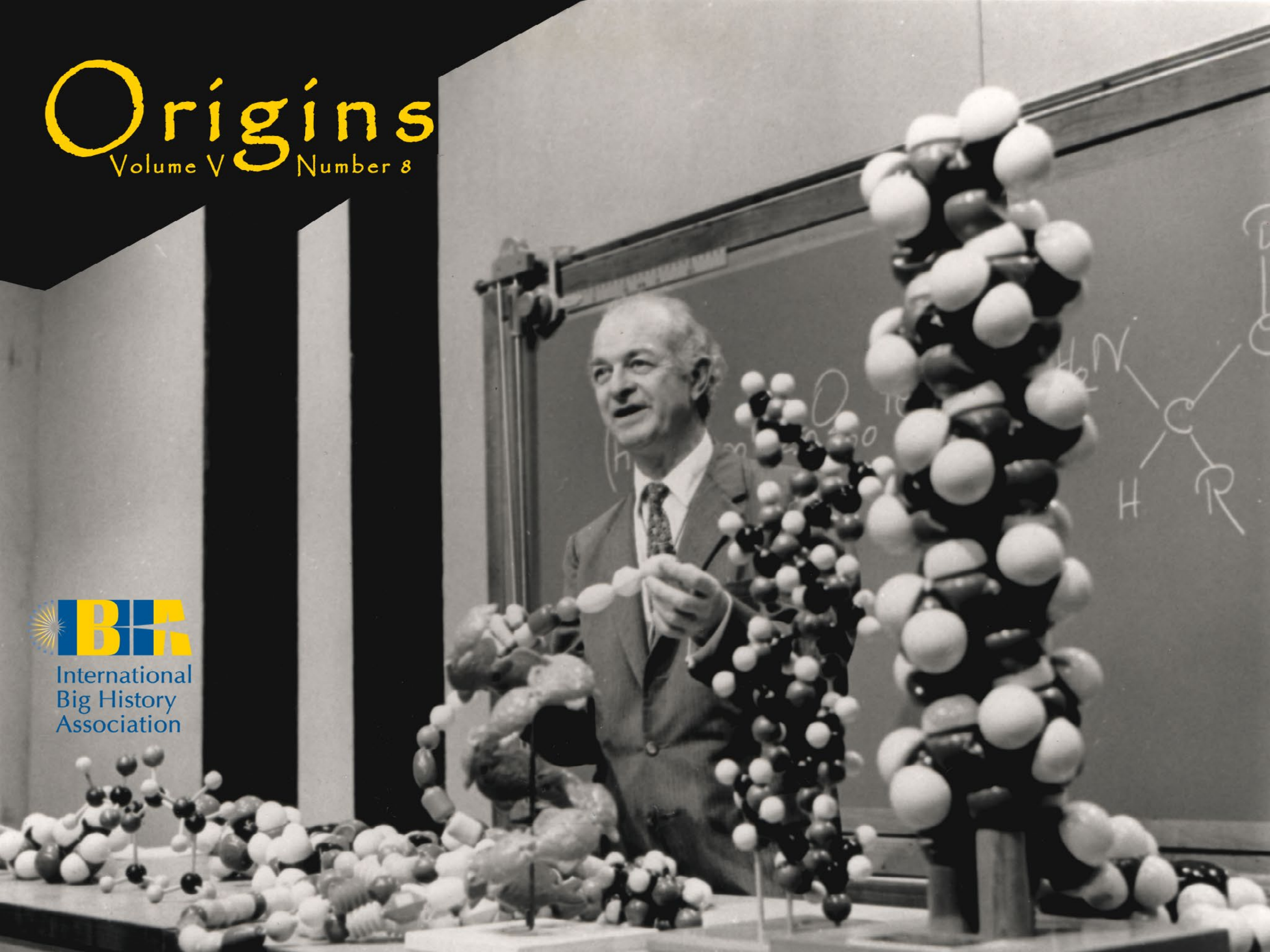


# Origins

Volume V Number 8



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Cover picture: Linus Pauling, world-famous chemist, lecturing with some of his molecular models. Pauling's legendary office was also a classroom-gallery of models for chemistry students. Pauling was the only Nobel laureate ever to receive one award as a scientist and one award as a humanist (The Peace Prize). Photo: Oregon State University Library. <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/MMBBNB>



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*Origins*. ISSN 2377-7729

Please submit articles and other material to *Origins*, Editor, [ibhanet@gmail.com](mailto:ibhanet@gmail.com)

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Thank you for your membership in the IBHA. Your membership dues all go towards the administration of the association, but do not by themselves cover our costs. The only paid position is a part time administrative assistant. Other costs are for our website, for example. [Please consider a tax deductible \(in the US\) gift](#) to our 501(C)3 and please consider remembering the IBHA in your will.





# TACTILE TEACHING:

**Models for “Teaching Museums” at three San Francisco Bay Area Universities:  
Dominican University of California,  
California State University, East Bay, &  
the Graduate Theological Union, Berkeley**

*Lanier Graham*

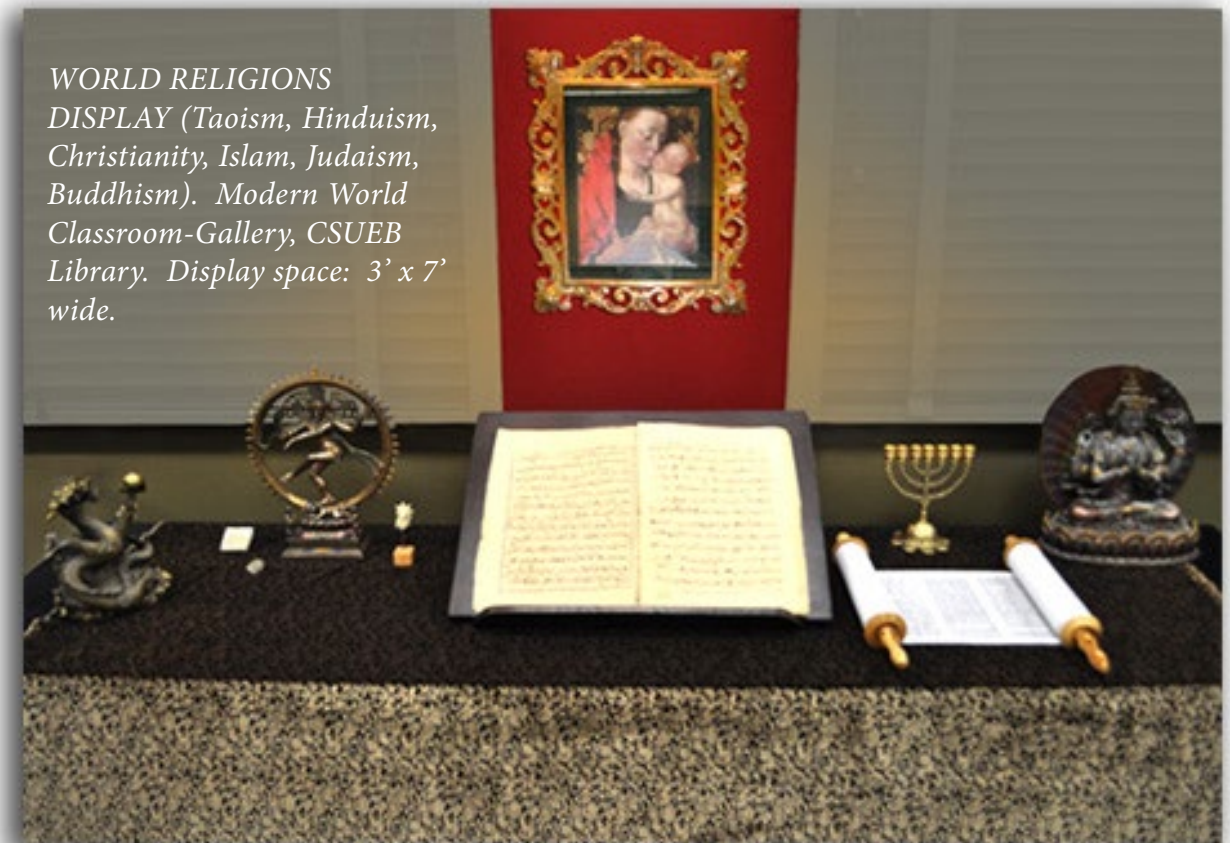
*Lanier.Graham@CSUEASTBAY.EDU*

CSUEB & [INSTITUTE FOR AESTHETIC DEVELOPMENT](#)

I’ve been teaching world art, world religions, & museum studies for 50 years. Before I started to do that full time, I was a museum curator, starting at the Museum of Modern Art in New York and then moving to San Francisco to be Chief Curator of the Fine Arts Museums. I use the same kind of educational technology that most of you do (slides, digital presentations, internet courses). However, I’m not using any of that today. Why? Because I want you to move your mind into pre-modern technology and think about how actual objects (stones,



*MODERN WORLD CLASSROOM-GALLERY, Museum Studies Program, CSUEB Library. In this unique laboratory, students have designed small displays of Big History highlights from the Renaissance to the Present, as they worked towards the design of a large Big History teaching museum. Artistic, literary, & scientific developments are represented side by side. The layout begins with a World Religions display, on an altar table, then moves into the corner to a full facsimile edition of THE GUTENBERG BIBLE. For this design team, Big History is a vision, a continuous inspiration, but not a dogma. The team felt free to make its own interpretation of key relationships.*

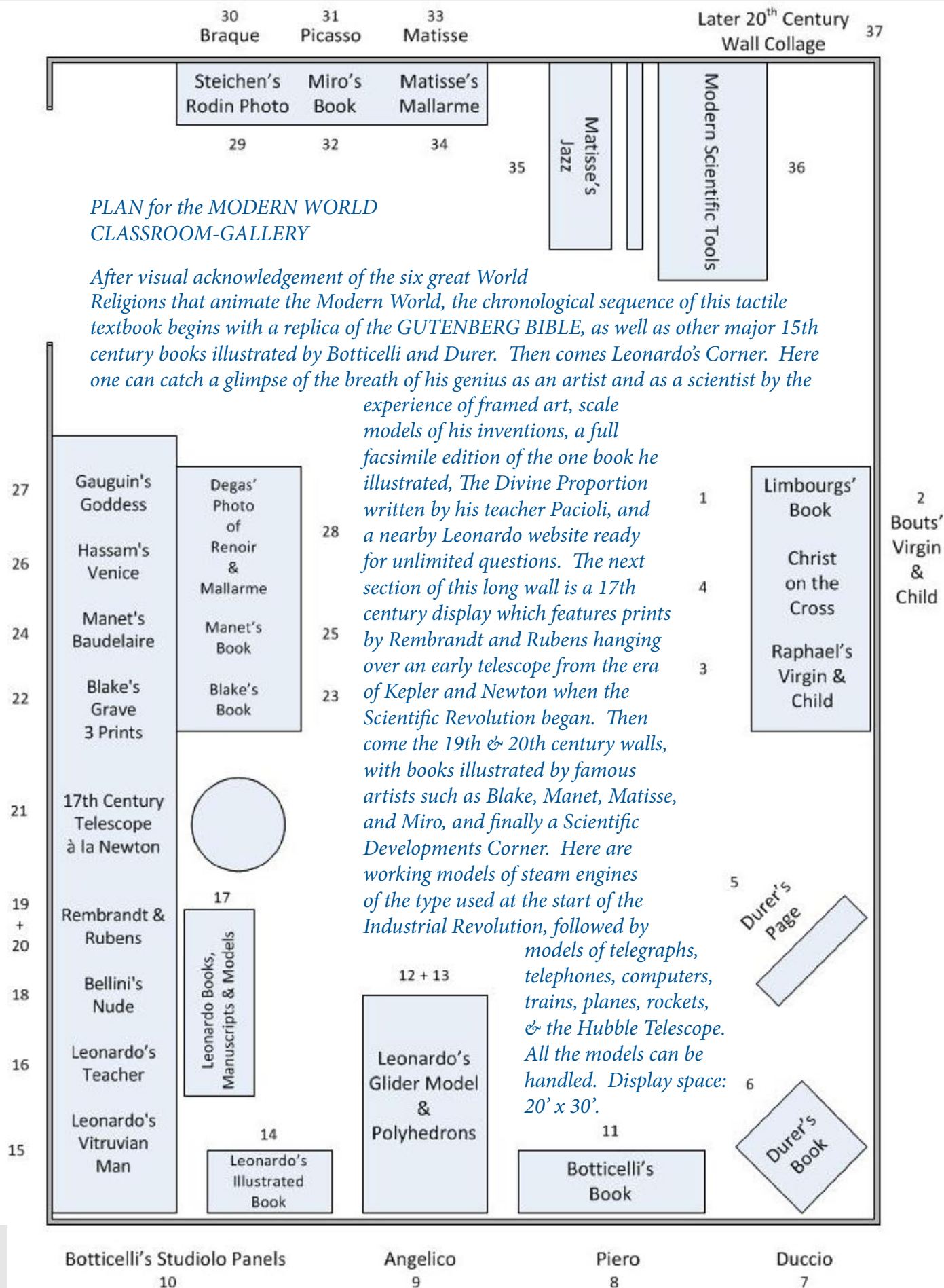


bones, paintings, and sculpture) communicate more deeply than slides, books, and websites. Why? Because tactile objects engage all of our senses & not just that narrow part of our mind that visualizes abstractions.

As a consultant, I also help foundations, universities, and government agencies develop master plans for museums and galleries. Some years ago, the President of Cal State University, East Bay, asked me if I would be willing to plan a teaching museum in the Main Library on the Hayward campus. I said “yes,” on the condition that it contain not only art history but also world history in a way that would serve all the academic departments - the humanities and the sciences.

What should such a teaching museum look like? I had no idea, so I started





from scratch with input from the Art Department, Anthropology Department, History Department, etc. The students in my graduate seminar on Museum Studies built a scale model to begin to visualize possibilities. The space available was only about 3,000 square feet, but enough to tell the human story from the Stone Age to the present with touchable artifacts from all the great spiritual traditions. Digital tablets would be available along the way, so that students could ask questions at any point during their visit.

To move things along, I arranged for a collection of world art to be donated to Cal State from a charity called the [Institute for Aesthetic Development](#) (IAD). That attracted a great deal of interest from the humanities professors.

How should we deal with the physical sciences? My inspiration came from a book called *Big History: From the Big Bang to the Present* by Cynthia Brown. That book made me realize that we needed a full Science Wing (to tell the story of the cosmos) in front of the Humanities Wing (to tell the story of humanity.)

What should the Science Wing look like? Not being a scientist, I asked the Dean of the College of Science at Cal State if I could organize a conference to conceptualize a plan. I wanted to use the combined brainpower of the chairs of all his departments: Astronomy, Biology, Chemistry, Geology, etc. That conference took place in the summer of 2012, right after the first IBHA conference where Cynthia introduced me as the planner of the first "Big History Teaching Museum." Well - not quite. Cal State was not ready for all of Big History, but the general vision was stimulating for everyone at the science conference.

If the Science Wing were to follow the historical divisions of Big History, the divisions would have been based on the thresholds. But that is not what the science faculty wanted to do. They wanted to tell the cosmic story in logical stages, but in stages that also are the study fields of each academic discipline. Each area of the wing would mark not only each phase in the development of the universe, but would also explain how each discipline studies that evidence. So the idea was to start off with astronomy/cosmology, then to follow with physics, chemistry, geology, and biology. In the minds of the science faculty, each division

# World History Learning Center

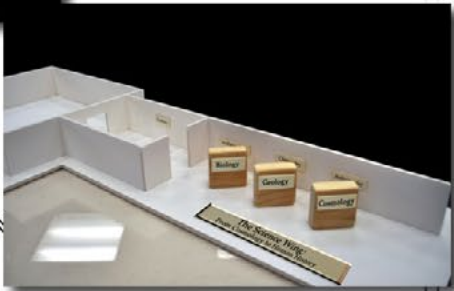
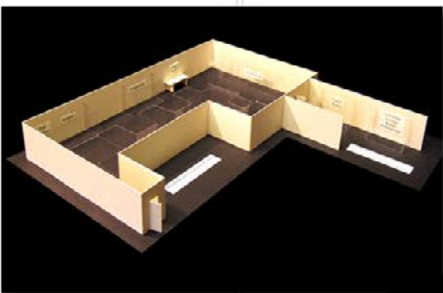
University Library, CSU East Bay

PLAN for the proposed WORLD HISTORY LEARNING CENTER, University Library, CSU East Bay (Project 2010-13)

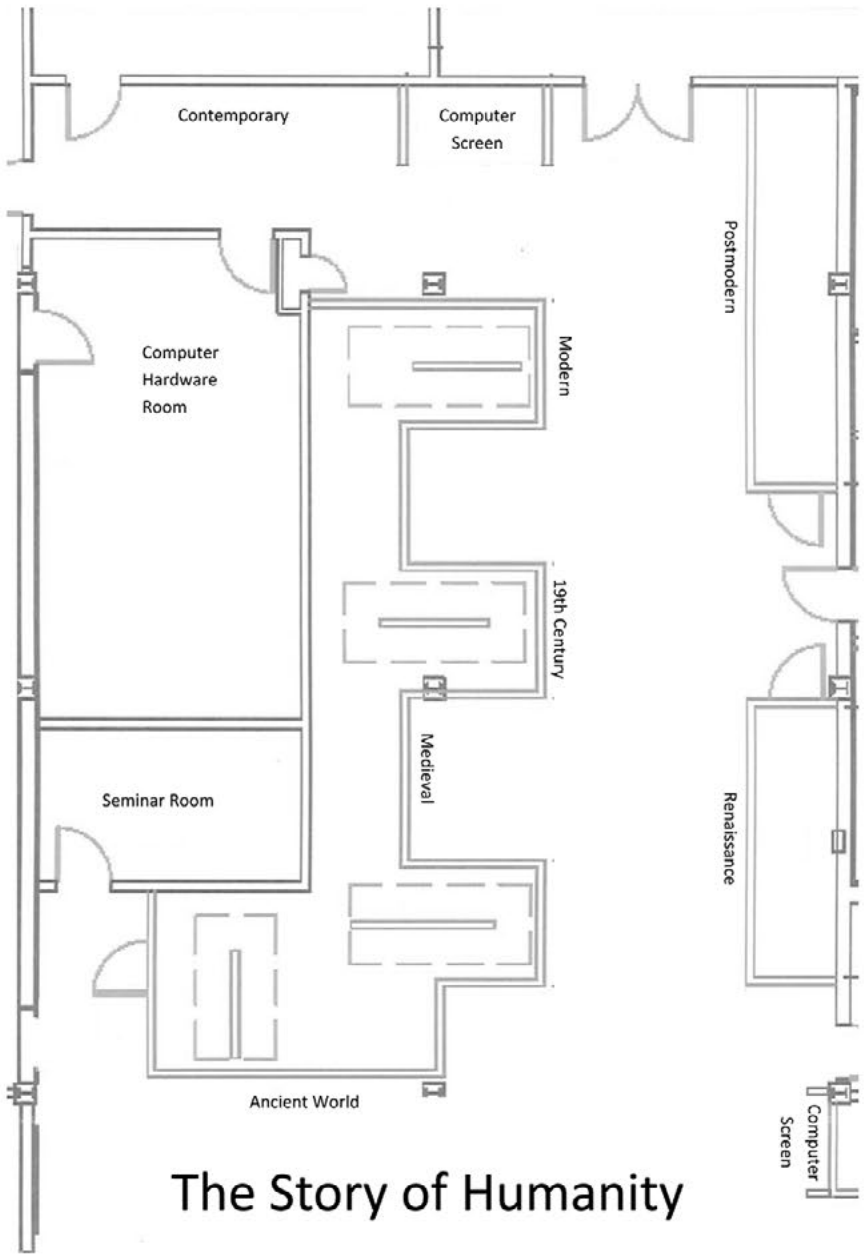
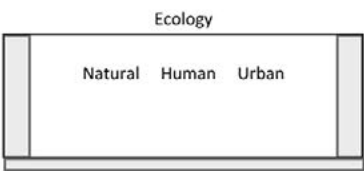
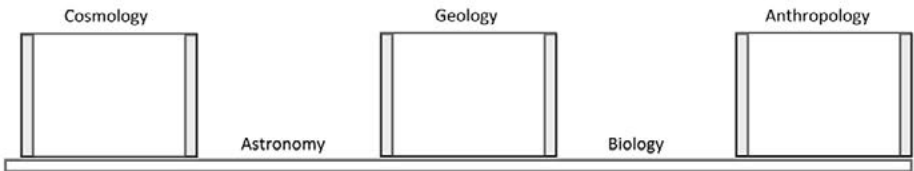
The basic concept of the design was inspired by Big History. The Story of the Cosmos and The Story of Humanity are given equal importance. The design group was made up of graduate students in the Museum Studies program over a period of several years under the leadership of the Program Director. For this design team, Big History is a vision, a continuous inspiration, but not a dogma.

The team felt free to make its own interpretations of key relationships. During the Preliminary Planning phase (2005-10), input was invited from a wide range of academic departments, led by Art, Anthropology, and History at CSUEB. During the Final Planning phase (2010-12), additional input was invited from a regional group and a national group of distinguished advisors.

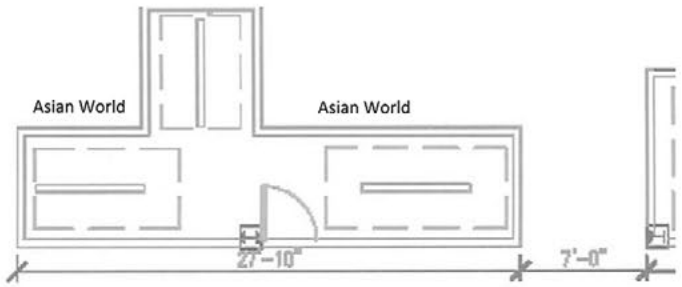
Display Area: 4,000 sf. The project was not completed, for reasons discussed in the text of this paper. But perhaps the concept will inspire others to develop Teaching Museums.



## The Story of the Cosmos



## The Story of Humanity







*TRIBAL WORLD CLASSROOM-GALLERY, Museum Studies Program,  
CSUEB Library. Art from Africa, Oceania, & the Americas.  
Display space: 12' x 20'.*

also would be a recruiting tool for each department.

After years of planning, we were ready to start writing grant proposals, when the earthquake engineers decided that part of the library needed to

be demolished. That demolition several months ago took away about 10,000 square feet of the library. As a result, there was no longer space for a teaching museum.

I was quite sad. But wanting to turn a lemon into lemonade, I offered the concept and the IAD collection of world art to other universities. I pointed out to them that a teaching museum need not be 3,000 square feet. It could be 300 square feet.

The point is to visualize a global perspective with touchable artifacts in order to generate a feeling of wholeness - both an emotional wholeness of being connected with the entire universe and an intellectual wholeness that is a mental framework for the study of any aspect of the universe.

There was interest from several universities, but the most attractive offer came from the Graduate Theological Union, Berkeley. The GTU does not have a museum, but they do have a gallery for regular exhibitions. They asked to have all the sacred art that makes up 90% of the IAD Collection. From this resource the GTU can present an

endless series of Indigenous art, Taoist art, Hindu art, Buddhist art, Jewish art, Christian art, Islamic art, etc. Any library at any college or university could do something similar

for Big History with nothing more than a wall for changing exhibitions.

In the meantime, I was very impressed with what Dominican University was doing with Big History.



*Tribal World Classroom - Gallery*



LEONARDO'S CORNER, Modern World Classroom-Gallery, CSUEB Library. Displayed are reproductions of some of his best known works as a painter, scientist, book illustrator, & philosopher. 9 running feet.



I, and the Trustees of IAD, wanted to support their pioneering work with what I regard as the most important new field in the academic world. So I gave their Big History faculty the opportunity to select from the IAD Collection whatever they thought would be useful.

Yet how could they use these artifacts without a museum, or even an available gallery wall? They came up with a brilliant plan - not a large static museum but small “teaching kits” that are part of a “portable museum.” Their idea was that small boxes or larger Rubbermaid tubs could hold objects under a desk and be brought out during each class. This very imaginative concept emerged during the first of

two planning sessions I had with Dominican's Big History faculty as a whole. The art they requested has now been delivered, and soon it will be part of the classroom experience.

More ideas emerged from later discussions at Dominican. Let me read to you from an email I wrote to the Big History Program Director as summaries of these later thoughts. I encourage you to not lock in on these local sites but rather to imagine how such museological concepts could be used at your institutions.

### FOCUSED VISUAL ENVELOPMENTS

(As I wrote to a Dominican University official)  
*“...the main point I wanted to leave with you is not so much any particular space utilization, but rather the under-appreciated educational principle of FOCUSED VISUAL ENVELOPMENTS. Telling a story is one thing. Reading a story keeps it in the mind longer. Experiencing a story pictured on a wall with both sides of the brain engaged in the act of perception is the most lasting experience. It is a holistic experience that you do not simply*



LEONARDO MODELS in LEONARDO'S CORNER displayed under a portrait of Pacioli who taught Leonardo advanced geometry. Leonardo illustrated his book on THE GOLDEN PROPORTION. Display space: 4' x 1.5' wide.



look at; it envelops you. Your innovative first-year experience gives the students a wonderful grounding in “global vision.”

But how useful it would be for the scope of this unusual holistic perspective to be continuously reinforced by what they see in their daily environment after the first year. As you pointed out at lunch, the Big History narrative can be told in many different ways. I encourage you & your faculty to explore all the possibilities you can imagine for regular reinforcement of the “global vision” at various meaningful points around the campus.

In the Meadowlands building, where nurses will study, for example, the world history side of the BIG STORY can be told in the lobby only, as the Provost was thinking, and/or it can be told in the Mural Room. Those paintings can be kept on the walls (if you wish) and covered with



Early Renaissance Wall with books  
illustrated by Durer and Botticelli



17th century display: Rembrandt and Rubens prints  
over a telescope from the era of Kepler and Newton.

temporary portable display boards that tell the BIG STORY with visual emphasis on how human health management has improved since the Stone Age with Egyptian brain surgery, the growth of the nursing profession from the nuns of the Middle Ages to the Civil War, etc. This visual reminder of chapters in the story of a noble tradition would be a constant inspiration to students of health and healing.

The lobby of the Science Building can tell the BIG STORY differently, with one 10' wall picturing the history of the cosmos, with the Big Thresholds matched to the academic disciplines in this university that study these chapters in the history of the universe. The opposite 10' wall can picture the history of humanity with the Big Thresholds matched to pictures of great scientific developments – the ancients, the Chinese,





da Vinci, Newton, Einstein, et al. These **FOCUSED VISUAL ENVELOPMENTS** can be done with just words and photos, or they can include small objects like meteorites, trilobites, dinosaur bones, and da Vinci models [[all available from IAD](#)].

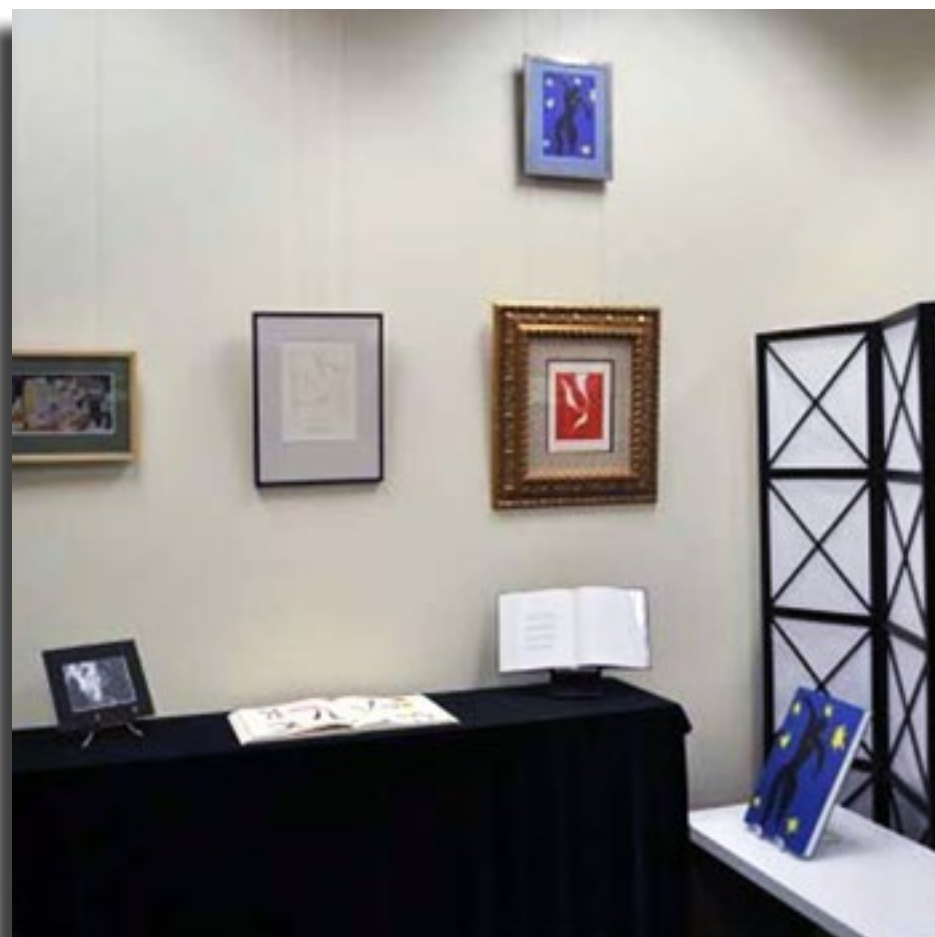
The library is full of possible display spaces. As one walks into the building there are empty walls, 10' to 15' wide, left and right. One side could tell the big cosmic story, while the other side could tell the big human story, at least with pictorial murals, or as miniature museums of objects [[all available to you from IAD](#)]. The cost of security glass in that area would be minimal. No climate control required. In addition, the two staircases offer a wonderful opportunity to tell the **BIG STORY** in a very dynamic way, as one walks through actual space-time.



WORLD WAR I & WORLD WAR II DISPLAY, Modern World Classroom-Gallery, CSUEB Library. Original military artifacts & a V-2 rocket model. Display space: 3' high x 2' wide.

AMERICAN CIVIL WAR DISPLAY, Modern World Classroom-Gallery, CSUEB Library. Original military artifacts & an original photograph of Abraham Lincoln from the years of the war. Display space: 3' high x 1'. Visible Civil War objects include a musket, bullets, a torn boot, and a crumpled mess kit, along with military decorations. In the foreground is an original carte-de-visite photograph of Lincoln that was blown up in the background.





20th century wall with books illustrated by Miró and Matisse.

Such **FOCUSED VISUAL ENVELOPMENTS** would serve budding scientists as regular reminders of historic developments and unusual opportunities to picture present inter-relationships.”

A few final thoughts on how much richer perception becomes when the individual elements under consideration are made particularly concrete, so concrete one can touch them.

I once had lunch with the great chemist Linus Pauling. His office was filled with models of molecules, not flat drawings but detailed 3-D models. “Why?” I asked. “Because I can only think well when I can see the relationships within the whole of what I’m thinking about.” (Please see the cover of this month’s Origins).

This paper was originally delivered last year to the IBHA Conference at Dominican University of California.

IAD is a center for the development of visual education and cultural planning. Established in 1975, at the suggestion of the National Endowment for the Humanities, IAD is the oldest such institution in the United States. The purpose of IAD is to create visual education programs that are innovative models for educational institutions, especially museums and universities. With the advantage of using multi-disciplinary, think-tank methodology, many of the programs and products IAD has designed have become national and international models. Museum Studies at CSUEB is a program that was designed & developed by IAD. IAD publications, which explore art, poetry, physics, & metaphysics, have appeared in a number of languages: English, French, Spanish, German, & Russian. A major ongoing IAD program area is donating teaching collections of World Art to schools, colleges, & universities. A new program in this area is called “Art History for the Blind.” It involves the design & development of portable book-boxes for all ages and “Please Touch” exhibition galleries. For a history of IAD [please click here](#).

#### Lanier Graham, M.A., Columbia University, NYC

Internationally recognized curator Lanier Graham is the former director of Cal State East Bay’s University Art Gallery. Mr. Graham brings a wealth of experience to Cal State East Bay, having served as the Chief Curator of the Fine Arts Museums of San Francisco and in senior curatorial positions at the Museum of Modern Art in New York; National Gallery of Australia in Canberra; and the Norton Simon Museum of Art in Pasadena. Mr. Graham is also a member of the Training Committee of the International Council of Museums. His knowledge and expertise have earned him the distinction of being listed in *Who’s Who in America* and *Who’s Who in the World*.





Editors' Note:

The following link is to a talk given on Earth Day Eve, 2015, by Nate Hagens. He called it "[Turning 21 in the Anthropocene](#)" and addressed it to students at the University of Wisconsin-Stephens Point, USA. Hagens integrates analysis of human psychology, finance, and natural resources in a synthesis rarely propounded. We include the talk because it seems just right for use with contemporary university students anywhere in the world.

Nate Hagens has a master's degree in finance from the University of Chicago and a Ph.D. in Natural Resources from the University of Vermont. He worked on Wall Street for a decade and made a lot of money, but left fifteen years ago. He lives in Minnesota, works part-time for the Institute for Integrated Economic Research, and serves on the boards of the Post Carbon Institute and the Institute for the Study of Energy and our Future. He is a popular speaker; his website is [www.themonkeytrap.us](http://www.themonkeytrap.us).

## New and Returning IBHA Members

One of the key purposes of the IBHA is for those of us who are interested in Big History to have a place to associate. It is a place to learn of other members' Big History activities and thoughts. So we are delighted to welcome new members to the IBHA – and by the vote of confidence and recognition of the value of our association by those who have renewed their membership. It is a pleasure to have each of you with us.



**Denise Ames**

**David Baker**

**Olga Garcia Moreno**

**John Healy**

**Amir Kolini**

**Lucy Laffitte**

**Steven Leibo**

**Pamelia Markwood**

**Arie Mijnlief**

**Craig Neff**

**Gordon Olson**

**Jack Pearce**

**Liu Shanshan**

**Brian Spooner**

**Ryan Tew**





Third IBHA Conference  
July 15 - 17, 2016  
Amsterdam



# Call for Papers

## INTERNATIONAL BIG HISTORY ASSOCIATION CONFERENCE

July 15-17, 2016

The University of Amsterdam

The Netherlands

## Building Big History: Research and Teaching

DEADLINE FOR [PAPER](#) / [PANEL](#) SUBMISSIONS IS FEBRUARY 12th, 2016

The International Big History Association (IBHA) defines its purpose as “to promote, support and sponsor the diffusion and improvement of the academic and scholarly knowledge of the scientific field of endeavor commonly known as “Big History” by means of teaching and research and to engage in activities related thereto.”

Article 2 of the IBHA Articles of Incorporation.

The theme for the 2016 conference is “Building Big History: Research and Teaching.” The conference seeks to present the latest and the best in Big History research and teaching, while creating a forum for the articulation and discussion of questions that are central to Big History. Among the topics that are to be addressed at the conference through a series of panels, roundtables, and discussions, are:

Approaches to Big History; Big History research agenda; Scholarship contributing to Big History;

Big History teaching at universities, secondary, and primary schools; achievements and challenges; Little Big Histories; Reactions to Big History. We encourage proposals along these lines on any topic related to Big History.

To allow the Program Committee to effectively group individual participants into panels, we request that you format your proposals as follows:

- Individual paper proposals must include two

separate paragraphs of no more than 150 words each.

- Paragraph one should contain the title of your proposed paper, and provide a summary of its specific content.
- Paragraph two should carry the title “Methodology, and Relevance to Big History”, in which you address the underlying methodology of your paper, your approach to Big History, and in which you explain how your specific paper



(as described in paragraph one) relates to the broader field of Big History.

- Your proposal must include your name, institutional affiliation (if you have any), e-mail address, phone and/or fax numbers, and a brief curriculum vitae.
- All of this must be provided as one single file, preferably in MS-Word.
- Proposals for entire sessions or panels must contain all this information for each participant, as well as contact information and a brief C.V. for the moderator, if you suggest one. (The program committee can help find moderators, if necessary.)

Please submit your [paper](#) or [panel](#) proposal by clicking on one of these links, which allow for submission of information. The deadline for paper and panel submissions is February 12th, 2016. The time limit at the conference for presenting papers will be 20 minutes, and the deadline for submitting papers to

the session moderator is three weeks in advance of the conference.

All presenters at the conference must be members of IBHA. Presenters may become members at [www.ibhanet.org](http://www.ibhanet.org) and will need to do so prior to registration for the conference.

The IBHA Conference will convene on premises of the University of Amsterdam, The Netherlands, located in the center of this beautiful European city. Attendees will have the option of selecting from one of several hotels in Amsterdam and the surrounding area with whom special conference arrangements have been made.

The Conference Planning Committee is already hard at work investigating walking and other pre-conference tours of the city, and a post-conference tour that will visit many of the leading scientific, geological, and

cultural sites in Europe. [Please see page 20 and ibhanet.org](#) for more on the post-conference tour.

For all things Amsterdam, you can go to <http://www.iamsterdam.com/en/>. For a complete guide to the Netherlands and its many attractions, you can visit <http://www.holland.com/us/tourism.htm>. If you have more time to explore the larger area, similar websites exist for nearby Belgium, France, Germany, and Great Britain.

Please find more details on the conference at [www.ibhanet.org](http://www.ibhanet.org). We very much hope that you can join us at the 3rd IBHA conference.

Program Committee: Jonathan Markley (chair), Cynthia Brown, David Christian, Lowell Gustafson, Andrey Korotayev, Esther Quaedackers, Fred Spier, Sun Yue.

The conference will take place at the Oudemanhuispoort (Old Man's Home Gate). Part of it was built, as the name implies, as a home for poor old people in the early 17th century. In the late 19th

century the University of Amsterdam started to use the building. Around that the same time book traders also moved into the little shops that line the main hallway of the building. The book traders are still

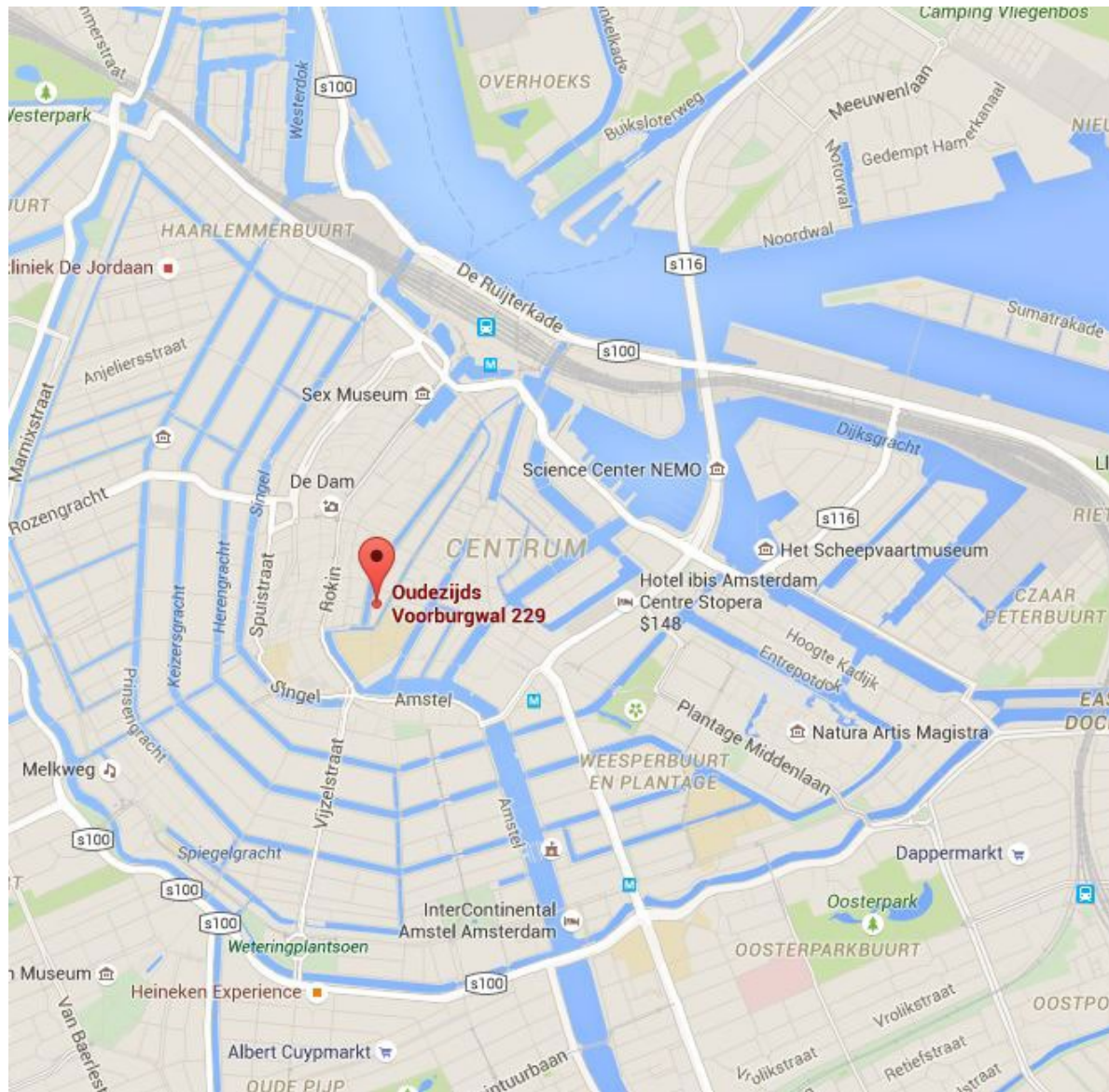
there. Fred Spier started teaching a Big History course in Oudemanhuispoort 20 years ago. It ran there for 10 years.

We have retained two hotels – IBIS Amsterdam Centre Stopera (<http://www.ibis.com/en/hotel-3044-ibis-amsterdam-centre-stopera/index.shtml>) within a 15 minute walk to the University of Amsterdam, and the Volkshotel (<https://www.volkshotel.nl/>) within a 15 minute metro ride to the University. The two hotels are totally different types of hotels; check the great reviews of these hotels on tripadvisor (<http://www.tripadvisor.com/>) . Please mark the dates of July 15 - 17 on your calendars, and start planning to join us in Amsterdam in July of 2016!

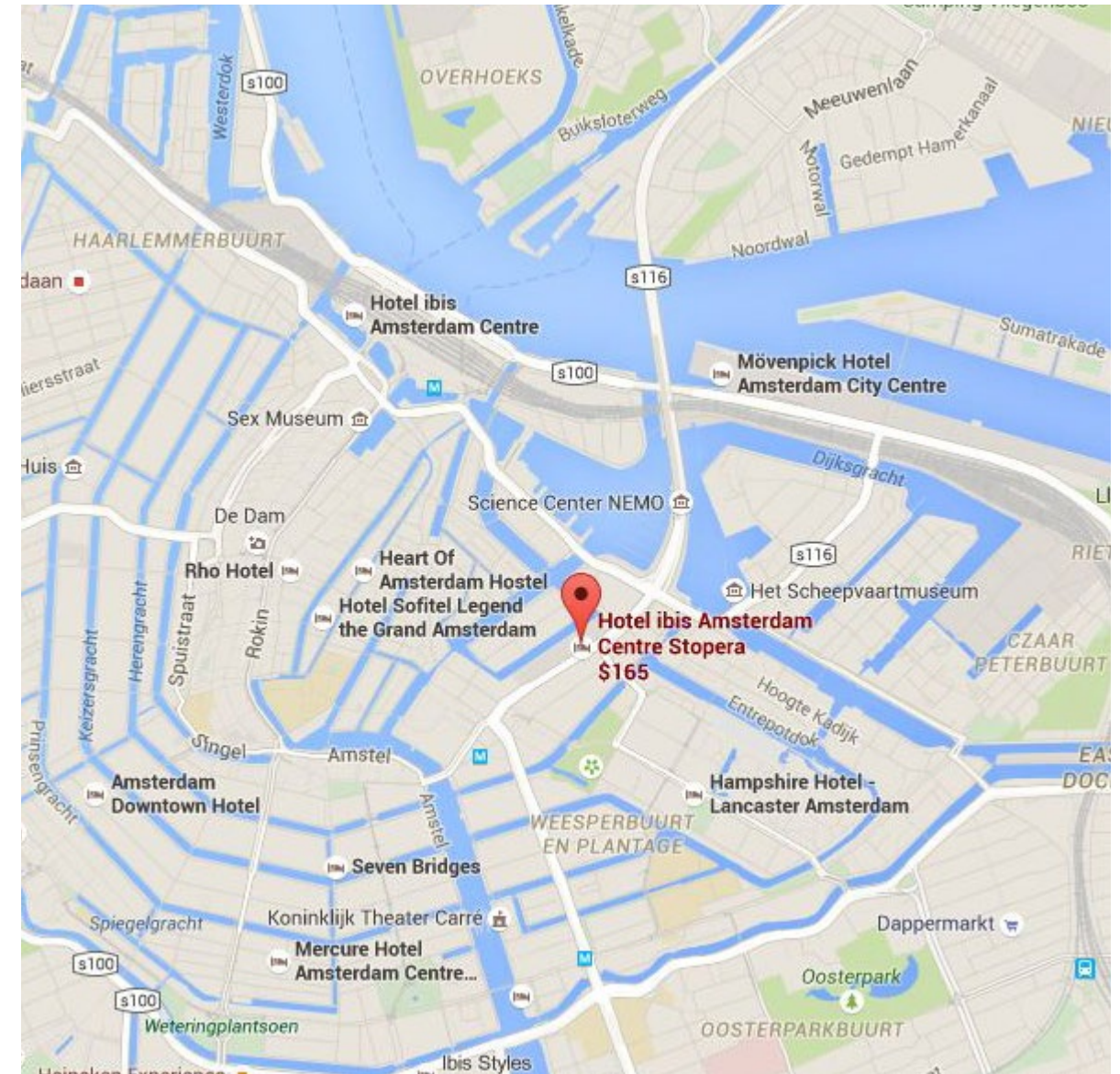
If you have any questions – just email Donna Tew, IBHA Office Coordinator @ [tewd@gvsu.edu](mailto:tewd@gvsu.edu)



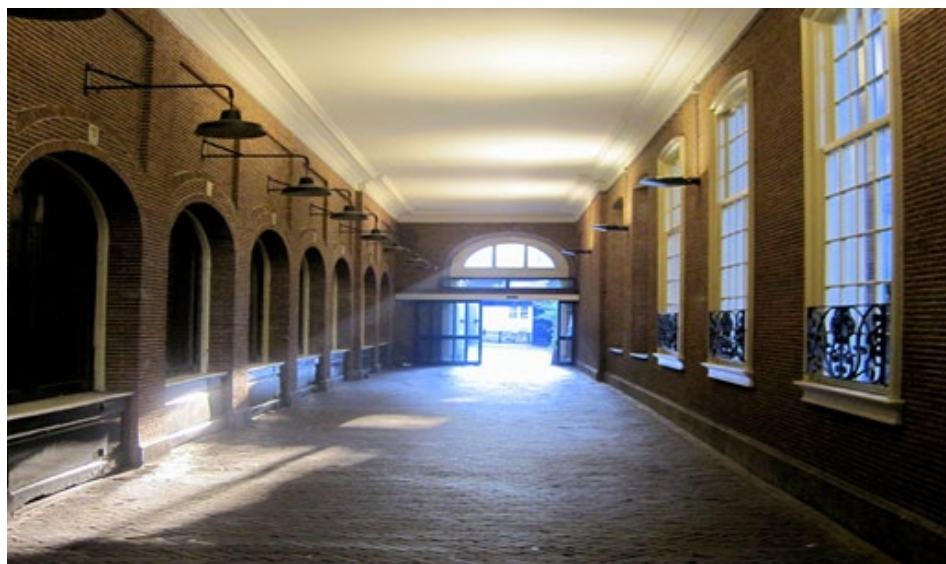




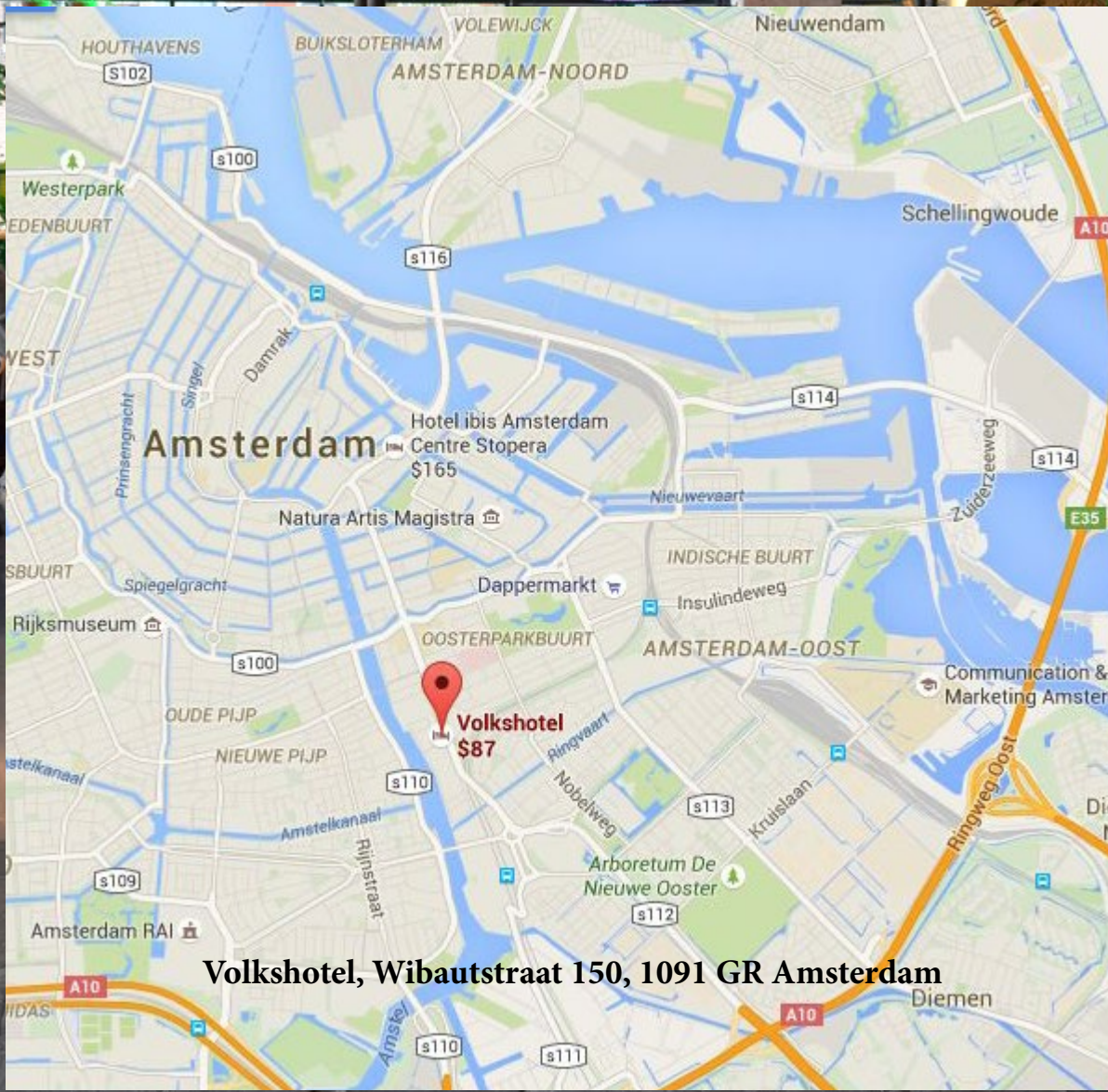
Location of Conference: Oudezijds Voorburgwal 229, 1012 EZ Amsterdam



Hotel ibis Amsterdam Centre Stopera, Valkenburgerstraat







**Volkshotel, Wibautstraat 150, 1091 GR Amsterdam**



## Did you catch these Tweets?

### From Fred Spier's Twitter

Follow Fred Spier on twitter  
@BigHistory

#### AncientBiotics - a medieval remedy for modern day superbugs?

A one thousand year old Anglo-Saxon remedy for eye infections which originates from a manuscript in the British Library has been found to kill the modern-day superbug MRSA in an unusual research collaboration at The University of Nottingham.

<http://www.nottingham.ac.uk/News/pressreleases/2015/march/ancientbiotics---a-medieval-remedy-for-modern-day-superbugs.aspx>

#### Observing the birth of a planet

Astronomers have confirmed the existence of a young giant gas planet still embedded in the midst of the disk of gas and dust surrounding its parent star. For the first time, scientists are able to directly study the formation of a planet at a very early stage.

<http://www.sciencedaily.com/releases/2015/07/150701114809.htm>

#### Latest Images of Pluto from New Horizons

<http://www.nasa.gov/image-feature/goddard/views-of-pluto-through-the-years>  
<https://www.youtube.com/>



[watch?v=7iyd-gh2rhM](http://www.nasa.gov/image-feature/pluto-is-dominated-by-the-feature-informally-named-the-heart)

Pluto is Dominated by the Feature Informally Named the "Heart"

<http://www.nasa.gov/image-feature/pluto-is-dominated-by-the-feature-informally-named-the-heart>

### Big History Project

#### ADVICE FOR THE NEW BH TEACHER

Angelina Kreger

Big History Teacher, 11th & 12th Grade

Novi, Michigan

[http://blog.bighistoryproject.com/2015/06/30/advice-for-the-new-bh-teacher/?WT.mc\\_id=07\\_11\\_2015\\_CP2\\_bhptw&WT.tsrc=BHPTwitter](http://blog.bighistoryproject.com/2015/06/30/advice-for-the-new-bh-teacher/?WT.mc_id=07_11_2015_CP2_bhptw&WT.tsrc=BHPTwitter)

#### How We Proved An Asteroid Wiped Out The Dinosaurs

Geologist Walter Alvarez gets to the bottom of a scientific murder mystery

[https://www.youtube.com/watch?v=YRDpPeKc-ZE&feature=youtu.be&WT.mc\\_id=07\\_15\\_2015\\_Eng\\_bhptw&WT.tsrc=BHPTwitter](https://www.youtube.com/watch?v=YRDpPeKc-ZE&feature=youtu.be&WT.mc_id=07_15_2015_Eng_bhptw&WT.tsrc=BHPTwitter)

**Big History is a course with a lot of writing.** This video discusses the various types of writing activities students will undertake in the course.

[https://www.youtube.com/watch?v=uo0BGMK4bfw&feature=youtu.be&WT.mc\\_id=07\\_14\\_2015\\_CP\\_bhptw&WT.tsrc=BHPTwitter](https://www.youtube.com/watch?v=uo0BGMK4bfw&feature=youtu.be&WT.mc_id=07_14_2015_CP_bhptw&WT.tsrc=BHPTwitter)

**Jericho**, located in the West Bank region of the Middle



East, is the oldest continuously inhabited city on Earth.

[http://www.slideshare.net/BigHistory/jericho-endurance-in-the-fertile-crescent?WT.mc\\_id=07\\_14\\_2015\\_Eng\\_bhptw&WT.tsrc=BHPTwitter](http://www.slideshare.net/BigHistory/jericho-endurance-in-the-fertile-crescent?WT.mc_id=07_14_2015_Eng_bhptw&WT.tsrc=BHPTwitter)

#### Stephen Hawking launches biggest-ever search for alien life

British cosmologist Stephen Hawking has launched the biggest-ever search for intelligent extraterrestrial life in a 10-year, \$135 million project to scan the heavens.

Russian Silicon Valley entrepreneur Yuri Milner, who is funding the Breakthrough Listen initiative, said it would be the most intensive scientific search ever undertaken for signs of extraterrestrial intelligent life.

"In an infinite universe, there must be other occurrences of life," Mr Hawking said at the launch event at the Royal Society science academy in London.

"Somewhere in the cosmos, perhaps, intelligent life may be watching.

"Either way, there is no bigger question."

"It's time to commit to finding the answer, to search for life beyond Earth. We must know."

@davidgchristian





# Crisis at the Edge of Science?

Big History depends on science. So how does the crisis in physics - a fundamental branch of science - affect us?

In their [op-ed piece in the New York Times](#), astrophysicists Adam Frank from the University of Rochester and Marcelo Gleiser from Dartmouth College discuss the limits of empirical knowledge in astrophysics. The authors point out the dilemma of modern physics – that current theories like string theory and multiverses seem beyond empirical investigation and therefore challenge the very foundation of what it means to conduct science. Some scientists are willing to consider theories if they are elegant and explanatory enough, even if they aren't confirmable empirically. In this piece Frank and Gleiser don't explicitly take sides on this controversy; they just point out the dilemma and how much is riding on what scientists find with the recently upgraded Large Hadron Collider.

Since astrophysics is a piece of the big history story, it is of interest to hear this discussion of where the limits of empirical knowledge are in that field.

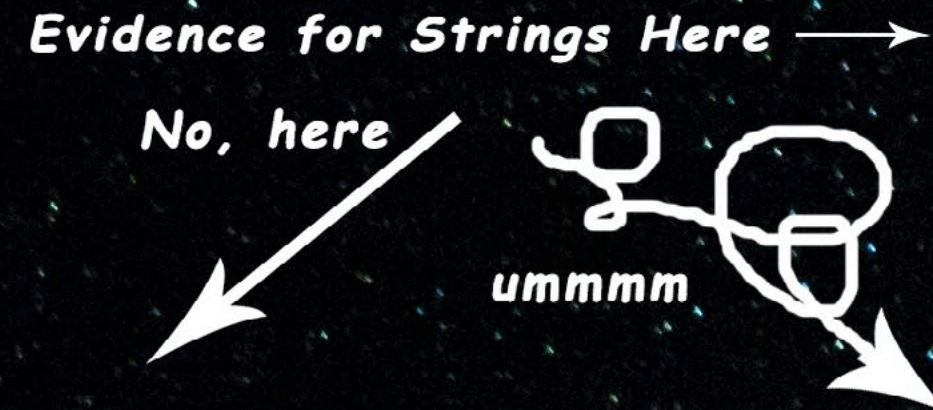
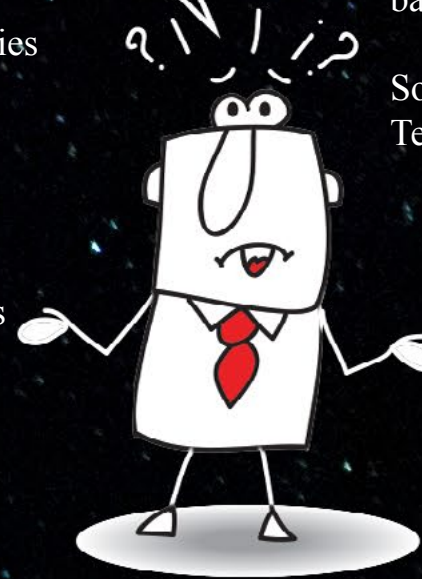
This topic is of interest to Big History since Article 2 of the IBHA Articles of Incorporation states that the International Big History Association (IBHA) defines its purpose as “to promote, support and sponsor the diffusion and

Evidence?!

improvement of the academic and scholarly knowledge of the scientific field of endeavor commonly known as “Big History” by means of teaching and research and to engage in activities related thereto.”

Should unconfirmed ideas in theoretical physics be considered part of science? How long should they be entertained before being rejected? How should they be incorporated into Big History when in most areas we seek to base the field on evidence that is confirmable empirically?

So how should we respond to the [Crisis at the Edge of Physics?](#) Tell us on the [Members' Forum at www.ibhanet.org](#).



## New IBHA Board Members Being Elected

The election of three members of the Board of Directors of the International Big History Association will continue on-line through July; the results are not yet complete as of this writing and will be announced in next month's *Origins*. On June 30, all IBHA members were sent an email from International Big History Association <[ibha@simplyvoting.com](mailto:ibha@simplyvoting.com)> with instructions for how to vote in the election. The Board appreciates the participation of IBHA members in this

election.

IBHA Board members are on staggered three year terms. Elections to fill the open seats take place each year. The Board will soon again be opening the process for nominations for Board candidates for next year's elections.

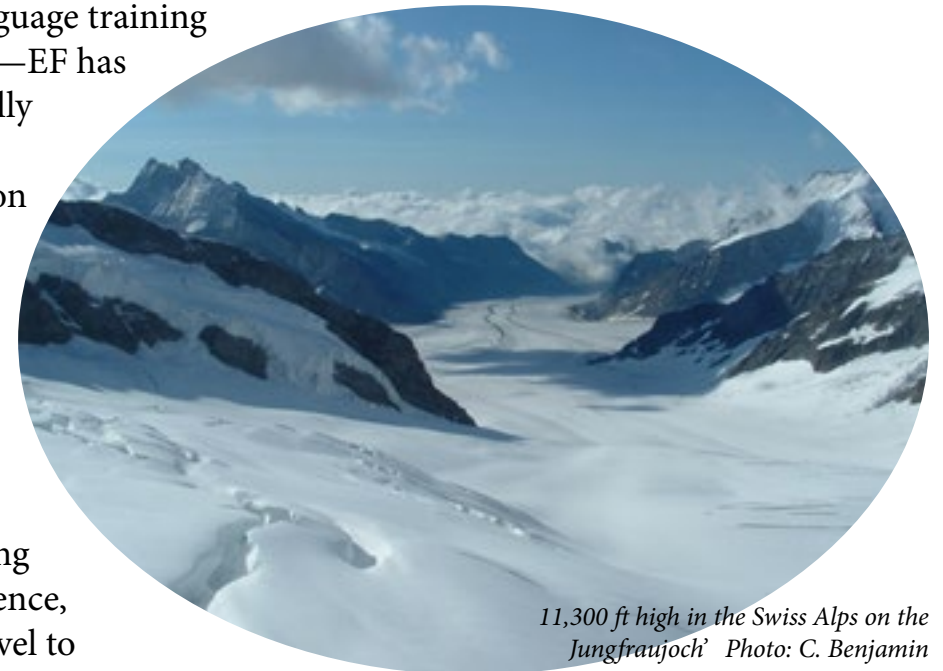


# IBHA Post-Conference European Tour – August 2016

The International Big History Association, in conjunction with Go Ahead Tours, is organizing a post-conference tour specifically designed for travelers with an interest in big history and world history. The tour will include regular lectures and latest information, which will be given on the bus and at many of the sites visited. The itinerary (see link here) includes astronomical, geological, historical and cultural places of interest. Designed and accompanied by leading historians, this one-time, extraordinary tour of Europe will take place over ten days immediately following the IBHA Amsterdam Conference.

Our partner, Go Ahead Tours, is the adult travel division of Education First (EF). For almost 50 years, EF has helped millions of people become citizens of the world by breaking down barriers of language, culture and geography. Through cultural

exchanges, travel, language training and degree programs—EF has become known globally as the world leader in international education travel. Go Ahead Tours will handle all of the tour logistics including transportation and accommodations.



11,300 ft high in the Swiss Alps on the Jungfrauoch' Photo: C. Benjamin



Following the conference, we will travel to Paris with an afternoon stop in Belgium. We will spend two nights in Paris, two nights in the Dordogne Region, one night in Geneva, two nights in Grindelwald, and will end the tour with two nights in the Heidelberg Region of Germany. Along the way, we will visit some of the most significant scientific, geographical and historic sites in Europe including:

- the battlefields of the First World War
- the Louvre in Paris
- the Renaissance architectural masterpieces of the Loire Valley
- the Paleolithic cave art of southern France
- the Volcanic Natural Park of central France
- the Large Hadron Collider at CERN
- the great mountain wall of the Bernese Alps
- the ancient university town of Heidelberg
- the European Parliament in Strasbourg
- the Rhine River valley

Please look for more information about the trip in next month's *Origins*!



9 OVERNIGHT STAYS		YOUR TOUR INCLUDES
Paris	(2 nights)	9 nights in handpicked 3-4 star, centrally located hotels
Dordogne Region	(2 nights)	
Geneva	(1 night)	Buffet breakfast daily, 1 wine tasting, 1 lunch, 4 three-course dinners
Grindelwald	(2 nights)	Multilingual Tour Director
Heidelberg Region	(2 nights)	
		Private deluxe motorcoach

#### DAY 1: 07/18/2016 PARIS

Your tour starts this morning. Say goodbye to some of your fellow conference-goers and hello to your Tour Director as you transfer from Amsterdam to Paris on our own deluxe coach. En route, you'll stop at Ypres, Belgium for free time and a visit to the In Flanders Field Museum.

*Included Entrance Fees: In Flanders Field Museum*

*Included meals: breakfast*

*Overnight in Paris*

#### DAY 2: 07/19/2016 PARIS

Guided Sightseeing of Paris

Panoramic tour featuring Notre Dame, Eiffel Tower, Louvre, Place de la Concorde

Guided tour of the Louvre's ancient artifact collection

Welcome dinner included tonight for the group in Paris

*Included Entrance Fees: Louvre*

*Included meals: breakfast, dinner*

*Overnight in Paris*

#### DAY 3: 07/20/2016 DORDOGNE REGION

Transfer from Paris to the Dordogne region on our deluxe coach with a stop in the Loire Valley.

Guided visit to Chateau Chenonceaux

Dinner included tonight for the group in the Dordogne region

*Included meals: breakfast, dinner*

*Overnight in Dordogne region*

#### DAY 4: 07/21/2016 DORDOGNE REGION

Morning guided visit to Lascaux II Cave

Afternoon visit to Musée national de Préhistoire in Les Eyzies-de-Tayac-Sireuil

*Included Entrance Fees: Lascaux II Cave, Musée national de Préhistoire*

*Included meals: breakfast*

*Overnight in Dordogne region*

#### DAY 5: 07/22/2016 GENEVA

Transfer from the Dordogne region to Geneva on our deluxe coach via scenic drive through the Volcans d'Auvergne Natural Regional Park, featuring Puy de Dôme and Puy de Sancy

*Included meals: breakfast*

*Overnight in Geneva*

#### DAY 6: 07/23/2016 GRINDELWALD

Morning guided tour of CERN

Afternoon transfer from Geneva to Grindelwald by bus

Dinner included tonight for the group in Grindelwald

*Included meals: breakfast, dinner*

*Overnight in Grindelwald*

#### DAY 7: 07/24/2016 GRINDELWALD

Full-day excursion to Jungfrauoch alpine saddle

*Included meals: breakfast*

*Overnight in Grindelwald*

#### DAY 8: 07/25/2016 HEIDELBERG REGION

Transfer from Grindelwald to Heidelberg on our deluxe coach with a stop in Strasbourg for a visit to the European Parliament

*Included meals: breakfast*

*Overnight in Heidelberg region*

#### DAY 9: 07/26/2016 HEIDELBERG REGION

Lunch and wine tasting on a Rhine River cruise

Farewell dinner included this evening for the group in Heidelberg region

*Included meals: breakfast, wine tasting, lunch, dinner*

*Overnight in Heidelberg region*

#### DAY 10: 07/27/2016 AMSTERDAM

Today, you'll transfer from the Heidelberg region back to Amsterdam on our deluxe coach with a stop in Cologne for free time

Once in Amsterdam, say goodbye to your group and tour director as you make your way home independently



*You are cordially invited to join us for our trip to Paris, Dordogne Region, Geneva, Grindelwald, and the Heidelberg Region.*



*Heidelberg Bridge and Castle*