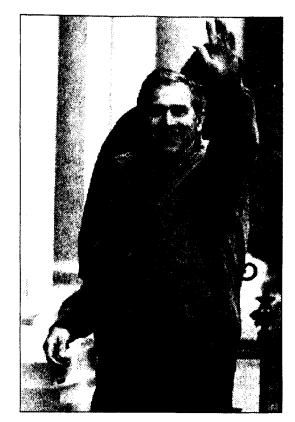
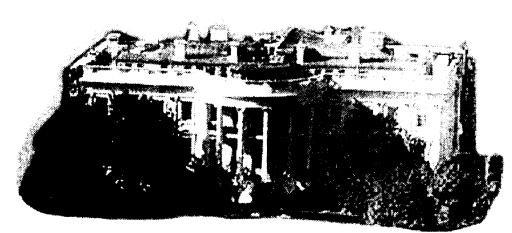
FINAL PLEAS MADE



Dems court **GOP**



electors to vote for Gore



by Scott Martelle Los Angeles Times

As the two major parties near the end of their vicious war for the White House, Democratic activists and would-be political reformers are quietly pressing Republican electors to do the unthinkable: Vote for Democrat Al Gore.

Less a movement than a series of individual and overlapping acts, the agitators seek to split away two or three votes from among George W. Bush's anticipated 271 Republican electors when the all-important Electoral College convenes Dec. 18.

If three Bush electors defect and vote for Gore, then the Democrats would win the White House regardless of the current court battles. If two defect, the election would be sent to the Republican-dominated U.S. House of Representatives.

While few expect the agitators to succeed in creating what are known as "faithless electors," their efforts

add yet another odd twist to an election that has already set new standards for bizarre.

The biggest hurdle is the nature of the electors themselves, most are selected as a payoff for years of party loyalty. And Gore himself has rebuffed the efforts.

"We're very proud to have earned the the popular vote support during this election but we are not seeking nor in anyway trying to get electors to switch over," Gore spokesman Chris Lehane said Tuesday.

Lehane, however, acknowledged that in the unlikely event the effort is successful, Gore would have little choice but to accept the presidency, despite earlier comments by the vice president that he would reject the votes.

"They can vote for whomever they choose, and if Gore gets 270 votes in the Electoral College he's the president," said Erwin Chemerinsky, a professor at the University of Southern California Law School. "He has no authority to concede the election to Bush in a legal sense, though if he does by announcement then it's less likely that the electors would (flip).'

Those involved in the effort range from two Claremont McKenna College seniors dismayed by the prospect of seating a president who placed second in the popular vote, to a New Hampshire lab technician who urged his state's four electors to reject tradition for the public will.

"I think there is corruption and the election was unfair in Florida," said Thomas Richard, a Concord, N.H., Gore supporter. "Electors have some discretion in who they vote for in New Hampshire. They're not bound by state law to vote for the elector that they're pledged to. So they ought to use their discretion, especially when the election was so close and the popular vote was greater for Gore."

In Pennsylvania, T.J. Rooney, a state representative from the Lehigh Valley and a Democratic elector, has undertaken his own campaign to buttonhole four or five Republican electors he knows in other states to entice them to vote for Gore.

"They listen to what I have to say," Rooney said. "Perhaps they're just just listening out of kindness or collegiality, but I think there's a strong case to be made. ... I am firmly of the opinion that if every vote was counted in Florida (Gore) will have earned the 25 electors."

David Enrich is one of the Claremont McKenna students behind the Citizens for True Democracy Web

(www.claremontmckenna.com/ctd/) that urges people to lobby Republican electors to vote for Gore. The Website has received more than 54,200 visits since it was posted two days after the election.

Enrich said he and roommate Matt Grossmann, of Columbia, Mo., are targeting the process, not the candidates, and would have sought Gore been reverse.

think is grossly unfair and antidemocratic and in great need of reform," said Enrich, 21, of Boston. "We think this is kind of a golden whose e-mail address is posted in the opportunity to reform it."

But Republicans see something more nefarious going on, an attempt by Democrats to circumvent the process.

usual tactics we've seen by the Democrats since the election," said Bush spokesman Ray Sullivan. "Ultimately, we believe that Republican electors across the country are and will continue to be committed to Gov. Bush and do not believe that they will be persuaded to turn their backs on their party or on our nomi-

While some Republican electors have been swamped with e-mails,

defectors had the circumstances paign but have not received any contacts. Still others said they have heard "This is an effort on our part to from more fellow Republicans urgdraw attention to a system that we ling them to stand firm than from people encouraging them to flip.

> John McCutcheon of Caldwell, W.Va., is one of the few electors Citizens for True Democracy Web site. He is receiving about two dozen messages a day urging him to vote for Gore.

But he said he's getting twice that "It is in keeping with some of the — amount from fellow Republicans.

> "The more inspiring ones are from folks who say, 'Look, I hear you're getting beat up. Stick to your guns," said McCutcheon, a political consultant and executive director of the Bush campaign in West Virginia.

> McCutcheon, like most of the Republican electors, is a veteran of campaigns and said he takes the contacts in stride, deleting most of them as he would junk e-mail.

"You could set me on fire and I others said they're aware of the cam- wouldn't change my mind," he said.

Into mummies' inner space

by Guy Gugliotta The Washington Post December 04, 2000

Fly in through the left nostril, head straight up for a few inches,

then level off to cruising altitude as you pass through the hole that was punched in the skull by ancient embalmers more than 3,000 years ago.

Suddenly, you're in the brain cavity of

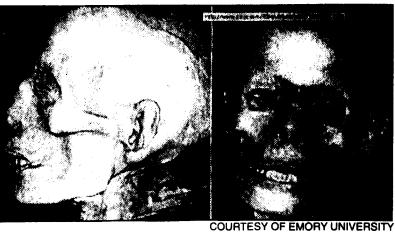
an Egyptian mummy, which may or may not have been the Pharaoh Ramses I. The time is right; the arms are crossed, indicating royalty; and the corpse's brain has been replaced by liquid resin - too expensive to waste on commoners. Most important, however, the

traveler obtains all this information without dissecting or disturbing the mummy, thanks to computerized tomography and its attendant software, which allows scientists to convert black and white X-rays into three-dimensional, full-color, virtual images capable of being viewed from any angle.

And in a first-ever refinement, an Emory University radiology team used the technique to take "virtual tours" of a mummy's innards. The results were presented last week in a series of spectacular photos and videos at the Radiological Society of North America's annual meet-

"It's like an endoscopy, a standard medical test in which you put a tube with a tiny camera on the

end of it into the body to explore," said Emory Hospital radiologist Heidi Hoffman, the project's lead researcher. "We're able to explore the body cavities of the mummies as though we were flying through."



Computerized reconstruction of a 3,000-year-old mummy that may be Ramses I. Scientists can explore the inner recesses of mummies without dissecting or disturbing them, thanks to computerized to-

The researchers examined nine mummies, acquired last year for \$2 million by Emory's Michael C. Carlos Museum in Atlanta from the Niagara Falls Museum, which is on the Canadian side of the famous landmark.

Carlos Museum Assistant Curator Betsy Teasley Trope said the Canadians obtained the mummies and their coffins in Egypt in the late 19th century. The mummies included men, women and children, most of whom died about 3,000 years ago or later, Trope said. One mummy, known as "the general," dates from Egypt's Roman period - the first or second century A.D.

Beyond that, the museum knows little, and doubts what little it does know, Trope said. The name "the general," for instance, was bestowed by the Canadian museum and signifies nothing except that the mummy - unaccompanied by a coffin - had been a robust individual with red hair and a beard an aesthetic more Roman than Egyptian.

"Is he a Roman buried in the Egyptian style or an Egyptian adopting Roman customs?" asked Trope. Or neither? The general and his eight associates were "probably

> purchased in (the artifact-rich zones around) Luxor or Thebes," she said, but their original resting places are a mystery.

With the help of computerized tomography, the museum now knows a lot more. The technique was first used in medicine in the early 1970s as a noninvasive way to examine patients' soft tissues and detect anomalies such as tumors or hemor-

rhages.

Instead of one camera and a plate, like a standard X-ray, computerized tomography uses multiple mini-cameras and detectors mounted in a tube that surrounds a patient (or mummy) to "scan" the individual from head to toe.

Each picture is a cross-section of the subject, Hoffman said. The data from each image are digitalized in a computer, and the "slices" are then "stacked" electronically to recreate a three-dimensional whole.

"Think of it as a loaf of sliced bread," Hoffman said. The Emory team used as many as 1,100 slices per mummy. Hoffman assigned colors to each component based on tissue density: "There's no science to the color coding," Hoffman said. "I chose colors that demonstrated the superficial structures."

The possible Ramses emerged as a two-toned, flesh and off-white death's head with very white teeth and a pinkish mouth cavity. A small child shows a readily visible depressed skull fracture, perhaps the cause of death. The general looks like a red-haired rendering of Don

Once the "bread loaf" is stacked together, it can be peeled, resliced and examined internally and externally in countless ways and conclusions reached based on data never before seen, Hoffman said.

The possible Ramses has a deformed ear and a badly eroded right temporal bone, "suggesting a chronic ear infection" like mastoiditis, she said, "Today this is treated with antibiotics, but 3,000 years ago it could go to the brain and cause meningitis or get into the blood and

kill you." Another mummy, thought at first to be a baby, turned out to be a small child with its legs amputated below the knees: "There's no evidence of bone healing, so it happened immediately before or after death," Hoffman said. "It could have died from the injury, but more likely, if there was a coffin of a certain size, the body was cut to fit."

Hoffman said embalmers often cut a slit in the side of cadavers so they could remove all the organs except the heart, regarded as an individual's source of wisdom and emotion.

Depending on the era or social status of the individual, the organs could be wrapped in linen and reinserted, or simply replaced with sawdust, stones or wads of packing. The possible Ramses's insides are filled with tight linen wraps, readily visible in Hoffman's images.

"After removing the organs, they might put palm wine or something else back inside to get a nice odor,' Hoffman said. The embalmers also paid the possible Ramses the ultimate high-status compliment by pushing a hook up his nostril, punching a hole in the bridge of his nose, pulling his brain out and refilling his head with a liquid resin that solidified as it dried.

Photos hint at historic presence of water on Mars

by Usha Lee McFarling Los Angeles Times December 04, 2000

The dry, dusty surface of Mars once might have been a Minnesotalike land of lakes, according to vivid new photos of the planet released Monday.

The images do not show water, but capture dramatic layered geological outcrops, such as those found in the Grand Canyon, that usually form within bodies of water.

The new pictures radically could revise notions of Martian geology, suggesting the planet was a wetter and wilder - place than previously believed. They also suggest that water might have been a long-standing feature of the planet and existed for millions of years, long enough for life to evolve.

"To geologists, layering is like the 'Holy Grail,'" said Mike Malin, who heads Malin Space Science Systems, the San Diego company that operates the Mars Orbital Camera now circling the planet aboard NASA's Mars Global Surveyor. "Mars isn't the way we thought it was."

"This picture really blew our socks off," said Ken Edgett, the study's co-author and a scientist at Malin, said of an image showing detailed, regularly spaced layers across the bottom of Valles Marineris, a canyon in Mars that stretches across a length equivalent to the distance between Los Angeles and New York. "We looked at that and said, 'We don't know how you do that without water."

The report is to be published in Friday's issue of the journal Science. This summer, Malin and Edgett reported finding evidence that small amounts of water recently might have flowed on Mars and carved out gullies within craters. The new finding indicates large amounts of water might have covered parts of the

planet billions of years ago.

Signs of layered sediments were first detected on Mars in 1971, with the Mariner 9 mission. The new images are the first highly detailed pictures and show the layers are distinct from most of the Martian terrain.

The pancakelike layers are widespread, visible in hundreds of the impact craters and deep chasms that scar the planet's surface. As in the Grand Canyon, erosion exposes layered outcrops far beneath the planet's surface. The layered rocks date from the earliest part of Martian history, more than 3.5 billion years ago.

Malin and Edgett have no idea where the sediments that make up the layers came from or how they could have been eroded so dramatically. They also see no "smoking gun" traces of gullies or streams that might have carried water to the areas where the sediments accumulated.

An alternative explanation is that the energetic mix of wind and sand that fuels the infamous dust storms on Mars might be transporting the sediments and that cyclic changes in the planet's atmosphere might play a role in depositing dust. In such a scenario, water would not be required, and the chances of finding traces of life might be diminished.

Other explanations, such as dust thrown up by impacting craters, or rocks spewed by volcanoes, do not explain the widespread extent of the layered sediments, Malin said.

Mars has "a lot of real estate," said Jim Garvin, the geologist who heads Mars exploration for the National Aeronautics and Space Administration. The new observations, he said "give us some direction ... on where to go."

Garvin compared the views of the layered rocks to the findings of archeologists who opened the first known tombs of the pharaohs.

"These are landscapes exhumed from the martian past," he said.