

American  
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Inc.



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## President's Corner

Michael McGuigan, MD



In my last column, I expressed my goals and objectives for my presidential tenure. In this one, I would like to expand on the goal of organizational relationships.

Good relationships among the three principal North American societies are critical to the growth and development of the field of clinical toxicology, particularly since so many of us belong to more than one of these organizations. As Albert

(the alligator) in the old comic strip "Pogo" said: "We have met the enemy and they are us."

Let me review the working relationships the AACT has. The AACT interacts with many other organizations—primary among these are the American Association of Poison Control Centers (AAPCC), the American College of Medical Toxicology (ACMT), the Canadian Association of Poison Control Centres (CAPCC), and the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT).

The AACT and the EAPCCT sponsor the *Journal of Toxicology—Clinical Toxicology* and have put out joint Position Papers on gastrointestinal decontamination. In addition, the AACT co-sponsors the annual International Congress of the EAPCCT (the next one being held in Berlin, 10-13 May 2005).

The AACT and the AAPCC co-sponsor the annual North American Congress of Clinical Toxicology (NACCT) meeting (the next one being held in Orlando, September 2005).

At the NACCT meeting in Seattle 2004, the AACT and the ACMT put on a very successful joint Occupational Environmental Practice Symposium.

Finally, the AAPCC, the ACMT, and the AACT are working cooperatively on the Consensus Panel Guidelines. These projects are a good start. It is my intent to further these relationships with more shared projects and activities.

In addition, the AACT also recognizes the importance of developing better working relationships with the following organizations:

- Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT)
- International Union of Toxicology (IUTOX)
- Consumer Product Safety Commission (CPSC)
- Health Resources and Services Administration (HRSA)
- Federal Drug Administration (FDA)
- Center for Disease Control and Prevention (CDC)
  - National Institute for Occupational Safety and Health (NIOSH)
  - Environmental Protection Agency (EPA)

We have come a long way in inter-organizational relationships but there is more to be done. Anyone who has ideas for joint projects or activities should send them to me.

## AACT Board of Trustees Members

Speaking of Board members, I ask that the members of AACT to please submit names of people they think would be willing to have their name put up for Board elections. New talent and fresh ideas are important for the vibrancy of the Board and the AACT.

## NACCT 2005 Planning Committee Meeting

The Planning Committee for the 2005 NACCT meeting consists of Donna Seger (Chair), Becky Tominack (Deputy Chair), Kathy Wruk, Lewis Nelson (also Abstract Review Chair), Jeff Brent, and Greg Gaar. Please send any questions, suggestions, or ideas about the 2005 meeting to Donna Seger—we would really like your input!

## Veterinary and Human Toxicology

For those of you who have not heard, the venerable journal *Veterinary and Human Toxicology* will cease publication at the end of this year. Dr. Fred Oehme, the Editor, has done a magnificent job with the journal and deserves our gratitude for his promotion of clinical toxicology over many decades.

## Famous (and Not so Famous) Events in Toxicologic History

# Cleopatra: Queen of Egypt—Poisoned by the Bite of an Asp?

Timothy B. Erickson, MD, FACEP, FACMT, FAACT

Cleopatra VII was born in 69 B.C. in Alexandria, Egypt. In 51 B.C., her father Pharaoh Ptolemy Auletes died and left his kingdom to 18 year old Cleopatra, and her 12 year old brother Ptolemy XIII. Tradition of the day stated Pharaohs had to be a male, so arrangements were made to have Cleopatra marry her younger brother in order to rule jointly. Cleopatra did most of the ruling, while Ptolemy served as a puppet for power-hungry advisers who promptly removed Cleopatra from the palace into exile. Cleopatra retaliated by building an army of loyalists outside the city.

In the first century B.C., Rome had assumed control of the majority of the civilized world. Egypt was still independent, but the Egyptian leaders retained their control by being submissive to Roman demand. The Roman Senate recognized only the authority of Cleopatra's younger brother Ptolemy. Cleopatra gathered soldiers to fight for her royal rights. When she was twenty years old, she met Julius Caesar who was stationed in a camp outside of Alexandria. Tradition has it that Cleopatra had herself smuggled in through enemy lines into Caesar's quarters, rolled in a carpet. Caesar was duly impressed, and the two became allies and lovers. The Alexandrian War started when Ptolemy XIII's army surrounded Caesar in Alexandria with twenty thousand men. Ptolemy XIII died while trying to flee the battle. Cleopatra was placed upon the Egyptian throne by Caesar, became the sole ruler of Egypt, and was worshipped as Pharaoh. Subsequently, Cleopatra became pregnant with Caesar's child and bore a son, Caesarion (Ptolemy Caesar) in 47 B.C..

With political unrest in Rome, Julius Caesar was assassinated in 44 B.C. by his own senators. His death plunged Rome, once again, into civil war. The two men fighting for supreme Roman power were Marc Antony and Octavian Augustus. Mark Antony was given control over Egypt for Rome. Antony, visiting to consolidate his power there, summoned the Queen of Egypt to appear before him in Asia Minor for punishment. Cleopatra came, but not in the manner of a victim. She was then twenty-eight years old, at the height of her physical beauty and intellectual power. She sailed up the river to Antony's court in a decorated barge, arrayed in "splendid garb". Like Julius Caesar before, Antony was fascinated by Cleopatra. He quickly became her devoted lover. Marc Anthony then divorced his wife (who was the sister of Octavian Augustus). Octavian became Antony's arch rival, and declared Cleopatra a "sorceress and an enemy of Rome". As a result, he declared war on Egypt in 32 B.C.. After a two year battle, Antony was defeated, and fell on his sword committing suicide in 30 B.C..

Cleopatra was subsequently captured by Octavian. With her defeat, Egypt lost its independence, and was made a Roman province. Octavian had no interest in any relationship, reconciliation, or negotiation with Cleopatra. Upon his orders, she would be displayed as a slave in the cities she had once ruled over. Tradition claims that Cleopatra, finding her position hopeless, resolved on suicide. Cleopatra shut herself in her mausoleum with her two maid servants, Iras and Charmion. When Octavian reached the monument, Cleopatra tried to stab herself, but was disarmed and captured along with her children, and banished to the mausoleum. She then arranged to have several of her other slaves and "common market-place criminals" poisoned to see which death was deemed "swiftest and most painless". During the first century B.C., the Alexandrian School of Medicine, as well as Cleopatra's personal physician, Olympus, was well informed concerning available poisons of the day. After observing their effect, she selected the bite of a snake as the easiest method. Additionally, the Egyptian religion declared that death by snakebite would secure immortality. Also during that time, capital punishment in Alexandria was often inflicted by the bite of a cobra since this was considered the most painless and humane form of execution.

In truth, the exact cause of Cleopatra's death has never been proven, and remains a subject of great speculation. The historian Strabo, who died in 20 A.D., wrote of at least two contradictory accounts: one of a snake bite, and the other of a mysterious "poisonous ointment". Second century documentation by the great physician, Galen, refers to a belief that Cleopatra bit *herself*, and poured poison directly into the wound. Others believed she had scratched her arm with a poisoned hair pin, or hollow comb filled with poison which was concealed in her hair. The classic legend describes that she ordered an "asp" be brought to her hidden in a basket of figs, or water jar with flowers. The term "asp" is imprecise, and referred to many various African vipers of the day. The death that Cleopatra suffered more accurately resembles the death caused by an Egyptian cobra, not an asp bite. Cleopatra, in first person accounts, describes it as: "thick, cool, mostly dark, with a lighter underside. Its tongue flicks out. It seems very docile" (George). As the story is told, she initially applied one asp to her breast, and other one to her arm. (Figure 1) "Dost thou not see my baby at my breast that sucks the nurse asleep?" (Shakespeare). According to DiCassius, the only marks on her body were "slight pricks on the arm". The snake was never discovered in the monument, although serpentine trail marks were noted in the sand outside the window of the mausoleum. Following her suicidal act, Octavian even summoned snake charmers, known as *Psylli*, and ordered them to "suck the poison from her wounds".

Through-out history, the snake has acted as a diverse symbol, representing immortality, evil, femininity, and masculinity. Snakes were believed to "mediate between life and death, earth and sky, from this world and the next". A coiled snake has come to represent the navel of the universe. Similarly, a snake swallowing its tail is a common symbol of eternity, an "endless cycle of life and death" (Schieffelin). Whereas the snake can represent immortality, it is also an omen of death. This prophet of death has long been linked to original sin and evil because of its role as the betraying, seducing villain in the Biblical Book of Genesis where the serpent is described as "more crafty than any other wild animals". The snake was also the emblem of the royal house of Egypt and was the Egyptian goddess Isis' sacred animal. The Egyptian cobra was considered the chosen protector of all pharaohs and was placed prominently as an insignia on the brow of the crown. It often took the form of two snakes since it was believed that Cleopatra was poisoned by not one, but two snakes. Latin poet Propertius referred to the snakes in plural when he wrote:

"I have seen the sacred adders' fangs, upon her bosom close and hang, and her whole body slowly creep, on the dark road to endless sleep".

Cleopatra has been called the "Viper of the Nile" as a result of her evil, serpentine nature, and tendency to "smother" men. Cleopatra is the considered the Queen of Snakes, and she is believed to be reborn as Isis, the ultimate mother figure. In some accounts, her dying words were "Take me to Isis!" (Halmi).

Cleopatra died on August 12, 30 B.C. at the age of 39. She was buried alongside Mark Antony in Alexandria. On Octavian's orders, Caesarion (the son of Julius Caesar and Cleopatra) was murdered soon after. Ironically, the other offspring of Cleopatra and Mark Antony were not harmed, and raised by Antony's wife, Octavia. With the death of Cleopatra, the age of Egyptian Pharaohs was replaced by Roman Emperors. While many considered Cleopatra VII as a scheming temptress, she clearly was a powerful political leader in a male dominated society, and certainly one of the most prominent and controversial women in history.

*continued on page 3*

# A Message of Invitation From the President of the EAPCCT

I have now returned to Europe following another stimulating meeting of NACCT. It was good to meet old friends and to make some new ones. Despite advance publicity, Seattle proved to be generally sunny and warm. It was therefore something of a shock to return to Europe to some gales, no doubt in part relating to the disastrous effects of hurricanes in the Caribbean and southern US states.

Although winter will soon be upon us, I would like to invite all members of the Academy to the next EAPCCT meeting in Berlin (May 10th to 13th 2005). Berlin is an exciting city, and the conference hotel is of the highest standard, within

a few minutes of the excellent Berlin public transportation system, and less than 20 minutes from the city centre. I hope to see many of you in Berlin in 2005, and would remind you that the abstract closing date for this meeting is November 22, 2004. The EAPCCT now has on-line submission for its abstracts. The web address is <http://www.eapcct.org> - submission opened on November 1, 2004.

We look forward to seeing you at what we are sure will be a great meeting!

*Dr. Nick Bateman*

## Cleopatra

*continued from page 2*

In the words of Octavia at her funeral:  
"Yet she preferred a finer style of dying,  
She did not, shirk the dagger or seek by speed at sea,  
To change her Egypt for obscurer shores,  
But glazing on her desolated palace,  
With a calm smile, unflinchingly laid hands upon  
The angry asps until,  
Her veins had drunk the deadly poison deep,  
And death determined, fiercer than ever, Perished.  
Was she to grace a haughty triumph,  
Dethroned paraded by the rude Liburnians?  
Not Cleopatra."

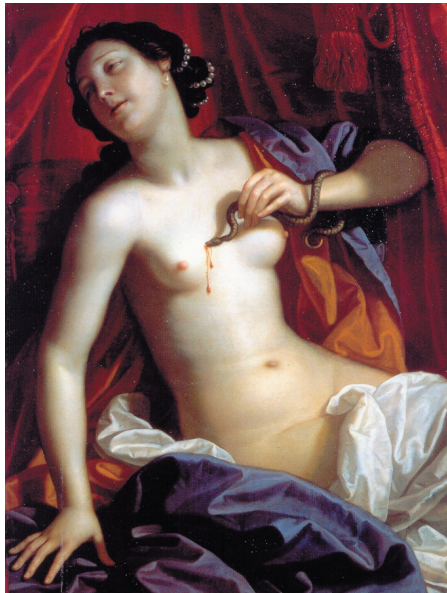


Figure 1: The Death of Cleopatra. Bartolomeo Gennari (1594-1661) Victoria Art Gallery

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## AACT Listserv Policy

Members who submit an item to the AACT for dissemination on the AACT listserv must include a few sentences about why he or she has selected the piece for dissemination and what he or she aims to achieve by asking the members to read it. The purpose of this requirement is to create a context in which the reader can place the information and to give the reader more direction on action needed. In addition, there needs to be something in the posting that identifies the person who submitted the piece."

Thank you for your cooperation,  
Dr. Michael McGuigan  
President, AACT

# AACTion

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## Call for Submissions

Drexel would like to announce the inception of a new monthly feature for *Journal of Toxicology—Clinical Toxicology*. This new column, entitled “Clinical Images in Medical Toxicology” will begin with the first 2005 issue and will be edited by Michael Greenberg, M.D., MPH. Drexel would like to solicit submissions of high quality, high resolution images that illustrate interesting, novel, or instructive elements of the science and practice of medical, occupational, or environmental clinical toxicology. Each submission should be a single image and be accompanied by a written narrative that describes the image and discusses the salient clinical features that the image depicts. The narrative should be no more than 500 words and should include no more than three references. The specifics of image and text submission should be consistent with those described in the general instructions for authors for the Journal. All submissions are subject to editorial review. Submissions and questions should be sent to Michael Greenberg (michael.greenberg@drexel.edu).