. The two collaborated to give the 2009 Terry Lectures at Yale University, and they have presented outstanding lectures on modern cosmology and its implications at universities, planetariums, and science museums around the world. Their popular previous book is called The View from the Center of the Universe, published by Penguin Group Riverhead Books.

Divine and Human Purpose in Science and Judaism

Sunday, November 1, 2015 -Breakfast 10:00 a.m., Lecture 10:30 a.m. Jewish Community Center of Greater Washington 6125 Montrose Road, Rockville, Maryland



Divine and Human Purpose in Science and Judaism

Please join Rabbi Dr. Leonard Levin, the author of The Case for God: Answering the Atheist (ajrsem. academia.edu/LennyLevin), in confronting the profound questions that we who affirm both contemporary science and Judaism must consider: Does the universe attest to a purposeful God? If it does, do humans have a special role in God's scheme? Science professes to be neutral on these issues, but revolutionary discoveries in physics and astronomy have revealed that our universe and life itself depend upon an extraordinarily improbable convergence of precise physical constants. Do these discoveries attest to God's creation? Rabbi Levin will draw upon biblical texts; ideas of our sages; and the writings of theologians, philosophers, and scientists from ancient to modern times to address these questions. For more information, go to http://www.scienceandjudaism.org.

"Science of Mindfulness: What we know and don't know"

Monday, November 16, 2015:

The Institute for Religion and Science, Hosted by Chestnut Hill College, invites everyone to an Evening Discussion with Marc Schulz, PhD, Hale Professor in Science and Mathematics, Bryn Mawr College –



Monday, November 16, 2015:

"Science of Mindfulness: What we know and don't know"

Location: Commonwealth Chateau on the SugarLoaf Campus of Chestnut Hill College, 9230 Germantown Avenue, Philadelphia, PA 19118

Meditation and other mindfulness practices are hot commodities in contemporary American popular culture. Ever widening circles of people are becoming interested in the benefits that mindfulness can offer in stress-relief, well-being and physical health. This talk will highlight modern conceptualizations and implementation of mindfulness practices that have arisen in the west, and will review scientific research that examines the potential health benefits of these practices. For more information, go to www.irands.org

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Re-conceptualizing the Origin of Life

Monday, November 9, 2015 - 8:00am to Friday, November 13, 2015 – 3:00pm The Carnegie Institution, 1530 P Street NW, Washington DC 20005

Physics and chemistry have arrived at a deep understanding of the non-living world. Can we expect to reach similar insights, integrating concepts and quantitative explanation, in biology? Life at its origin should be particularly amenable to discovery of scientific laws governing biology, since it marks the point of departure from a predictable physical/chemical world to the novel and history-dependent living world. The origin of life problem is difficult because even the simplest living cell is highly evolved from the first steps toward life, of which little direct evidence remains. The conference aims to explore ways to build a deeper understanding of the nature of biology, by modeling the origins of life on a sufficiently abstract level, starting from prebiotic conditions on Earth and possibly on other planets. The conference will examine the origin of life as part of a larger concern with the origins of organization, including major transitions in the living state and structure formation in complex systems science.

This conference is the outgrowth of a grassroots movement called "Modeling Origins of Life", MOL for short, that sprung up from a number of informal workshops that were organized in the US and in Japan in 2014. Our goal is to host a workshop of broad scope but with targeted impact on key questions and core concepts about the origin of life on Earth, the organization of the biosphere, and the nature of the living state. Speakers include: Christoph Adami, University of Michigan; Laurie Barge, Jet Propulsion Laboratory; John Baross, University of Washington; Henderson Cleaves, Institute for Advanced Study; Lee Cronin, University of Glasgow; Jessica Flack, Santa Fe Institute; Takashi Ikegami, University of Tokyo; Betul Kaçar, Harvard University, and a host of others from around the world. The conference is limited to 100 registrants to maintain productive interchange, but inquiries may be directed to the conference administrator at the link: https://carnegiescience.edu/events/lectures/re-conceptualizing-origin-life.

A public lecture will be featured on Thursday November 12, at 6:30 p.m. with Dr. Robert Hazen - Chance, Necessity, and the Origins of Life.

Registration closes fast, but access is on the webpage.

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February 13-14, 2016:

Evolution Weekend, sponsored nationwide by the Clergy Letter Project.

WesleyNexus is pleased to announce that we once again will be hosting the premier event in Maryland, at the Baltimore-Washington Conference Mission Center in Fulton, Maryland. For the fourth year we will be live-streaming the event from our webpage. We encourage all in our network who are in the near vicinity to plan on attending and bring a large delegation from your congregation. In 2016 our focus will be on Medical Ethics: How will the New Technologies Change the Way we Think about Ourselves and Social Responsibilities? We are confirming our speakers now for this interfaith event, which will be moderated by Professor Sondra Wheeler, bioethicist and Professor of Christian Ethics at Wesley Theological Seminary in Washington. More information will be on our webpage shortly, but we hope you will make your plans now to be present, and if out of the area, organize a church viewing that week-end and have your own discussion by participating in our webcast.