

Ahearn, Marilyn

Marilyn Ahearn is a PhD candidate in the faculty of Education at Southern Cross University, Australia and is due to submit her thesis in August 2018. Her research focuses on the impact of teaching Big History in the elementary school and the extent that it can inform children's environmental education values. Marilyn is experienced in elementary education, including roles on school leadership teams and in environmental education initiatives. She advocates transdisciplinary learning that encompasses sustainability, the Big History story and children's wonder of the universe.

Elementary Education: Little Learners, Big History, Bigger Future

Anthony, Carl

Carl Anthony is an architect, activist and urban strategist, lifelong advocate for environmental and racial justice, and co-founder with Dr. Paloma Pavel of the Breakthrough Communities Project at Earth House Center. Carl served on the faculty of the UC Berkeley School of Architecture and served for ten years as the first African American president of an international environmental organization (Earth Island). He is founding editor of the *Race Poverty and the Environment Journal*, the oldest Environmental Justice journal in the United States and founding Executive Director of the SF Bay Area Urban Habitat program. He directed the portfolio on Sustainable Metropolitan Communities for the Ford Foundation, in the US and 14 global sites. He is a frequent presenter in national and international conferences on sustainability and social justice (with Dr. Pavel) including the IBHA conferences in both Amsterdam (2016) and San Rafael (2014). Carl is currently on a national community mobilization tour with his latest book, "*The Earth, the City and the Hidden Narrative of Race*" (New Village Press, 2017)

A New Story of Race and Place

The Earth, the City & the Hidden Narrative of Race

Baskin, Ken

Ken Baskin is an independent researcher and writer, who focuses on integrating insights from fields ranging from Complexity Theory to Big History, Neuroanthropology to Evolutionary Developmental Biology. Having graduated with a Ph.D. in English Literature from the University of Maryland in 1977, he escaped academia and spent fifteen years writing Corporate Public Relations for several major firms. His publications include his book, *Corporate DNA* (1998), also translated into Chinese; the book of essays on Complexity Theory and Storytelling that he edited with Professor of Business David Boje, *Dance to the Music of Story* (2010); and his monograph with Anthropologist Dmitri M. Bondarenko, *The Axial Ages of World History* (2014). Baskin's current projects include work with Bondarenko on a longer version of their book, and an exploration of religion as a product of biological evolution. Baskin is a Founding Member of the International Big History Association and a Fellow at the Institute for the Study of Coherence and Emergence.

America's Turn-Of-The-Century "Religion"

Big History and The Process Paradigm

Benjamin, Craig

Craig Benjamin is a Professor of History in the Meijer Honors College at Grand Valley State University, where he researches and teaches Big History and ancient Eurasian history. Recent books include *Big History: Between Nothing and*

The Sun That Is Young Once Only: A Little Big History Of 'Fern Hill',

Everything (McGraw-Hill, 2014); Cambridge History of the World Vol IV (CUP, 2015) and Empires of Ancient Eurasia. The First Silk Roads Era 100 BCE - 250 CE (CUP, forthcoming 2018). Craig has recorded programs and courses for the History Channel and The Great Courses, and lectures for Archaeological Tours, and Scientific American and New York Times cruises.

Blanks, David

David Blanks is professor of history at Arkansas Tech University. Previously he was at the American University in Cairo, where he worked from 1992 to 2015. A medievalist by training, specializing in religious and social history, his work has examined heresy and anti-clericalism in 14th-century Languedoc, Christian-Hindu encounters in 16th-century Vijayanagara, and Muslim-Christian encounters in the early modern Mediterranean. Dr. Blanks first became interested in Big History at the 14th Annual World History Association conference in Ifrane, Morocco in 2005.

The Origins of Big History in Romantic Science
What Cognitive Structures Underlie Big History?

Bos, Jesse

Jesse E. Bos lives in Amsterdam and a 'relady' (/regent) in Coldigioco, the small 'contrada' in Italy where the start of the IHBA was affirmed. She has a bachelor's degree in political science and was from 2000 till 2014 active in Amsterdam politics as a social democrat. She was and still is active in several voluntary social organizations and used to have her own social consultancy. Migration and cultural developments have her special attention. She finished her master on recent history with minors in cultural anthropology, sociology and Chinese language. She worked for 12 years in the Tropical museum in Amsterdam. After that experience she finished a PhD on the organization and privatization of museums in Holland.

Big History in European High schools

Brown, Hayden

Hayden Brown is the Director of Academic Extension and Big History teacher at Broome Senior High School. Hayden balances overseeing academic extension programs in Year 7 and 8, as well as teaching Humanities. Hayden has been a lead teacher and design partner of The BHP in Australia since 2016 and a finalist for the WA Secondary Teacher of the Year in 2017.

Big History Inclusive Education - Connecting the School and The World

Chandrankunnel, Matthew

Fr. Mathew Chandrankunnel is a professor of philosophy of science at Dharmaram Vidya Kshetram and Christ University, both in Bangalore, India. He is the author of several books including "Philosophy of Quantum mechanics" and "Ascent to Truth: The Physics, philosophy and Religion of Galileo Galilei". He is a scientist, philosopher and theologian.

Relationship and Community

Chuss, David

Dr. Chuss is an Astrophysicist specializing in the development of new instrumentation to study the universe. Before joining the Villanova Faculty in 2015, Dr. Chuss spent 10 years working in NASA Goddard Space Flight Center's Observational Cosmology Laboratory. His current interests are the physics of the early universe and the mechanisms underlying star formation in the Milky Way.

Measuring Cosmic History: Tools for Understanding the Universe

Codetta Raiteri, Adalberto

Adalberto Codetta Raiteri graduated in Physics in 1972, taught Mathematics and Physics in secondary schools, and was a headmaster. I started my career as a teacher trainer on computer literacy and I gradually extended my professional activity from the scientific sector to the teaching-learning methods. I participated in many

Big History in European High schools

educational research that I presented at numerous conferences and at CIEAEM (International Commission for the Study and Improvement of Mathematics Teaching). I wrote, together with other authors, the book: *Zero e senso comune* (Zero and common sense) a survey on the temporariness of disciplinary learning.

Curtis, Wendy

Wendy Curtis is the author of *The Biggest Picture: From the Formation of the Elements to the Emergence of Society* (which has recently been translated into Spanish) and co-author of *Big History in Flight: From the Creation of Our Universe to the Crafts Built to Explore it*. After many years exploring history, mechanics, science, and geology on her own, Wendy graduated from Smith College with a major in geology and a minor in art. She presented some of her findings in lectures at previous IBHA conferences and was a featured author at the Experimental Aircraft Association's conference in Oshkosh Wisconsin. She is currently working on a Big History of North America.

Seeing Is Believing: A View from Above Gives Us the Big Picture

Davis, Cameron

Cameron Davis is a Senior Lecturer with the University of Vermont Department of Art & Art History, and Environmental Humanities Fellow. She teaches Painting, Drawing, Perspectives on Making and courses exploring the intersection of Art, Perception & Ecology. She received her M.F.A in Painting from Pratt Institute, NYC, 1981 with post graduate studies at Schumacher College, UK, 1998, 2015. Davis' paintings explore wholistic aesthetics; art, science & imagination, as contributing to our capacity to create a life affirming future.

Aesthetics in Big History: The Power of Beauty in Evolution

Cosmophilia, A Visual Arts Practice

Davis, Felicia

Felicia Davis is Sustainability Coordinator at Clark Atlanta University, is Co-Chair of the HBCU Geosciences Working Group.

A New Story of Race and Place

Davis, Frederick R.

Frederick R. Davis is Professor of History and the R. Mark Lubbers Chair in the History of Science in the Department of History at Purdue University. His most recent book was *"Banned: A History of Pesticides and the Science of Toxicology"* (Yale 2014). He teaches the history of science and medicine and environmental history. Davis recently developed a new course in Big History. He is currently writing a book on Rachel Carson: *"The Making of 'Silent Spring.'"*

Rachel Carson, The Sea, Silent Spring, And the Fabric of Life

Day, Philip

Philip Day is the author of the *Rap History of the World*, which he presented at the IBHA Conference 2016 in Amsterdam; it offers a concise statement of Big History's Grand Narrative in 800 lines of syncopated rhyming verse: www.raphistoryoftheworld.com. Philip studied Modern History at Oxford University, graduating in 2004, and has pursued interests in history, science and Big History since. His paper, 'Disease in our World: A Dark Side of Interaction' was published in IBHA Origins VII.3 https://bighistory.org/Origins/Origins_VII_03.pdf.

Threat Assessment: Networks and Disease

de Vinck, Andre

Ph.D. English and American Literature, Binghamton University. My early interest in literary theory led me to anthropological, cultural, historical, evolutionary theory which led me to write this book.

A Theory of No-Thing

Deyo, Brian

Brian Deyo is an Assistant Professor of English at Grand Valley State University, where he teaches environmental literature, world literature, and critical theory to undergraduate and graduate students. His scholarly publications are primarily oriented toward the fields of ecocriticism, animal/animality studies, and postcolonial literature.

Conceptualizing Hyper objects: Ecological Literature and The Anthropocene,

Duncan, Todd

Todd Duncan is Visiting Professor of Physics at Pacific University. He received his undergraduate degree in physics from the University of Illinois, an M. Phil. from Cambridge University as a Churchill Scholar, and a doctorate in astrophysics from the University of Chicago where he was an NSF and McCormick Fellow. His views on science education and cosmology are summarized in a recent TEDx talk, "The Value of a Cosmic Perspective."

Nagel's Objective Idealism and Explanation in The Context of Big History

Ellenberger, Kurt

Kurt Ellenberger is a pianist, composer, and author whose work includes music for a wide range of ensembles. His writings include a jazz theory book, other pedagogical writings, and essays that appear in his arts blog Also Sprach FraKathustra, which is published by The Huffington Post. He is a faculty member in the Meijer Honors College at Grand Valley State University and has recorded on Innova Recordings, Ghostly International, and Challenge-A Records. He is a Fulbright Scholar who taught in Austria at the Kunstuniversität Graz and serves as artistic advisor for the city of Mannheim, Germany.

Music and The Brain

Espartinez, Alma S.

Dr. Alma S. Espartinez is the Vice President for Academic Affairs of Holy Angel University in Angeles City, Pampanga. She is a graduate of AB Philosophy at University of Santo Tomas, Manila; she finished her M.A. Philosophy and PhD in Philosophy at the same university. Dr. Espartinez is a Fulbright Scholar-in-Residence awardee in 2010-2011. She is an author of three philosophy books: (1) Logic: The Art of Reasoning (which is already in its 7th edition), (2) Becoming a Human Person (4th edition), and (3) Logic and Ethics.

Crossing the Threshold of Hope

Firer, Ruth

Ruth Firer studied, lectured and researched at the Hebrew University of Jerusalem, Israel. Main research: She is authored 'Agents of Zionist Education' and 'Agents of the Holocaust Lesson'. With Palestinian Sami Adwan, she published a comparative research 'The Israeli-Palestinian Conflict in History and Civics Textbooks of both nations' and directed a project in Israeli and Palestinian middle schools entitled, "To Learn to Live Together". She also completed a research 'To Obey or Disobey: the dilemma of civil and military nonviolent disobedience in history and civics textbooks in Israel, Britain and the U.S'. Now she is working on 'Big History' in high schools and in textbooks.

Devil's Advocate: Teaching Big History in High Schools

Fisher, David C.

David Fisher is an associate professor of history at the University of Texas Rio Grande Valley where he works in the fields of Russian, world, and big history.

River of Wealth and Poverty: A Little Big History of The Lower Rio Grande

Flynn, Dennis O.

Director of the Pacific World History Institute and Professor Emeritus of Economics, University of the Pacific, Dennis O. Flynn has published scores of articles and books on global economic history, the (multidisciplinary) birth of globalization during the sixteenth century, and economic theory over the past 40 years. He has attended all IBHA conferences thus far and proposes an economic model congruent with scientific methods and central themes of Big History.

Big History, Geological Accumulation, And Physical Economics

Garcia-Moreno, Olga

Olga Garcia Moreno holds a PhD in Geology and teaches at the University of Oviedo. She is also a researcher at the Center for Nanomaterials and Nanotechnology (CSIC-UO-PA). She was a Visiting Scholar at the University of California, Berkeley, in 2013 and 2016. She has published widely on advanced ceramic nanomaterials and igneous petrology. Her research interests cover phase equilibrium diagrams with applications in petrology and material sciences. She has also experience in experimental petrology and published her PhD dissertation on this topic. Since 2013 she has been introducing Big History in Spain, together with the role of planetary geology and meteorites in this interdisciplinary approach. She is the director of the first Gran Historia course in Spain. She has participated in several Spanish and European projects in the fields of geology and material science. She has also participated in innovative Geological teaching projects and in numerous science outreach activities.

University Education: Big History at The University of Oviedo

Research in Big History from An Earth's Scientist Point of View

Gibelyou, Cameron

Cameron Gibelyou holds a PhD in astrophysics from the University of Michigan (2012) and currently serves as a faculty member there, developing and teaching courses focused on Big History, popular science, and the future. He has taught Big History at both the high-school level and the college level and has worked with the Big History Project in various capacities since 2011. He has taught physics, astronomy, psychology, history, and English at UM, and has taught astronomy to high-school and junior-high students in academic summer camps. He and Prof. Douglas Northrop of the UM History Department are co-authoring a book on Big History for Oxford University Press.

Why the Future Needs History (And Science)

Gilbert, Ken

Ken Gilbert is currently an independent scholar who has been researching a transdisciplinary synthesis of Big History for 48 years since his undergraduate days at MIT. His background includes master's degrees from California Institute of Integral Studies and Wayne State University, and postgraduate research at University of Edinburgh and Emory University on a Woodruff Fellowship. Ken has recently presented at the IBHA conferences of 2012 and 2014, and previously participated in conferences sponsored by the Templeton Foundation. His paper from the 2012 IBHA conference is included in the first IBHA proceedings volume.

The Evolution of Consciousness

Gragg, Richard Schulerbrandt

Richard Schulerbrandt Gragg, Ph.D. is Professor of Environmental Science and Policy at Florida A&M University School of the Environment and together with FELICIA DAVIS, Sustainability Coordinator at Clark Atlanta University, is Co-Chair of the HBCU Geosciences Working Group.

A New Story of Race and Place

The Earth, the City & the Hidden Narrative of Race

Grassie, William

William Grassie was the founding executive director of the Metanexus Institute. He received his doctorate in religion from Temple University and his undergraduate in political science at Middlebury College. Grassie's books included *The New Sciences of Religion: Exploring Spirituality from the Outside in and Bottom Up* and *Politics by Other Means: Science and Religion in the Twenty-First Century*. His next book is *Applied Big History: A Guide for Entrepreneurs, Investors, and Other Living Things*.

Our Big Future or How I Learned to Stop Worrying and Love the Apocalypse

Grim, John

John Grim is a Senior Lecturer and Research Scholar at Yale University, where he has appointments in the School of Forestry and Environmental Studies as well as the Divinity School and the Department of Religious Studies. He teaches courses in Native American and Indigenous religions and World religions and ecology and undertakes field work with the Crow/Apsaalooke people of Montana and Salish people of Washington state. His works include: "The Shaman: Patterns of Religious Healing Among the Ojibway Indians" (1983) and "Indigenous Traditions and Ecology: The InterBeing of Cosmology and Community" (2001). With Mary Evelyn Tucker, he directed a 10-conference series on "World Religions and Ecology." With Mary Evelyn Tucker, he has co-edited "Worldviews and Ecology" (1995), a Daedalus volume titled "Religion and Ecology: Can the Climate Change?" (2001) "Ecology and Religion" (2014). They edit the "Ecology and Justice" series with Orbis Books. John is President of the American Teilhard Association.

The New Cosmic Story: Inside Our Awakening Universe

Grinin, Anton

Anton L. Grinin, PhD in Biological Sciences, is Senior Research Fellow for International Center for Education and Social and Humanitarian Studies. His main research interests include global technological transformations and forecasts. He is the co-author of the monograph «From Bifaces to Nanorobots. The World on the Way to the Epoch of Self-Regulating Systems [History of Technologies and Description of Their Future Development]. and a number of articles in English and Russian.

Measuring the Rate of Technological Evolution

Grinin, Leonid

Leonid Grinin is a Russian philosopher of history, sociologist. He is a Deputy Director of the Eurasian Center for Big History & System Forecasting (Russian Academy of Sciences). He is an author of more than 500 scholarly, 30 monographs including *Cosmic Evolution*. Volgograd: Uchitel. In Russian. *The Cybernetic Revolution and the Forthcoming Epoch of Self-Regulating Systems*. Moscow: Moscow branch of Uchitel PH, 2016; *The History and Evolution of the Solar System* (Uchitel, 2017). In Russian. He is editor (with Rodrigue and Korotayev) 3 vol. *A Big History Anthology* (Delhi: Primus Books, 2015–17)

Evolution of The Early Solar System

Guarnaccia, Rachael

Rachael Guarnaccia began in auditing/operations for banks and midsize companies; fulfilled by improving systems while supporting individuals. Studied various martial arts, mediation, peace/conflict courses and NVC. Attracted to complex systems

Cosmic Walk

International Student Exchange

science and optimistic uses of AI deep learning, she created discussion groups. Introduced to Big History; remotely assisted Prof. Rodrigue and Prof. Katayama with their student exchange between Symbiosis, India & J. F. Oberlin, Japan. She assists where possible, while writing fiction and work as a RE investment analyst

Guarnaccia, Sam

Sam Guarnaccia is a composer, classical guitarist, and scholar. He studied in Spain, the US, and received an MFA, California Institute of the Arts, created and directed the guitar program of DU's renowned Lamont School of Music, and has taught at Middlebury College and the University of Vermont. Among his works—a cycle of nine peace songs; *A Celtic Mass for Peace*, in collaboration with Celtic scholar/writer John Philip Newell—performed in both Europe and the US, featured in a major Peace celebration: 10th anniversary of 9/11, September 11, 2011, in New York, and Vermont. The *Emergent Universe Oratorio* had its world premiere with new libretto and full orchestration in Cleveland, June 30, 2017. He works closely with creative partner Paula Guarnaccia.

Aesthetics in Big History: The Power of Beauty in Evolution

Gustafson, Lowell

Lowell Gustafson, Ph.D. is President of the International Big History Association and Professor of Political Science at Villanova University. I He earned his PhD from the University of Virginia and have held a position on the political science faculty at Villanova University in Villanova, PA, USA since 1986. I have written or been a contributing editor of seven books as well as numerous book chapters and articles.

The New Cosmic Story: Inside Our Awakening Universe

Gustafson, Lowell

Lowell Gustafson is professor of political science at Villanova University. His research interest is in big history and politics. He has held various positions in the IBHA; he looks forward to emerging understandings of the relationships between science and the liberal arts.

Ties That Bind

Hasse, John

Dr. John Hasse is a professor of geography in the Rowan University Department of Geography, Planning & Sustainability and founder/director of the department's Geospatial Research Laboratory where his research focuses on mapping for sustainability and community engagement. In recent years Hasse has been working with colleagues and paper coauthors B. Flanagan, R. Federman and C. Nolan to integrate the concepts of Big History as a unifying theme in the department's general education geography courses.

A Big History/Geography Alliance for Teaching the Anthropocene

Haught, John

John F. Haught is Distinguished Research Professor, Georgetown University, Washington DC. His area of specialization is systematic theology, with an interest in issues pertaining to science, cosmology, evolution, ecology, and religion. He is the author of 20 books on these topics. He lectures internationally on many issues related to science and religion. He testified for the plaintiffs in the Harrisburg, PA “Intelligent Design trial” (Kitzmiller et al. vs. Dover Board of Education) and in 2008 received a “Friend of Darwin Award” from the National Center for Science Education.

The New Cosmic Story: Inside Our Awakening Universe

Hazra, Orla O'Reilly	Orla O'Reilly Hazra currently lives in Mumbai India. She has a master's degree in spirituality and spiritual direction from Fordham University, Religion and Religious Education (2003) and is licensed as an alcohol and drug abuse counselor. In 2009, she completed her PhD, tracing an awakening to somatic and narrative ways of knowing (in family, schools, work and recreation through the fourfold wisdom conversation of science, religion, women and indigenous peoples. Orla is a research associate with the Department of Interreligious Studies (DIRS), associated with Tarumitra, a UNEP Ecoliteracy Centre in Patna, India, a member of the International Big History Association (IBHA), and a founding governing board member of the Deep Time Journey Network (www.deeptimejourney.org).	Cosmic Walk Community as The Context for Learning Big History
Hines, C.J.	C.J. Hines is working towards an AA at a Florida state college. She was introduced to Big History and Future Studies a few years ago, and has remained interested in their implications, structures, and past ever since. She aims to communicate her ideas through various forms of media, such as film-making, writing, games, and visuals. She also enjoys philosophy, mathematics, playing the harp, exploring, and reading.	The Battle Tomorrow: Narrative Theory of The Past and Future
Jennings, Christian	Christian Jennings has worked as a college professor (Washington and Lee University, University of Wisconsin-Stevens Point) and high school teacher (The Nueva School, Bugil Academy Global Leader Program).	Broke Down, Busted and Brilliant: Collective Learning in A Used Universe
Jing, Zhongfan	Zhongfan Jing. Is an 11th grader from Boston University Academy, Boston, MA. I grew up in Beijing, China. I moved to Sydney, Australia with my family when I was nine. I came to the US in 2015.	The Inevitable Disparity: An Essay on The Legacy of European Colonialism
Katerberg, William	William Katerberg is professor of history at Calvin College in Michigan. He teaches environmental history, theory and methods, Native American history, the North American West, and world history. He has published work on religion and politics, the mythology of the American West, visions of the future, historiography, and Big History. His interest in Big History is from the viewpoint of the history and philosophy of science. His current work focuses on the relationship between the natural sciences and the humanities and conversations about the ideal of consilience.	Two-Way Traffic on The Road to Big History; Or, Rethinking Consilience
Kayayama, Hirofumi	Hirofumi Kayayama is a professor of economics at J.F. Oberlin University, Tokyo, where he specializes in environmental studies. He organized and teaches the first big history course in Japan (see the J.F. Oberlin University Big History Project). His publications include Free Market and the Commons: An Introduction to Environmental Finance (2008) and Politics of Climate Change over the Arctic: Preliminary Thoughts on the Global Commons (2014).	Environmental Ethics of Astronauts
Kim, Hanseung	Ph.D. Student, Department of Geography Education, Seoul National University and Teacher, Hana Academy Seoul	Big History Education in Korea Revised

Kim, Kyungtae

Student, Hana Academy Seoul

Big History Education in Korea Revised

Korotoyev, Andrey

Andrey Vitalievich Korotayev is a Russian anthropologist, economic historian, comparative political scientist, and sociologist, with major contributions to world-systems theory, cross-cultural studies, Near Eastern history, Big History, and mathematical modelling of social and economic macrodynamics. He is Head of the Laboratory of Monitoring of the Risks of Sociopolitical Destabilization at the National Research University Higher School of Economics, and a Senior Research Professor at the Center for Big History and System Forecasting of the Institute of Oriental Studies as well as in the Institute for African Studies of the Russian Academy of Sciences.

The 21st Century Singularity and Its Big History Implications: A Re-Analysis

Laffitte, Lucy

Lucy B. Laffitte, M.Ed., PhD teaches science in context from the Big Bang to the future, both in-class and on-line. She has a bachelor's degree in natural science from the University of Oregon, a Master's in adult education/instructional design, and a PhD in environmental resource management from North Carolina State University. She teaches Big History at North Carolina State University, and North Carolina School of Math and Science. She currently serves on the board of directors as secretary for the International Big History Association in 2016 and is Chair of the 2018 IBHA Conference.

Lynn Margulis' Symbiotic Earth

Last, Cadell

Big Historical Evolution of Symbolic Orders: Higher Order Understanding of Universal Internalization

Lee, Hyogun

Ph.D. Student, Department of Education, Incheon National University and Teacher, Hana Academy Seoul. Born in Seoul in 1969, he majored in geology at Yonsei University. He teaches earth science, assignment research, and big history at Hana Academy Seoul.

Big History Education in Korea Revised

Lent, Jeremy

Jeremy Lent is an author whose writings investigate the patterns of thought that have led our civilization to its current crisis of sustainability. His recent book, *The Patterning Instinct: A Cultural History of Humanity's Search for Meaning* (Foreword by Fritjof Capra) was published by Prometheus Books in 2017. He is founder of the nonprofit Liology Institute. The new book he is currently working on is *The Web of Meaning: Integrating Science and Traditional Wisdom to Find Our Place in the Universe*.

What Cognitive Structures Underlie Big History?

LePoire, David

David J LePoire has worked in environmental and energy areas for many governmental agencies over the past 25 years. Topics include uncertainty techniques, pathway analysis, particle detection tools, and physics-based modeling. He has also explored historical trends in energy, science, and environmental transitions. He has a PhD in Computer Science from DePaul University and BS in physics from Caltech. His research interests include complex adaptive systems, logistical transitions, the role of energy and environment in history, and the application of new technologies to solve current energy and environmental issues.

Quantifying Long Trends in Big History

Interpreting Trends in Big History Towards Sustainability

Using Analogies to Gain Insights into Major Historical Transitions

Liu, Shanshan

Shanshan Liu got her PhD of Architectural and History Theory from Tsinghua University. Her research interests cover urban and architectural big history, big history for landscape architecture, little big history and big history education. She is the coauthor of the book Garden Paintings in Old China (2012). She is working at promoting big history research in China. She's running a Big history official account and designing a big history course for Chinese school students.

Development of Big History Research and Education in China

Loehr, Davidson

B. Music in Music Theory (U. Of Michigan); M.A. in Methods of Studying Religion, Ph.D. in theology, the philosophy of religion, philosophy of science, and Wittgenstein's "language philosophy" (U. of Chicago). 23 years as a liberal minister. Formerly also a musician, combat photographer, portrait/wedding photographer, carpenter, woodturner, and broad-based heretical thinker. Retired, living in Asheville, NC.

The Legitimate Heir to Religion -- And Big History's Task

Maccone, Claudio

Claudio Maccone was born in Turin (Torin), Italy, on February 6, 1948. After degrees in Physics (1972) and Mathematics (1974) at the University of Turin, he got his Ph.D. in Mathematics at the University of London King's College in 1980. Then he worked for 20 years (1985-2004) on scientific space missions at Alenia Spazio S.p.A. in Turin. he wrote three technical and scientific books: Telecommunications, KLT and Relativit; Deep Space Flight and Communications; Mathematical SETI. In 2010 he was appointed Director for Scientific Space Exploration by the International Academy of Astronautics (IAA) based in Paris, France. In 2012 he was elected Chair of the SETI Committee of the IAA and started working on this mathematical Evo-SETI Theory.

Mathematical Big History as A Part of Evo-SETI Theory

Maniago, Edmond M.

Edmond M. Maniago is the Dean of the School of Arts and Sciences of Holy Angel University (HAU), Philippines. He oversees the Psychology, Communication and General Education Programs of HAU. Currently, he oversees the implementation of Big History courses as part of the First Year Experience Program of the University.

Opening the Doors of a Higher Education Institution to Big History

Mann, Claudia

Claudia Mann is a Montessori educator and leader in the field of Cosmic Education for Elementary and Middle School students. Her interest in Big History began under the guidance of great Montessori story-tellers: Martha McDermott, William Maier, and many others in the fields of geology, earth history, and paleontology. Following the children's lead, she created tools to inspire the children's curiosity while developing their basic skills, linking the methods of brain-based teaching/learning techniques to traditional Montessori methods, helping children delve more deeply into the mysteries of Deep Time.

Montessori Cosmic Education: Big History for Little People

Maxwell, Ross

Ross Maxwell is an independent scholar and 35-year member of the Institute for Historical Study. At Pomona College he majored in history. In 1973 with a masters' from UCB he became a transportation engineer, retiring in 2016. Reading widely, Jantsch's, "evolution of evolution" was a deep challenge. How does the non-life

Proposed Definition of Information & Big History Implications

part evolve? Ross began exploring what we now call big history. In the late 1980's he developed an information approach that seemed to work. Realizing he needed to explore in depth one or more of the proposed information types, he picked civilization as his first test.

McGaughey, William

I am a 77-year-old married man who now lives in Milford, Pennsylvania with my wife and young grandson, having spent most of my life in Minnesota. I am a graduate of Yale, class of 1964. I have published or self-published several books on various topics. A book titled "Five Epochs of Civilization" developed a theory of how advanced human societies have developed. I have attended all three previous conferences of the International Big History Association held in 2012, 2014, and 2016. My papers presented at those conferences and other materials appear in a website, www.bighistorysite.com, which is translated into ten other languages. I plan to publish my book, *History of the Triple Existence*, within a year. (

A Three-Part Structure for Big History

Metallo, Paula

Paula Metallo was born in Syracuse, New York and lives in the Marche Region of Italy. She has a BFA from the State University of New York at New Paltz, and graduate studies at the Accademia delle Belle Arti, Urbino, Italy. Co-founder, of the Geological Observatory of Coldigioco, Italy, where the International Big History Association (IBHA) was established on August 20, 2010. Teacher of *The Science of Aesthetics*, in a 12-week Environmental Studies Program with (Associated Colleges of the Midwest) Her exhibitions include *Rimanere Colpiti (Awstruck)* at a Penrose Conference on climate history in Ancona (Italy) in 2007; *(UN)Measuring the World*, with the Humboldt Museum of Natural History in Berlin in 2009.

Give and Take- Science and The Humanities (From an Artist's Viewpoint)

Morgan, Jennifer

Jennifer Morgan is an award-winning author, educator, master storyteller and founder of the Deep Time Journey Network, an online educational and social network for teachers, parents/grandparents, artists, religious, and activists. Her programs cover the Big History Story, Montessori Cosmic Education curriculum, Big History storytelling, and addressing today's issues inside the context of cosmic evolution. Ms. Morgan's books "Born with a Bang" (Learning Magazine's Teachers Choice Award), "From Lava to Life," and "Mammals Who Morph" have been endorsed by Jane Goodall, Thomas Berry, Brian Swimme, Nobel Laureate (Physics) Leon Lederman, Neil de Grasse Tyson (Director, Rose Center, AMNH), and numerous others.

Maria Montessori: The First Big History Educator

Big History and Ritual

Motloch, John

Educational, sustainability & transformation consultant helping communities live within complex socio-ecological systems. Planning/designing whole-system solutions. Writing/speaking on complexity, transformation and growing inability of systems to fully-renew and build resilience. Former director, BSU Land Design Institute and 3 USDOE-funded international consortia. Co-recipient, 1st Prize (2015) & 2nd Prize (2017), International Making Cities Livable Design Competition. International keynotes (2010 & 2012 ICSSH), plenary keynotes (IMCIC 2017; 2009 & 2010 NCSE) and national panel chair.

Unlocking Complexity as Turning Point in Conscious Transformation

Nairn, Anthony

Anthony Nairn was born in Ottawa but living most of my youth across Northern Ontario and went to Ryerson University for my undergraduate in Information Technology Management. Disenchanted with commerce, I joined the military but was injured and honorably discharged. I went back to Ryerson for Arts and Contemporary Studies. Encouraged to do graduate studies, I went to Carleton University for a MA in Sociology. On 12 September 2016, my heart went into ventricular fibrillation and then failed causing cardiac arrest. I will start another MA in the history and philosophy of science at the University of Toronto.

"Cosmos" As A Means to Re-Enchant the Secular West

Noguera Vila-Masana, Jaume

Musician & Historian graduate pursuing research on chronology. The music notation system and time concepts are tools that can help me understand and manage history events on its most basic feature: time. Many chronological disputes of the past remain unsolved; The present days are still a compound mixture of calendars that emerged from distinctive cultural environments; The future of chronology looks global, yet, manifold from a technical standpoint that pursues precision. It's a duty for Big Historians to collect, study and explore the past, present and future of chronology on a big scale!

The Future of World Calendars

Olalekar, Prashant

Prashant Olalekar is head of the Department of Interreligious Dialogue, St Xavier's College, Mumbai. He is the founder of InterPlay India. He explores creative ways of integrating play into education and spirituality. He has facilitated creative meditation sessions for all types of groups: urban and rural, local and global. He uses meditation to interact meaningfully with the poor and marginalized groups. He demonstrates how the wisdom of the body puts us in touch with the wisdom of the universe.

**Meditation Can Be Active and Playful: Join Us!
Joyful Mindfulness**

Pandya, Jahnvi

Jahnvi Pandya from India, is a national award-winning archer, singer, composer, social worker. She graduated this year from St. Xavier's College, Mumbai majoring in Psychology and was awarded 'Student of the Year.' She has been working on suicide awareness for 9 years and has collected over six thousand dollars in 2 years for orphan girls, through crowd funding, and has reached to over 200,000 students helping them deal with exam stress through YouTube. She has composed the Bhagavad Gita in English Indo-Western tunes, to make it more appealing and act as a tool for promoting harmony.

**Creating Identity Using Meditation and Music
Cosmic Walk**

Patomaki, Heikki

Heikki Patomaki is Professor of World Politics at University of Helsinki. Patomaki's research interests include philosophy and methodology of social sciences, peace research, futures studies, economic theory, global political economy and world political theory. He has published 25 scholarly books and 200 scientific papers, as well as hundreds of popular articles and blogs. His most recent monograph in

Mythopoetic Imagination

English is Disintegrative Tendencies in Global Political Economy: Exits and Conflicts (Routledge 2018). Recent papers include “Social Imaginaries and Big History: Towards a New Planetary Consciousness?”, with M. Steger, Futures and “On the Possibility of a Global Political Community: The Enigma of Small Local Difference within Humanity”, Protosociology.

Pavel, Paloma

M. Paloma Pavel MDiv, PhD, is an educator, activist, eco-psychologist, and President of Earth House Center. Her graduate work at Harvard included forming the successful S. African Apartheid Divestment campaign. Dr. Pavel was co-editor (with Dr. Robert Gottlieb) of the MIT book series “Sustainable Metropolitan Communities Books”, and she co-produced the PBS film series *The New Metropolis* which aired in over 150 cities. She coordinated strategic planning and peer learning for the Sustainable Metropolitan Communities Initiative at the Ford Foundation.

A New Story of Race and Place

The Earth, the City & the Hidden Narrative of Race

Pearce, Jack

Author of Fundamentals for the Anthropocene, De Gruyter, 2017. Government service included Assistant Chief of the Public Counsel Section of the U. S. Department of Justice Antitrust Division with responsibility for advice to Congress, Executive Branch and regulatory agencies on economic competition issues, Assistant General Counsel of the US Agency for International Development, Deputy General Counsel of a White House Office of Consumer Affairs. Partner in Pearce and Brand law firm in Washington DC. with an AV rating. Innovator in "Virtual Office" systems for attorneys and others

Do the Fundamentals of Order in The Universe Allow an Anthropocene?

Is Life an Order and Information Pump in The Universe?

The Digitalization of The World

Pizzorusso, Ann

Ann C. Pizzorusso is a geologist and Italian Renaissance scholar. After many years of doing virtually everything in the world of geology (drilling for oil, hunting for gems, cleaning up pollution in soil and ground water) she turned her geologic skills toward Leonardo da Vinci. Her research on da Vinci concentrates on his activities as a geologist. Her recent prize-winning book, *Tweeting da Vinci* explores how the geology of Italy influenced its art, architecture, medicine, religion, literature and just about everything else

Italy's Open-Air Museum

Pons, Jose Carolos

José Carlos Pons is a fellow at the Smithsonian Anthropology Department and a Ph.D. student in environmental history at Georgetown University. His research focuses in understanding how narratives shape geographies (and vice-versa) from a long-term interdisciplinary perspective. José's work has been published in scholarly magazines such as the Journal of Industrial Ecology and the Journal of Env. Science and Technology. Beyond academia, José is interested in filmmaking as a medium to communicate scholarly research with non-academic audiences. He is now working

The New Cosmic Story: Inside Our Awakening Universe

	on the film Felicia: The Life of an Octopus Fisherwoman -- a story on the link between poverty and environmental degradation in Madagascar.	
Quaedackers, Esther	Esther Quaedackers is a lecturer in big history at the University of Amsterdam, where I teach several big history courses and work on developing my little big history approach.	Research: A LBH Of Protective Environments
Rathmann-Bloch, Julia	Julia began her big history journey as a sophomore in high school under the tutelage of Christian Jennings. Her research resulted in presentations at the 2016 IBHA conference in Amsterdam and a publication in Origins. Now, as a Stanford University undergraduate, Julia is engaged in neuroscience research in the Wyss-Coray laboratory, and she's also interested in exploring how humans interact with technology.	Big History and Virtual Reality: The New Frontier of Collective Learning
Rodrigue, Barry	Barry H. Rodrigue is Professor of Anthropology, School for Liberal Arts, Symbiosis International University, Pune, Maharashtra, India, where he serves as Director of the Symbiosis Collaborative for Asian Ethnography. As co-founder and international coordinator of the International Big History Association and the Asian Big History Association, Barry co-developed and co-taught the first course in Big History in South Asia at Symbiosis International University in 2018. His three-volume collection, <i>From Big Bang to Galactic Civilizations: A Big History Anthology</i> (Primus Books, 2015-2017), brought together 100 scholars from 25 nations.	Universal Studies: Variety in Holism
Routon, Bryan	Bryan Routon graduated from the University of Washington with a BA in Political Science in 2014. He is passionate about building and growing relationships through classical singing, basketball, and the Gospel of Jesus Christ.	Difference, Equality, And Unity Within Durable Systems
Satkiewicz, Stephen	Stephen Satkiewicz is an independent scholar from Michigan. He is the current editor of the newsletter for the International Society for the Comparative Study of Civilizations (ISCSC). He is also a student at Oakland University in Michigan. He has been a member of the International Big History Association (IBHA) since 2012 and presented at the inaugural Big History conference in Grand Rapids of the same year. His major research areas of interest include Social Evolution, Intellectual History, Historical Macrosociology, and Civilizational Sciences.	Towards A Big History of Warfare
Shin, Dong Min	Student, Hana Academy Seoul	Big History Education in Korea Revised
Simon, Richard B.	Richard B. Simon is lead author and editor of Teaching Big History (University of California Press 2015). He helped found the Big History program at Dominican University of California, and now leads "Honors 101: The Big Picture", a Big History course at Western Washington University, with a rotating set of lecturers. Simon is a veteran rock journalist and has covered many terrific concerts and interviewed many interesting musicians, including a few handfuls of rock legends. He is the co-founder of the underground psychedelic rock festival the Frisco Freak-out. He teaches Creative Writing, Big History, and other subversive things.	Teaching Big History at Western Washington University

Solis, Ken

Ken Solis chose ER medicine because it allowed him to also pursue other interests, including advanced rope jumping as sport/exercise/entertainment, and a master's in bioethics. However, it was his interest “consciousness” that led him to consider the brain’s processing of information as a possible key to the “mind’s” origin. Relevant to big history, this also led him to study information theory, thermodynamics, and complexity science. Ken is published in bioethics, invasive plant control, rope jumping as a sport and exercise, and most recently, "The Unfolding of Information" for the Journal of Big History.

The Natures of Information

Thermodynamic & Informational Aspects of Events Forging the Modern Era

Complexity - The Dance of Information and Energy

Spiritbringer, Thomas R

Thomas Spiritbringer is celebrating 60 years of life on Earth and brings his culmination of formal and natural education, world travel and relationships to the IBHA! With an M.A. in Teaching and a M.A. in Culture, Cosmology and Spirituality he has developed a synthesis of the Physical and Social Sciences with The Universe Story Calendar Initiative. Thomas presently lives at Earth Abides Catholic Worker Farm in Sheep Ranch, CA USA where he runs the CentrAll for The Universe Story Calendar that brought forth the book and 2018 CE Calendar (and 2019 CE soon) for Humanity!

The Universe Story Calendar: Humanity's New World and Big History Educational Tool

Striker, Spencer

Dr. Spencer Striker is currently a professor of Digital Media at the American University in Dubai--studying, teaching, and producing digital media and technology in one of the most innovative and entrepreneurial cities of the 21st century. Spencer's current project is the building of a tablet-first next gen digital education experience called "Big History Adventures: The Stories of People in Time, Connected by Eternity."

Big History Adventures: The Stories of People in Time, Connected by Eternity (A Digital Learning Experience)

Tierney, James

James Tierney is a social worker retired after 35 years primarily in the public sector. He has worked with children and families and helped to build and measure the results of the systems intended to protect at risk children. He has presented a paper at each of the previous International Big History Conferences. This paper builds on that work and the article in Origins Volume VII Number 4. He lives in Brunswick, Maine, has 10 grandchildren and enjoys skiing, gardening, canoeing and most other outdoor activities.

Coevolution

Tsujimura, Nobuo

Nobuo Tsujimura is President of the Asian Big History Association as well as adviser and webmaster for J.F. Oberlin University Big History Project. His goal is to make big history as broad and as accessible as possible -- to be lived and felt, to make us sense the world and the cosmos vividly, and by doing so, to vitalize our creativity to weave a new worldview together by involving all the people across all the genres. He has developed a series of Japanese big history books with the Institute for Global and Cosmic Peace in Yokohama and big history articles with Hirofumi Katayama at Oberlin.

The Present State of Japanese Big History

A Cosmic Feast: The Big-Historian Explosion

Tucker, Mary Evelyn

Mary Evelyn Tucker is co-director with John Grim of the Forum on Religion and Ecology at Yale where she teaches in an MA program between the School of Forestry and Environmental Studies and the Divinity School. With Grim she organized 10 conferences on World Religions and Ecology at Harvard. They were series editors for the 10 resulting volumes from Harvard. She co-edited Confucianism and Ecology, Buddhism and Ecology, and Hinduism and Ecology, she authored with Grim, Ecology and Religion (Island Press, 2014) With Brian Swimme she wrote Journey of the Universe (Yale 2011) and was the producer of the Emmy Award Winning Journey film that aired on PBS.

The New Cosmic Story: Inside Our Awakening Universe

The Earth, the City & the Hidden Narrative of Race

Ursula Goodenough

Ursula Goodenough is Professor of Biology Emerita at Washington University. Her research focuses on the evolution of sex and molecular/cellular differentiation in eukaryotic microbes. Her book, *The Sacred Depths of Nature* (Oxford 1998), represents an early contribution to the Big History project.

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van Andel, Gijs

Gijs van Andel is teaching Philosophy and Big History in Senior High School and is giving a seminar on philosophical reading at Leiden University. He initiated Big History at Atheneum College Hageveld (in Heemstede, The Netherlands) in 2017 for 10th and 11th graders, coordinating both content and organization (of guest teachers and experts). Gijs van Andel holds master's degrees in history and Philosophy from Leiden University and a post-graduate degree in education from University of Amsterdam.

The Philosophy of Big History

Volk, Tyler

Tyler Volk is professor of biology and environmental studies at New York University. His research has involved the global carbon cycle and life in the biosphere, advanced life support (for NASA), world futures, and patterns of systems across scales. Books include Quarks to Culture: How We Came to Be (Columbia University Press, May 2017); CO2 Rising: The World's Greatest Environmental Challenge (2008); Gaia's Body: Toward a Physiology of Earth (1998); and Metapatterns Across Space, Time, and Mind (1995). At NYU, Volk received the Distinguished Teaching Award and Golden Dozen Award.

From the Geopolitical State to Planetization

Wamberg, Jacob

Jacob Wamberg is Professor of Art History at the University of Aarhus, Denmark. He works on an evolutionary theory of the visual arts, especially in relation to nature and technology. His present focus is posthuman aspects of avant-garde art. His publications include *Landscape as World Picture: Tracing Cultural Evolution in Images* ([2005] 2009), *Totalitarian Art and Modernity* (2010, ed. with Mikkel Bolt Rasmussen) *The Posthuman Condition: Ethics, Aesthetics and Politics of Biotechnological Challenges* (2012, ed. with Kasper Lippert-Rasmussen and Mads Rosendahl Thomsen), and *Art, Technology and Nature: Renaissance to Postmodernity* (2015, ed. with Camilla Skovbjerg Paldam).

Research: A LBH Of Protective Environments

Wang, Ji Hun

Ji Hun Wang is an undergraduate student at Stanford University and a graduate of the Bugil Academy Global Leader Program, South Korea. His primary interest is in Linguistics and Computer Science, and he also possesses diverse interests in many different fields. He values interdisciplinary and creating learning, as he trusts that innovative ideas emerge when ideas from seemingly unrelated fields combine.

Big History, Technology and Linguistics

Whitehouse, Peter J

Peter Whitehouse is a transdisciplinary Professor of Neurology and former or current professor of Psychiatry, Psychology, Cognitive Science, Neuroscience, Bioethics, History, Nursing and Organizational Behavior at Case Western Reserve University, Professor of Medicine at the University of Toronto, and President of Intergenerational Schools International. He is an internationally recognized expert on aging and intergenerational learning. He performs as Sylvanus the Tree Doctor. He is the author of hundreds of books and papers on aging, cognitive neuroscience and ethics.

Aging in Big History: Elders and Reenchanting the World and The Cosmos

Wong, Aidan

Aidan Wong is a PhD student from Division of Environment and Sustainability at The Hong Kong University of Science and Technology. Following completion of his MPhil, he is now continuing to pursue further research on the impact of incorporating Big History as pedagogical framework to teach a sustainability course. During his studies, he also performs as teaching assistant for an undergraduate course Big History, Sustainability and Climate Change.

Teaching Experience from Hong Kong

Wood, Barry

Barry Wood holds an interdisciplinary doctorate from Stanford University. His teaches literature and COSMIC NARRATIVES, a core curriculum Big History offering at University of Houston, featured in the IBHA Newsletter, Vol. 1, No. 4 (2011) and Vol. 2 of the Anthology of Big History. His Big History publications have appeared in JBH (2017, 2018) as well as Science, KronoScope, IJAS, and New Directions in the Humanities. His earliest of 60 + publications began with Earth Day editorials (1970). Forthcoming contributions include chapters in Studies in Time from the 2016 International Society for the Study of Time (ISST) Conference and Selected Papers from the 2017 World Environmental Education Congress (WEEC).

Kilonova 2017 Requires A Dramatic Rewriting of Element Creation

Emergence

Yavelow, Jonathan

Jonathan Yavelow is a biology professor at Rider University, Lawrenceville, NJ. He has done work on diet and cancer and published a book in 2013 titled: From Stargazing to Sustainability. This is a deep history book as it reviews the integration of all the sciences into the deep history of the universe. Since 2010 he has been working and studying with Sister Miriam MacGillis at Genesis Farm. His more recent interests are in the areas of environmental health and human health and he is a commissioner for the New Jersey State Commission for Cancer Research.

Environmental Health and Human Health: Lessons from Big History

Yue, Sun

Sun Yue is Professor of English at the College of Foreign Languages, Capital Normal University in Beijing. He also works for the Global History Center, School of History of CNU, helping connect world/global historians worldwide. He studied early modern European witchcraft and witch-hunting for his PhD research, but later shifted to notions of the “good life” in human history and big history. In 2013, Sun

Is There Such a Thing as Love in Big History?

edited the first big history anthology in Chinese, and the following year, taught the first Big History course in Germany, as a visiting scholar at Jacobs University Bremen.