This month I would like to start the CyberScribe report by dealing with a couple of very interesting health issues. One of these issues deals with the appearance of cancer in ancient Egypt, and the other discusses the possibility of ancient Egyptians suffering from heart attacks.

The cancer report stirred up quite a controversy. The first reports suggested that cancer was a purely man-made disease, and was entirely or nearly completely absent in ancient times. Response was led by Egyptologist Rosalie David, a person well known for her studies of ancient Egyptian mummies. The crux of her response was that people in ancient Egypt seldom lived long enough to develop cancer. In today's world, cancer is chiefly the ailment of older people, and the people of ancient Egypt seldom lived as long as modern Westerners, or even people in second and third world country areas.

In an 'Archnews' article by Paula Viega, the controversy is reviewed and explained (http://snipurl.com/1r2t8g). Abbreviated somewhat, her article is presented below and is well worth reading:

"In direct contradiction to the recent Manchester University article in Nature stating cancer is 'man made', Paula Veiga strongly argues the case for the existence of cancer in Ancient Egyptians. Citing both her own research during her time at Manchester and Professor Zimmerman, she questions Prof David's conclusions. "It seems Dr. Zimmerman's work from 1995, my own research in 2007-08 and reputed scientists' work (Strouhal, Zink, Nerlich, Capasso and others) were not enough to convince Prof. Rosalie David."

"The controversy among researchers, scientists and Egyptologists sprouted like a cabbage planted in the middle of the media field after an article titled 'Scientists suggest that cancer is purely man-made' was published in Nature Reviews Cancer last October 2010.

"The article in question, published by two experts on ancient medicine states that 'Yet again extensive ancient Egyptian data, along with other data from across the millennia, has given modern society a clear message – cancer is man-made and something that we can and should address.'

"Professor Zimmerman said: 'In an ancient society lacking surgical intervention, evidence of cancer should remain in all cases. The virtual absence of malignancies in mummies must be interpreted as indicating their

rarity in antiquity, indicating that cancer causing factors are limited to societies affected by modern industrialization'.

He does not advocate that cancer did not exist, and he could not do it, just because, in 1977, Zimmerman made some experiments trying to mummify cancerous tissues to see if they stay preserved or not for future analysis. The results showed that 'malignant tumors were found to be much better preserved after mummification than normal tissues'. Zimmerman also said that, 'There are only a handful of reports of tumors in ancient remains.' (1)

"Prof. David is approaching retirement, and excellence in lecturers there belongs to the past. I had the opportunity to study and learn with Dr. Corthals who has worked on the Royal Mummies 'DNA in Cairo, and other colleagues who have medical and biology degrees. These people contributed largely to the success of the KNH in the past recent years (2003-2009) introducing new ideas for research cases, but now they are gone for good. Prof. David is working on a new marketing tool to call the attention to her Centre. I congratulate her on her eternal efforts over the past 30-40 years and I am grateful for the experience, but, she never researched, wrote, or talked about cancer in ancient Egypt BEFORE my presence there, as it happens to be my idea.

"The 'first ever histological diagnosis of cancer in an Egyptian mummy' as the Nature article states, was, after all done by Professor Michael Zimmerman in 1995... 'He diagnosed rectal cancer in an unnamed mummy, an 'ordinary' person who had lived in the Dakhleh Oasis during the Ptolemaic period (200-400 CE).' Rectal or colon cancer is just centimeters away and this might look as a new case, but it is the same. It is published, with pictures on page 373 of Prof. Aufderheide's famous 'bible' for biomedical 'aficionados' like me...The scientific study of mummies, Arthur C. Aufderheide, Cambridge University Press, 2003.

"Put this in the blender, plus some of my conclusions, as I graduated from the same Institute where this 'study' was conducted, add some foreign ancient bodies' cases (Greece, Chile) previously published, and some generic talk about how scarce the evidence are and how lifespan was shorter, and you get this misguiding information...; as cancer did exist in ancient societies. What man has made with the polluting agents is TO INCREASE the probability of cancerous cells developing in a human or other mammal body. The production of cancerigenous cells is not a characteristic of modern societies; it is a bio-chemical response of the body, either caused by genetic factors or environmental ones. I have learned this in a special lecture in Lisboa given by world-renowned cancer research scientist, Dr. Jorge Pacheco (http://sites.google.com/site/jorgempacheco/complexsystems).

"Of course this does not mean that greater excavation activity in Egypt will necessarily reveal more cases of tumors, but it is an indicator that, as well as the fact that this population may have been less exposed to this diseases, there is also a lack of material to study. This is not only because this type of disease is difficult to detect in ancient tissues (including bone tissue) but also because not everything has been excavated yet.

"And, there is reason to think, from studies done on the Ebers Papyrus, that oncology was a fact in ancient Egypt. Ancient Egyptian doctors already had some information that enabled them to diagnose and treat cancers, although the literary sources do not clearly describe how they distinguish an abscess from a pustule or neoplasia.

"If the evidence for carcinogenic cases amongst the ancient Egyptians is almost untraceable, then this may explain the apparently low incidence of this disease in the ancient remains. However, in this case, how can we explain that the Ebers Papyrus has so many prescriptions for the treatment of 'swellings' that are interpreted as tumors?"

Not too surprising, One supposes, is the fact that ancient Egyptians also suffered from heart attacks, more explicitly, atherosclerosis. The short article below reviews a more substantial research paper published in the Journal of the American Medical Association (JAMA). Unfortunately, the CyberScribe does not have access to JAMA, so we will depend on a review of the paper that appeared in 'Thailndian" (http://snipurl.com/1r2wax). Read on:

""Atherosclerosis, despite differences in ancient and modern lifestyles, was rather common in ancient Egyptians of high socio-economic status living," says Gregory Thomas, clinical professor of cardiology at the University of California-Irvine (UCI).

""The findings suggest that we may have to look beyond modern risk factors to fully understand the disease," said Thomas, principal study co-investigator.

"The nameplate of the Pharaoh Merenptah (1213-1203 BC) in the Museum of Egyptian Antiquities reads that, when he died at 60 years, he was afflicted with atherosclerosis, arthritis, and dental decay.

"Intrigued, Thomas and a team of US and Egyptian cardiologists, joined by experts in Egyptology and preservation, selected 20 mummies at the Museum of Egyptian Antiquities for scanning on a Siemens 6 slice CT scanner during February. The mummies underwent whole body scanning with special attention to the cardiovascular system, said an UCI release.

"The researchers found that nine of the 16 mummies who had identifiable arteries or hearts left in their bodies after the mummification process had calcification either clearly seen in the wall of the artery or in the path were the artery should have been. Some mummies had calcification in up to 6 different arteries.

"Using skeletal analysis, the Egyptology and preservationist team was able to estimate the age at death for all the mummies and the names and occupations in the majority. Of the mummies who had died when they were older than 45, seven of eight had calcification and thus atherosclerosis while only two of eight dying at an earlier age had calcification.

"Atherosclerosis did not spare women; vascular calcifications were observed in both male and female mummies, said an UCI release.

"The most ancient Egyptian afflicted with atherosclerosis was Lady Rai, who lived to an estimated age of 30 to 40 years around 1530 BC and had been the nursemaid to Queen Ahmose Nefertiti. To put this in context, Lady Rai lived about 300 years prior to the time of Moses and 200 prior to King Tutankhamun."

Next let's move on to examine 'sand fish'...or rather fish remains found deep inside the modern bounds of the Sahara desert. A recent study has used a variety of techniques to reconstruct the Sahara as it was 8-11,000 years ago, and the find it dotted with lakes, swamps, and rivers...a place teeming with life, including aquatic life.

Their report (abbreviated below) appeared in the journal 'Proceedings of the National Academy of Sciences'. In an article titled 'Ancient watercourses and biogeography of the Sahara explain the peopling of the desert', by Drakea, Blenchb, Armitagec, Bristowd, and Whitee (Proceedings of the National Academy of Sciences).

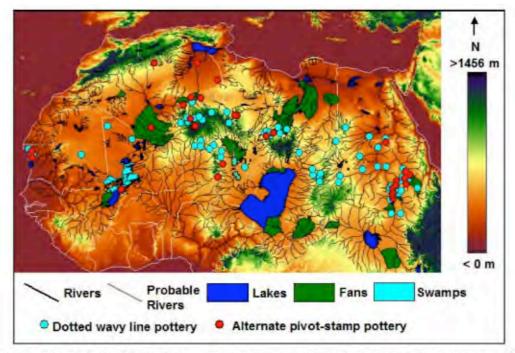
The CyberScribe does not have access to that journal, but here is the abstract of the paper in question:

"Evidence increasingly suggests that sub-Saharan Africa is at the center of human evolution and understanding routes of dispersal "out of Africa" is thus becoming increasingly important. The Sahara Desert is considered by many to be an obstacle to these dispersals and a Nile corridor route has been proposed to cross it. Here we provide evidence that the Sahara was not an effective barrier and indicate how both animals and humans populated it during past humid phases.

"Analysis of the zoogeography of the Sahara shows that more animals crossed via this route than used the Nile corridor. Furthermore, many of these species are aquatic. This dispersal was possible because during the Holocene humid period the region contained a series of linked lakes, rivers, and inland deltas comprising a large interlinked waterway, channeling water and animals into and across the Sahara, thus facilitating these dispersals. This system was last active in the early Holocene when many species appear to have occupied the entire Sahara. However, species that require deep water did not reach northern regions because of weak hydrological connections.

"Human dispersals were influenced by this distribution; Nilo-Saharan speakers hunting aquatic fauna with barbed bone points occupied the southern Sahara, while people hunting Savannah fauna with the bow and arrow spread southward. The dating of lacustrine sediments show that the "green Sahara" also existed during the last interglacial ( $\sim$ 125 ka) and provided green corridors that could have formed dispersal routes at a likely time for the migration of modern humans out of Africa."

A review (abbreviated) of this paper added the following comments and a copy of the wonderful new map that shows the ancient water resources of the Sahara (http://snipurl.com/1r2xgo).



Supporting Fig. 14. Late Pleistocene and Early Holocene palaeo-hydrology of the Sahara (~11-8 ka) with the spatial distribution of dotted wavy line and alternate pivot-stamp pottery plotted (from Ref. 70).

A map of what the Sahara was like 8,000 to 11,000 years ago, revealing rivers, lakes, swamps and fan-shaped deposits where rivers emptied out. The dots indicate where various kinds of pottery were found. Credit: Nick Drake.

"Fish may have once swum across the Sahara, a finding that could shed light on how humanity made its way out of Africa, researchers said.

"Scientists have often focused on the Nile Valley as the corridor by which humans left Africa. However, considerable research efforts have failed to uncover evidence for its consistent use by people leaving the continent, and precisely how watery it has been over time is controversial.

"Now it turns out the Sahara might not have been quite as impassable as once thought — not only for humanity, but for fish as well.

""Fish appeared to have swam across the Sahara during its last wet phase sometime between 10,000 and 6,000 years ago," researcher Nick Drake, a geographer at King's College London, told LiveScience. "The Sahara is not a barrier to the migrations of animals and people. Thus it is possible — likely? —that early modern humans did so, and this could explain how we got out of Africa."

"Using satellite imagery and digital maps of the landscape, the researchers found the Sahara was once covered by a dense network of rivers, lakes and inland deltas. This large waterway channeled water and animals into and across the Sahara during wet, "green" times. [See digital map of ancient Sahara]

"In their analysis, Drake and his colleagues found evidence that many creatures, including aquatic ones, dispersed across the Sahara recently. For example, 25 North African animal species have populations both north and south of the Sahara with small refuges within the desert, including catfish (Clarias gariepinus), tilapia (Tilapia zillii), jewel cichlid fish (Hemichromis letourneuxi) and freshwater snails such as the red-rimmed melania (Melanoides tuberculata). Indeed, more animals may have once crossed over the Sahara than over the Nile corridor, the researchers said — only nine animal species that occupy the Nile corridor today are also found both north and south of the Sahara.

"If fish could have crossed the Sahara, it is hard to imagine that humans didn't. Analysis of African languages and artifacts suggest that ancient waterways recently affected how humans occupied the Sahara. For instance, speakers of Nilo-Saharan languages once lived across central and southern Sahara, and may have once hunted aquatic creatures with barbed bone points and fish hooks. In addition, ancient lake sediments suggest the Sahara was green roughly 125,000 years ago, back when anatomically modern humans might have begun migrating out of Africa."

Two new temple discoveries were highlighted this month. One was in a little known site north of the better-known site of Mendes...the site called Tell T'mai...ancient site of the city of Thmuis. Though little remains to be seen, the article (http://tiny.cc/jctpd) that appeared in 'Unreported Heritage News', stated (abbreviated):

A temple built by Ptolemy II Philadelphus has been discovered at the ancient city of Thmuis (also known at Tell T'mai) on the Nile Delta in Egypt. Ptolemy II was a king of Egypt and the son of one of Alexander the Great's generals. During his reign Egypt had a vast navy and controlled harbors and territory throughout the eastern Mediterranean. He erected a stele (a stone carving) at Thmuis and inaugurated a building and restoration program in the city.

"Archaeologists believe that the newly discovered temple may have been built as a memorial to his dead queen – Arsinoe II. She was held in such high regard that the king deified her after she died.

""We suspect this was a temple that was built for Arsinoe (the second) – a memorial temple for Arsinoe," said Professor Robert Littman of the University of Hawaii. He leads the research team along with Jay Silverstein, an archaeologist at the same institution.

"More work needs to be done on the structure, "right now all we have are fluted columns and one inscription, one cartouche of Ptolemy," said Professor Littman. He added that they have also found fragments from an art relief.

"The size of the columns suggests that it was a large temple. The team plans to use Ground Penetrating Radar and magnetic survey to determine its dimensions and get clues as to its layout.



A column from the newly discovered temple of Ptolemy II at Thmuis. It may have been built as a memorial temple for his dead queen - Arsinoe II. Photo courtesy Professor Robert Littman



The cartouche of Ptolemy II, found on the temple. Photo courtesy Professor Robert Littman



Mud brick structures jut out from the ruins of ancient Thmuis. Photo courtesy Professor Robert Littman



A figure of the hippo goddess Taweret. It was discovered near the harbor of Thmuis. Photo courtesy Professor Robert Littman

"In 332 BC Alexander the Great entered Egypt, chasing out the Persians and inaugurating a line of Greek rulers that would last nearly 300 years. Historians refer to this period as the "Ptolemaic Dynasty," so named after the general that took control of Egypt after Alexander's death – Ptolemy I Soter. The city of Thmuis flourished during this time. Located on the eastern Nile Delta it grew in population and size.

"Just 500 meters to the north there was another ancient city, called Mendes. That site was founded more than 5,000 years ago, but was in decline at the time of the Ptolemies. "Apparently the course of the Mendesian branch of the Nile started to change - the northern tell, Mendes, fell into disuse," said Professor Littman. "(It) severely wanes in the 5th and 4th centuries and Thmuis increases in size and population."

Silverstein added that the team is "looking at the possibility a branch of the Nile River, or a tributary of that, ran between the two cities."

"The harbor of Thmuis was important to the city's success. The team has been trying to locate it by using core samples, excavation and magnetic survey. "We think we're right at the water line now," said Silverstein.

"Littman said that the team hasn't found firm archaeological evidence of this army. One possible artifact from these legions is a coin from Judea that was found north of Thmuis, at Mendes. "The coin comes from a period after the sack of Jerusalem," said Littman. He said that it's possible that the coin was dropped by a soldier returning from the battle. "Even though the sources don't say that Titus marched on back, there's a good chance that he did," said Littman. "The garrison that he was taking came from Alexandria to begin with."

"Thmuis continued to be occupied into the Coptic and Islamic Periods, declining, it seems, during the Middle Ages. Even today there are people living near the site – a fact that poses a conservation challenge. All throughout the Nile Delta populations are growing, putting pressure on its archaeological sites.

"15% of the Tell in the last decade has been lost to encroachment of the villages building on the site." said Littman. But the biggest challenge being faced at Thmuis is a stadium that is going to be built. "The stadium is a fait accompli, there's no way to stop it, but we hope that this will be the last encroachment on the site," said Littman."



The platform of a first century BC temple at Thmuis. Photo courtesy Professor Robert Littman

The second temple story is also a sad one...an ancient Egyptian temple partially submerged in sewage. The brief story (http://snipurl.com/1r32q8) is presented below in full:

"An ancient Egyptian temple to the god Ptah in the village of Mit Rahina, near Memphis, just south of Cairo, now sits submerged in sewage.



The temple, which was built during the reign of Pharaoh Ramses II (1279 BC - 1213 BC) and was once a major tourist attraction, now serves as a home for stray dogs.

"According to local residents, sanitation authorities never removed the piles of garbage dumped around the temple by villagers. They also complain that many of their homes have likewise been flooded with sewage and underground water, which they have been forced to remove with the use of buckets.

""Villagers destroyed sewage pipes and built homes in their place," said local resident Ashraf Beshir. "Meanwhile, they disposed of their washing water around the temple, creating a small lake in the area."

""The authorities have forbidden us from burying our dead in and around the village on the pretext that the village itself is an archaeological site," complained villager Abu Ahmed. "Even when tourists came to visit the temple, though, we never benefited."

"Haroun Mohamed, another local resident, urged authorities not to neglect the village. "Don't forget that this area was the capital of Egypt during the reign of Ramses II," he said." An odd, and rather sad little tale emerged from California recently. It seems that persons unknown erected a rather grand Horus statue...only to have it hauled off and destroyed by the Marin County Fire Control Service (http://snipurl.com/1r3779). What is this story...and why did they destroy poor Horus? Read on (abbreviated):

"Tucked into the brush along Blithedale Ridge, the since-destroyed statue of the falcon god of ancient Egypt remains a curiosity.







The statue found by the Mount Tamalpais Fire Crew in 2008 off a fire road along Blithedale Ridge.

"Fire crews discovered the concrete falcon on Blithedale Ridge in 2008 while clearing brush. It had been placed in a clearing off the main fire road and fixed its stony stare west into the setting sun. A plaque at the base of the statue named it "Horus, Falcon God," and indicated it was modeled after an original found at the Edfu Temple in Egypt dating back to 237-57 B.C. In an effort to find out more about the statue, Mill Valley police called upon Novato resident Phil Pasquini, who taught sculpture for 39 years and is currently a photojournalist for the Washington Report for Middle East Affairs.

"Whoever made it did a very fine job. It was just the perfect setting for it," said Pasquini, who estimates the cast stone statue weighed about 1,200 pounds. "It would take a group of people to get it in there." Eventually, the Marin County Open Space District got wind of Horus' existence.

"The last time I visited Horus, he had been cited for trespassing on MCOSD lands," said Tim Walsh, superintendent of the Marin County Tamalpais Fire Crew, which found the statue. "The violation notice gave him 30 days to fly away or the MCOSD was going to remove him."

"And remove him they did.

"After holding Horus an additional 90 days to see if anyone would claim him, he was brought to the district's refuse center in late 2008 and "recycled."

""I was quite surprised that they destroyed it," said Pasquini. "It was a really good piece. It certainly deserved, if nothing else, to be kept in their office."

""People dump all kinds of things there," said Ron Paolini, deputy director for the district. "We try to keep the open space as natural as possible. We don't discriminate."

"While Horus' statue is now mere dust in the sky, his legend lives on.

""(Horus) was a solar deity. He was basically the god of kingship," said Juanita Ortiz, supervisor of the Rosicrucian Egyptian Museum in San Jose. "Whoever was the pharaoh at that time in Egypt was called the living Horus."

"Perhaps whoever placed a statue of Horus on Mount Tamalpais wanted to secure this protection for those who surrounded it. Perhaps that's why they went through such an effort to establish the statue there." Let's close this month's column with a bit of oddness...as usual. Here we go!

What in the world happened! The three great Pyramids of Giza are gone! This picture, provided by Zahi Hawass, shows the great Sphinx with absolutely nothing behind It. Where did the pyramids go?



This photograph appeared in one of the periodic short publications provided by Zahi Hawass, and depicts the area outside his office as seen one morning when heavy fog blanketed the Giza plateau. Zahi Hawass stated that he had never seen such an event before in his life.

The CyberScribe was once on the Giza Plateau during a fog nearly this thick. During the CyberScribe's visit, the fog was so thick that only the lower 15 feet of the pyramids were visible.

This next item deals with the firmly held bit of nonsense that states Scotland was founded by refugee Egyptians, especially the fleeing princess Scota. It

doesn't seem to matter that there is not the slightest bit of evidence to support this pipe dream...the story pops up now and again...and here is the latest iteration. In a recent article appearing in the 'Caledonian Mercury' (http://snipurl.com/1r35ip) we read (abbreviated somewhat) that:

"At first glance there doesn't seem to be much connection between the land of the Pyramids and the land of Irn Bru, but that hasn't put off a number of people, including the ex-owner of Harrods, Mohammed al-Fayed, from believing that Scotland, the place and the people, are in fact descended from an Egyptian princess called Scota.



15th century manuscript of Bower's Scotichronicon

"Such is Mr. Fayed's belief, that he has in the past considered building a statue to this Pharaoh's daughter, and has even suggested that when the time comes and (he hopes) Scotland at last frees itself from the shackles of England, that our joined ancestral heritage will put him in line for the top job, or in his words: "When you Scots regain your freedom, I'm ready to be your president." And the president's home will no doubt be the 65,000-acre Highland estate, Balnagown, that he owns and runs in Sutherland.

"Which must, surely, be enough for us all to hasten our vote towards independence...

"The claim of Egyptian roots for Scotland does, at first, appear to have some heavy-weight champions beyond the man sometime referred to in Private Eye as the "phony Pharaoh", Walter Bower, who wrote his great work of Scottish

history "Scotichronicon" in the late 1440s, records his version of where the people of Scotland derived. Here we see for the first time a direct reference to our descent from a Pharaoh's daughter and her husband, a Greek king. She was Scota, from whence came Scotland, he was Gavthelos, hence Gaelic, and their son was Hiber – which of course leads us to Hibernia.

"Bower's history was not the first place which suggested an exalted history for the Scots, Dust down your copy of the Declaration of Arbroath and you'll find added weight to our Eastern ancestry. The document was written in 1320 by 51 Barons and Noblemen of Scotland imploring the Pope to intervene on their behalf against the English during the Wars of Independence. Their letter begins:

""Most Holy Father and Lord, we know and from the chronicles and books of the ancients we find that among other famous nations our own, the Scots, has been graced with widespread renown. They journeyed from Greater Scythia by way of the Tyrrhenian Sea and the Pillars of Hercules, and dwelt for a long course of time in Spain among the most savage tribes, but nowhere could they be subdued by any race, however barbarous."

"The idea of Scota, the princess, gained more of a following with the publication of Ralph Ellis's book "Scota, Egyptian Queen of the Scots". Ellis uses as his starting off point an ancient text: "The History of Egypt' written in 300BC by an Egypto-Greek historian called Manetho Ellis. This recounts the story of a royal family's expulsion from Egypt during a time of war and uprising.

"Using Manetho's text as a starting point, Ellis then identified Scota as Ankhesenamun, daughter of Akhenaton and Nefertiti. He tracks the family's journey west where, according to Ellis, they had ships enough for 1,000 of their followers and plentiful supplies. They landed first in Spain, where they lived for several generations, their first-born son Hiber, giving rise to the naming of the area as Iberian. Later they moved to Ireland where Ellis offers archaeological proof in the form of necklaces found there which resemble Egyptian torcs and tombs which he suggests could only have been built with Egyptian know-how.

"From Ireland to Scotland was a short boat-ride and so, the Pharaonic family eventually crossed the water, bringing with them, yes, you've guessed, Jacob's Pillow, AKA the Stone of Destiny.

"It is certainly a great yarn and one that Al-Fayed has taken very much to heart. Sadly, historians' reactions to the idea that Scotland was born of Pharaoh's daughter tend to vary between dismissing it as either "rubbish" or "complete rubbish"."

And with that wondrous tale of ancient Egyptians paddling their royal canoes all the way from Egypt to Scotland...and the mind-boggling prospect of Al-Fayed as the President (hmmm...why not king) of newly liberated Scotland...let's wrap this column up.

See you all here next month...