UC SANTA BARBARA

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# UCSB PROFESSOR HELPS TELEVISION RECREATE HISTORY

UC Santa Barbara Professor Fikret Yegul has spent much of his academic career studying the technological mysteries of the heated bath houses of the Roman empire.

This past fall Yegul was asked to put his knowledge to the test when the popular Public Broadcasting Service (PBS) program NOVA made him its chief advisor for an episode of a planned mini-series to be titled "Secrets of Lost Empires II."

NOVA producer Nancy Linde said the "Secrets" series attempts to explain the technological achievements of ancient peoples by asking modern scientists and engineers to duplicate them using only ancient means and materials.

Yegul's episode involves the construction of a functioning replica Roman bath on an archeological site near Sardis, Turkey.

Other episodes will chronicle reconstructions of the roof over the Roman Coliseum and an Incan rope bridge and the carving and transportation of Moai stone statues on Easter Island.

Yegul -- a UCSB history of art and architecture professor -- was NOVA's first choice to head up the academic and engineering side of the bath project.

"He is clearly the leading scholar on Roman baths and he is also an architect," Linde said.

"We couldn't think of a better combination of skills and ability to build our bath."

Yegul's team broke ground on the project in mid-September.

Seven weeks later, he and several colleagues were seated on marble benches chest-deep in the steaming waters of an operating Roman bath while the NOVA cameras chronicled the giddy scene.

"It really was extremely exhilarating,'' said Yegul, whose 1994 book, "Baths and Bathing in Classical Antiquity" is recognized as a landmark contribution in its field. "There were five or six of us and we had been having a lot of bitter arguments before this about how to do things, what was correct and what was not and so on.

But once the bath started working, all that went away and we all became very friendly.

We really felt almost childish, we were so pleased.

It just won us over."

The biggest challenge of the project was getting the heating system, which moved water heated in a copper boiler into the pools and circulated warm air beneath the brick floors, to exhaust properly.

"Our chimney system leaked at first, so we had smoke coming out of the walls instead of the chimney," Yegul said.

Yegul's team also had to fudge a bit on using ancient materials, substituting silicone caulking in the pools for hard-to-find volcanic sand and modern bricks for ancient ones. "Our attempts to make our own bricks ended with the bricks cracking when subjected to the heat," Yegul said. "Hundreds of them cracked.

We finally found in the ancient literature that bricks of that type had to be dried over a period of two years.

We couldn't wait that long."

Yegul made four trips to Turkey to supervise the project.

The effort was valuable, he said.

"In projects like this you learn things you could never learn by going to the library,'' he said.

"No one had ever done this kind of experiment before.

This is the first and only fully functional Roman bath anywhere in the world today."

Millions of television viewers will benefit from the effort, too, Linde said.

The series is tentatively planned to be broadcast in the United States in the spring of 2000, with earlier broadcasts possible in England and France.

Ten million viewers watch NOVA on PBS each week, she said.

"Dr. Yegul gave us a lot of time and we are eternally grateful to UC Santa Barbara for allowing him to do this," Linde said.

"Ultimately, a lot of people will see this and it will be used in educational venues so it will have great value."

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## About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.