

# PRESERVATION CHRONICLES

THE NEWSLETTER FOR CULTURAL RESOURCE MANAGEMENT PROFESSIONALS

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## DISTANCE LEARNING FOR CULTURAL RESOURCE SPECIALISTS

At 62, Fred E. Budinger, Jr. is not looking for career advancement. The owner and Principal Archaeologist of *BUDINGER & ASSOCIATES*, who has dedicated 34 years of his life to the controversial Calico Early Man site at Pleistocene Lake Manix, says his only interest is advancing his own knowledge and expertise. "I would have been very happy as a career student, but life got in the way," he says wistfully.

He is one of a growing number of professionals who are pursuing distance education programs either for personal enrichment or professional growth later in their careers.

Budinger is working on a new doctoral program in geo-archaeology, which will give him a Ph.D. in geology at its completion. "It's a very progressive program," he says. With the assistance of Dr. Lewis Owen and Dr. David Nash of the Uni-

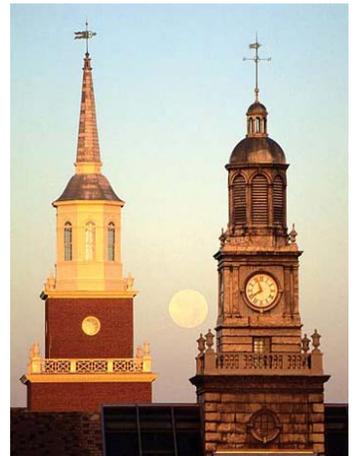
versity of Cincinnati, who championed his bid to complete the doctorate program through distance learning, Budinger received a University Graduate Scholarship from the University of Cincinnati, Ohio, which qualifies him as a resident of Ohio.

His tuition for the fall quarter was only \$1,650.00, which he pays three times a year and, so far, he has completed classes in Geomorphology, Glacial Processes, Geochronology, Paleoclimatology, and Scientific Writing, as well as many units of Ph.D. dissertation research.

He likes the convenience of such software programs as Blackboard, which allows him to post PDFs. Online access to the university library permits him the use of JSTOR and other scholarly sites without having to pay a subscription. He was also able to purchase a copy of Adobe Illustrator for \$400 using his student discount. The program normally would cost about

\$3,000.

"There is a lot of telephone and email work," he says. Many doctoral programs require their Ph.D. candidates to publish two



*The University of Cincinnati, Ohio is pioneering a new distance learning program that culminates in a doctorate of geo-archaeology. The program could lead to an expanded curriculum of distance learning degrees in the arts and sciences.*



*Portrait of the French explorer Jacques Cartier who founded Fort Charlesbourg-Royal in 1541. Cartier's settlement was the first attempt by the French to establish a foothold in the new world.*

## 3D OPTICAL SCANNING AT FORT CHARLESBOURG-ROYAL

When Yves Chrétien uncovered some burnt timbers and broken pottery above the St. Lawrence River near Quebec during the fall of 2005, he was keenly aware of the significance of the find.

Quickly comparing the piece of pottery to Italian plates from Faenza, Italy (1540-1550), which are housed in Russia's Hermitage Museum, the shard

was a perfect match. Such fine faience could only have been owned by a member of the French colony leaders, maybe Jacques Cartier, explorer and founder of the first French colony in North America or most likely Francois Larocque of Roberval, his superior.

Touted as one of the most significant archaeological finds since the earlier discovery of a

Viking settlement in Newfoundland, the Quebec provincial government has invested substantially in the excavation of the historic site.

In an effort to carefully document every detail of this excavation Chrétien and his team turned to MCG3D Inc. for its high performance 3D imaging system. "We knew MCG3D services from our colleagues in the

### 3D OPTICAL SCANNING AT FORT CHARLESBOURG ROYAL

Quebec city region, so it seemed good to inquire about the services they offer,” comments Chrétien. The company uses a 3D optical scanner – long range time-of-flight scanner, and a Shape-Grabber system (short wave) for very close scanning of remains.

The scanner projects a low-power laser on the object's surface and the light is captured by a CCD camera integrated into the scanner. The result is a large point data file containing a 3D image of the scanned surface.

organic material such as pieces of wood allowed us to discover parts of a wooden bowl, pieces of furniture and other things like cordage and textiles. Also, different pieces of wooden frame from the buildings were still in place in the ground. This is quite unusual for sites of this age to find organic material so well preserved.”

How will the 3D images eventually be used? 3D scanning is of great value as an instructional tool, explains Chrétien. It can be used to

“3D recordation of artifacts is quite useful to manipulate very fragile objects, to make measurements in a very efficient way and to share the information with other researchers, but most of the time, archaeology must proceed with a very limited budget and then 3D techniques are not possible,” deplores Chrétien.

MCG3D Inc. president, Guy Côté spent several days in the field at Charlesbourg-Royal collecting the 3D scanning data and returned to the company's lab where they

give back life to objects and to pieces of building that can be moved and assembled to create a virtual reconstruction. So, it is also of first importance to emphasize the historic value of archaeological remains in the context of an exhibition or an interpretation center.

To learn more about 3D optical scanning and its applications for historic preservation contact:

Yves Chrétien,  
Ph.D.,archéologique

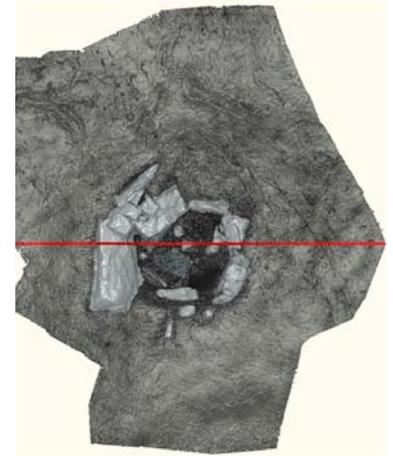
spent a few hours processing the data. Côté expects to return to the site later this year to document more of the findings made by Chrétien's team of archaeologists.

Some of the items that have been excavated and scanned so far include pottery, tools, fish hooks, and seeds from Europe. Perhaps most surprising of all were the pieces of organic material that had burned when the Fort was destroyed.

Chrétien explains, “The incomplete carbonization of

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3D model image of a post hole (part of the original building 1541-1542). The image cross-section was provided courtesy of MCG3D Inc.

**“3D recordation of artifacts is quite useful to manipulate very fragile objects, to make measurements in a very efficient way and to share information with other researchers”**

### DISTANCE LEARNING FOR CULTURAL RESOURCE SPECIALISTS

professional papers in a peer-reviewed journal. Budinger will have completed five papers, which will form different chapters of his doctoral dissertation.

In addition, the University wants to ensure that its doctoral students are effective teachers. Normally this skill is acquired through assistant teaching; however, in his case he was allowed to fly-in and give a series of three

seminars, each three hours in length, to the faculty and students.

Budinger says that Professor Owen has gone out of his way to make this program work, and it could lead to more distance learning programs at the university. “An American scientist wouldn't go to bat for a student like this,” he says. Owen, a Welchman, is the leading scientist in the world at beryllium dating.

Neither does Budinger think this kind of program would be possible at the University of California, due to the politics of education at the graduate level.

His dissertation will reveal the results of newly acquired dating techniques that include uranium thorium, beryllium 10, aluminum 26, and optically stimulated luminescence, as applied to artifacts at the Calico site.



Fred E. Budinger, Jr. is excavating Master Pit I of the Calico site for sediments used in pollen analysis. Photo courtesy of www.calicodig.com with permission from Fred E. Budinger, Jr.

## DISTANCE LEARNING—CONTINUED

Budinger believes that once properly dated using the newer methods, some of the artifacts, which include stratulated scrapers, wood-working tools, cobbles, and rounded limestone balls that appear to have been used as bolos, will prove to be 400,000 years old.

Craig Lesh first heard about the University of Leicester Archaeology (Distance Learning) program through an advertisement in *Archaeology Magazine* and did some research to find out if it was a “real university” and not sim-

ple a diploma mill. He asked some of his colleagues and they were familiar with the school. However, it was when Dolly the Sheep (the famous cloned sheep) made headlines that he became convinced of the legitimacy of the program, because the University of Leicester was involved in certifying the cloning program.

“They were the only school that had the program I was looking for,” says Lesh. Lesh teaches archaeology to

English.” The difference in colloquial (American and British) English occasionally led to some misunderstandings. Also, if he wanted to communicate with his instructors he had to be up at 2:00 A.M. Aside from these minor grievances, Lesh wholeheartedly supports the program and recommends it to other colleagues.

For additional information about distance learning programs and professional enrichment courses offered to cultural resource specialists

please refer to the distance learning sidebar in the right hand column.

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Craig Lesh, Heritage Education Programs (909) 793-3922, crlesh@heritageedu.com

## DISTANCE LEARNING PROGRAMS

**PDH Center Online** – [www.PDHcenter.com](http://www.PDHcenter.com)

Coursework includes Preservation, Rehabilitation, Reconstruction, and Restoration Standards for Historic Buildings.

**National Park Service** – [www.nps.gov/history/ethnography](http://www.nps.gov/history/ethnography)

The African American Heritage & Ethnography program is sponsored by the Cultural Resources Stewardship Careers Program.

**University of Illinois Online** – [www.online.illinois.edu](http://www.online.illinois.edu)

The Virtual Campus offers courses in Ethnic and Cultural Studies, Anthropology, and History.

**South Puget Sound Community College Online** – [www.spscc.ctc.edu](http://www.spscc.ctc.edu)

The Cultural Resource Technician/Archaeology program offers courses in anthropology, archaeology, and ethnography.

**Planetizen** – The Planning & Development Network – [www.planetizen.com](http://www.planetizen.com)

The Historic Preservation Planning course provides an introduction to Secretary of the Interior's Standards.

**The eLearning Center for Gatlin Education Services** – <http://thelearningcenter.com>

The Preservation Standards for Historic Buildings course is concerned with standards and guidelines for grant-in-aid projects.

## THE ECONOMICS OF SUSTAINABLE GROWTH

At the 6<sup>th</sup> Annual History Symposium sponsored by the County of Riverside, Professor Catherine Gudis, of the U.C. Riverside Public History Program, described the political context which led to the decision to demolish the famed Mediterranean revival-style Ambassador Hotel, the landmark that was notable for hosting the Cocoanut Grove nightclub, as well as one of the darker episodes in

Los Angeles history—the assassination of Robert F. Kennedy after his acceptance of the Democratic nomination for president in the Hotel's Embassy Ballroom.

Significantly, Gudis described how the national mass media depicted the effort to preserve the historic building in stark terms of aesthetic connoisseurship and elitism versus the immediate needs of the poor and the have-nots.

The episode underlines a central theme that preservationists must face in their daily work. In addition to justifying the cultural value of preserving the history of a community, preservationists must also be prepared to demonstrate the economic merits of preservation.

Donovan Rypkema, Principal of PlaceEconomics in Washington D.C., explains that “Preservation” was once an



Myron Hunt's masterpiece, the Ambassador Hotel, was completed in 1921 and played a central role in Hollywood's developing entertainment industry. It was also one of the first desegregated hotels in Los Angeles County.

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**SUSTAINABLE GROWTH—CONTINUED**

end in itself, but is now seen as a means to a range of ends. Preservationists in this respect have become “economic development consultants.”

Rypkema, who specializes in commercial district revitalization and reuse of historic structures, offers the following statistics:

New job creation (per \$1 million spent) amounts to 21.5 jobs for new construction, but 25.3 jobs for rehabilitation projects. Even more dramatically, household incomes for new construction account for \$721,300, but for rehabilitation projects the same \$1 million expenditure results in household incomes of \$798,000, a 7.7% in-

crease over new construction. Rypkema believes that the rehabilitation of only 2-3% of urban buildings per year is enough activity to create perpetual jobs in the building industry.

The statistics for public works projects show even greater margins favoring rehabilitation over new construction. Furthermore, the increased property values witnessed in historic districts, which is uniform nationwide, and the income generated from heritage visitors is enough to dispense with the argument that historic preservation is a costly and elitist vision of the urban planner.

The total construction budget for the Central Los Angeles

New Learning Center, which will replace the demolished Ambassador Hotel, is estimated at \$566 million. Applying Rypkema’s statistics for an equivalent expenditure on rehabilitation, this means that 2,150 jobs and \$43,412,200 in household income will be lost in the construction of the new buildings.

The economics of historic preservation show that rehabilitation is not only a means of preserving the cultural integrity of a community, but is a well reasoned financial solution to the economic demands of the society.

Donovan Rypkema’s most recent book is entitled, *The Economics of Historic Pres-*



*The Central Los Angeles New Learning Center #1 K-3 facility rises from the ashes of the historic Ambassador Hotel.*

*ervation: A Community Leader’s Guide*, published by the National Trust for Historic Preservation, 2005.

Professor Catherine Gudis’s latest publication is called *Buyways: Billboards, Automobiles, and the American Landscape*, published by Routledge, 2004.