

## SEARCA INVITES APPLICATIONS FOR GRADUATE SCHOLARSHIP IN AGRICULTURE FOR SCHOOL YEAR 2012-2013

The Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) invites applications for its graduate scholarship (MS and PhD) in agriculture and related fields (including biological sciences, social sciences, economics and statistics, forestry and fisheries, environmental sciences, agro-industrial technology and engineering, biochemistry, and development management) for school year 2012-2013. The scholarship is open to nationals of Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam who are regular employees of academic or research institutions or government agencies and not older than 35 years old.

Applications may be submitted directly to the Ministry of Education/Higher Education, or to the Ministry where the applicant is employed for preliminary screening. The Ministry where the applicant is employed may conduct preliminary screening of applicants and submit their nominations and the application documents to the Ministry of Education/Higher Education, which will then include the nominees of other Ministries in the final list of candidates accompanied by the complete set of requirements to SEARCA not later than 30 July 2011. Applicants should inquire with their respective Ministries regarding the Ministries' deadline for receiving SEARCA applications.

SEARCA scholars may study at any of the following members of the University Consortium coordinated by SEARCA: Universiti Putra Malaysia, Malaysia; Kasetsart University, Thailand; Institut Pertanian Bogor and Universitas Gadjah Mada, Indonesia; and University of the Philippines Los Baños, Philippines. Other reputable universities outside the University Consortium but within the Southeast Asian region may also serve as study posts of scholars under special arrangements and project agreements. Applicants may apply online via the SEARCA website, but original application documents must still be sent to their Ministry for official endorsement and submission to SEARCA. Applicants are required to submit to SEARCA applications for admission to the Graduate Schools of at least three universities in the list.

The application requirements and forms may study may be downloaded from the SEARCA website at <http://www.searca.org>.

The topic of the research that the applicants plan to conduct for their thesis must be in line with either of the priority thrusts of SEARCA, namely: natural resource management and agricultural competitiveness.

**Interested parties may contact the Graduate Scholarship Department of SEARCA via email at [gsd@agri.searca.org](mailto:gsd@agri.searca.org) or [ecc@agri.searca.org](mailto:ecc@agri.searca.org).**

### 3D sites and monuments

Digital three-dimensional recreation of ancient sites and monuments is being increasingly undertaken in Southeast Asia.

A 3D film of a relic site in Vietnam's historic Hue city has been produced by the Republic of Korea Advanced Institute of Science and Technology, *VOV News* says.

Made on the Ho Quyen royal arena in the former imperial city, the 10-minute film is part of a heritage preservation project collaboration between Vietnam and Korea.

It re-enacts scenes staged for the king and the royal court that feature fights between tigers and elephants as rituals during the Nguyen Dynasty.

In Thailand, students of the Kasetsart University have produced a digital representation of a temple, Wat Chaiwattanaram, in the world heritage city of Ayutthaya.

The 3D temple virtual-world allows internet visitors to gain insights into Thailand's past, its heritage, arts, and culture.

The 3D Virtual World Heritage Wat Chaiwattanaram promotes an innovative Internet tourism, and opens the possibilities for incorporating three-dimensional computer models in preservation efforts and tourism.

### New archaeological findings on Bayon

The *Phnom Penh Post* says that a team of Cambodian and Japanese archaeologists has presented recent discoveries from the Bayon temple excavation at Angkor Thom.

Approximately a thousand objects under the temple have been excavated, and include pieces of gold, religious artefacts, and tools.

Ceramics believed to have come from Vietnam, Thailand and Japan have also been discovered.

In a separate report, the *Phnom Penh Post* says that an unconventional conservation approach has been taken in the restoration of the Bakong in Angkor.

Usually, restoration efforts are centred on ancient Khmer edifices at the Angkor temples, but at Bakong, a conservation team has been restoring Buddhist paintings in 20<sup>th</sup> century monuments in the complex.

The Restaurateurs Sans Frontieres have been working on the wall paintings which had been neglected and dismissed as kitsch.

Monasteries in Cambodia feature murals which often depict tales from the life and previous lives of Buddha in brightly-painted scenes.

### Foot bone oldest remains found in the Philippines

Archaeologists believe an excavated foot bone could determine that humans first inhabited the Philippines 67,000 years ago, *AFP* reports.

The fossil is found to be older than the 47,000-year-old Tabon Man previously considered the first human to have settled in the Southeast Asian country.

An archaeological team from the University of the Philippines and the National Museum unearthed the third metatarsal bone in 2007 in the Callao caves near Penablanca, north of Manila, says the report.

### Recent finds in Vietnam

*Vietnam News* reports that archaeologists in Vietnam are establishing new understanding of the Metal Age, based on ancient copper furnaces dug up at an archaeological site in Dong Anh recently.

A majority of the furnaces, which were designed similarly, is believed to approximately 4,000 years old.

The discoveries included copper objects, pottery shards, pans and tripods, and cinders, which may belong to a traditional kitchen.

Another archaeological news item by the news agency says that a terracotta jar has been unearthed at the Nhan Co site in Dac Nong.

Archaeologists found 109 pieces of the jar, and other artefacts such as variety of rocks, tools, hoes, and unidentified objects.

They said that the finds prove that humans inhabited the area during the Middle stone and New Stone Age.

*Vietnam News* also reports that along the banks of Ky Lo River in Phu Yen, hundreds of urns or jar tombs have been discovered.

The terracotta urns, which are oval and of various sizes, are among objects found at the archaeological site that included debris from plates, bowls, and white bricks.

### Archaeology unit set up in Singapore

An archaeology unit, headed by Dr. John Miksic and Mr. Lim Chen Sian, has been established in Singapore, and is the country's first formal archaeological unit, a *Straits Times* report says.

As part of the Nalanda-Sriwijaya Centre at the Institute of Southeast Asian Studies (Iseas), the unit will concentrate on the early past of Singapore and the region, and show the links between peoples and cultures for centuries.

Associate Professor John Miksic has been working in the region for four decades, and was responsible for the excavations at Fort Canning that yielded evidences detailing life in the 14th Century.

Mr. Lim is thought to be the only full-time local archaeologist, responsible for excavating a site between the old Supreme Court and City Hall.

Iseas director Mr. K. Kesavapung made the decision on setting up the unit as he realized that the only Asean member without a proper archaeology centre was Singapore.

The unit's major task is to process the thousands of artefacts discovered during several years that had not been analysed.

Prof. Miksic says that another priority is to develop a website and an electronic journal on Southeast Asian archaeology to share the unit's work.

### Laos a focus of prehistoric human settlement

The *Vientiane Times* reports that Dr. Joyce White from the University of Pennsylvania Museum, believes that Luang Prabang "could represent the heartland of human settlement in the Mekong region".

Dr. White and Mr. Bounheuang Bouasisengpaseuth, Deputy Director of the Lao National Museum, have been surveying and mapping both Luang Prabang and Vientiane for nearly a decade.

As leaders of the Middle Mekong Archaeological Project (MMAP), they recently presented their latest findings indicating that the Mekong region was an ancient melting pot

of people, cultures, and technologies for over 5,000 years.

About 60 sites which yielded thousands of bones, stone tools and pottery shards, and other evidence of human habitation are located in the northern province of Luang Prabang.

Among the most outstanding finds is a secondary burial dated 2,000 years old, uncovered in Tham An Cave.

Bones and skulls of three people were discovered in a mortuary pot that had been reburied after the initial internment, representing an example of a burial ritual within the region, and common to Thailand and Vietnam.

The MMAP is an archaeological collaboration between Lao National Museum and an international group of experts. Professionals from Europe and the US along with geologists from the local Department of Mines have been training Laotians, and sharing skills and techniques not applied locally before.

### Research rewriting Myanmar's history

Archaeologists and experts have been investigating the Pontaung primate fossils found in rock layers in the Pontaung region of Myanmar.

China's *Xinhua* news agency reports that the authorities in Myanmar claimed the origin of

Myanmar people can be established by the archaeological research supported by the findings and examination of evidences such as those at Pontaung.

The discoveries of primates from the Stone Age, Bronze Age, and Iron Age, and research in Meiktila and Yamethin districts of Mandalay are contributing to a refining of Myanmar history, the report says.

It also says that in 2009, evidences indication Bronze and Iron ages were excavated in Thazi, Mandalay that included 44 bodies, iron objects, stone beads, and earth-baked as well as earthen artefacts.

**Six hundred years of history in fishermen’s nets**

An exhibition at the 2010 Hue Festival in Vietnam has been displaying more than 300 objects dating back six centuries, *VOV News* says.

Held at the Revolutionary History Museum in Thua Thien-Hue, the exhibition contains artefacts chosen from over a million items that fishermen found from wreckages of merchant ships plying between China, Thailand, and Vietnam.

The ancient artefacts, from ships that sunk during the 15<sup>th</sup> - 18<sup>th</sup> centuries, were made of a diversity of materials, including metals, stone, wood, and ceramics.

**Thailand’s northeast yields dinosaur bones**

A Thai-French team of diggers has discovered 15 bone shards belonging to a 150-million-year-old herbivore in Kalasin, Thailand.

*The Nation*, a Bangkok daily, reports that the find includes scapula, coracid, massive pelvic, as well as a 150 cm hip bone which belonged to a new species of Sauropod dinosaurs.

Excavating in a layer of rock that is 150 million years old, and at about 25 m, the discoveries are expected to become the biggest and oldest in the country.

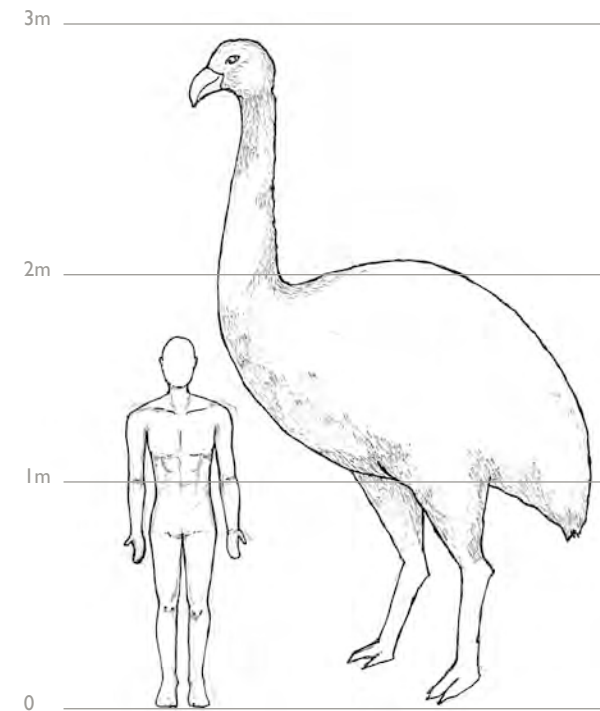
As part of a 30-year investigation into the evolution of Mesozoic era bio-diversity in Thailand, funded by the Thailand Research Fund and France’s Scientific Research Centre, the fossils will undergo conservation and documentation at the Sirindhorn Museum.

Over 2,000 bones representing five dinosaur species have been found in the Northeast of Thailand during the past 25 years.

**Eggshells yield DNA of ancient birds**

An international team of researchers discovered that a rich source of preserved DNA could be obtained from eggshells of extinct bird species.

The researchers also isolated DNA molecules in the eggs of emu, ducks, and the extinct moa.



*Aepyornis stood at 3 m tall  
Sketch by Wanichaya*

A researcher on the team, Charlotte Oskam of Murdoch University, said that scientists had been applying a DNA isolation method designed for bone rather than fossil eggshell, and had been unsuccessful.

Through the new approach, the DNA of a diversity of species, including the elephant bird *Aepyornis*, were extracted.

The *Aepyornis* was an ostrich-looking extinct bird which stood 3 m tall, and at half a tonne, was the heaviest bird ever existed.

Most of the ancient birds disappeared a thousand years ago.

**Collapse at the Domus Aurea of Nero**

Part of the ceiling over the Domus Aurea (House of Gold) complex has collapsed, raising worries about the stability of the palace of the Roman emperor Nero.

Authorities believe that water damage caused the collapse of the tunnel section of Hadrian’s Baths.

Located between the Colosseum and the Roman Forum, the Domus Aurea had been closed for restoration, and was a major tourist attraction. It reopened in 1999 after 18 years of restoration, when structural problems and water infiltration were serious concerns. In 2001, part of a ceiling fell, and it was closed to the public again.

The large place is known as the House of Gold because of the gold leaves that cover it.

Built in 68 AD, the vaulted ceilings of the complex were once encrusted with pearls, adorned with ivory, and frescoes filled its maze of passageways.

**Fossil link humans and apes/monkeys**

The skull of a 29 million-year-old creature that might have been a common ancestor of pre-historic monkeys and apes, including humans, has been unearthed in Saudi Arabia.

Researchers from the University of Michigan say that the fossilized remains belong to a primate, *Saadanius hijazensis*, and share features common to prehistoric apes and monkeys, including humans today.

The scientists hope to learn something about that time period and the animal's living conditions so as to discover what causes the evolution of apes and humans.

Ultimately, the research may show that *Saadanius* might even have been the common ancestor linking humans to ancient monkeys.

### Radar finds ancient Egyptian city

Radar imaging located an ancient Egyptian city in the Nile Delta.

*BBC* reports that a team of Austrian archaeologists found the underground outlines of the city, believed to be Avaris.

Avaris was the summer capital of the Hyksos people who were foreign occupiers from Asia, and ruled Egypt for a century about 3,500 years ago.

The radar images show the underground outlines of the city, streets and houses below the rural and urban landscapes of the densely populated Delta area.

Determining the extension of the underground ancient city is the major objective of the team of archaeologists.

### Images of Jesus' apostles found

Art restorers in Rome have uncovered paintings of some of Jesus Christ's apostles believed to be the oldest ever found.

New laser technology, when applied on 4 - 5<sup>th</sup> Century paintings in a catacomb, reveal faces of apostles Andrew, John, Peter, and Paul.

*BBC* reports that the head of archaeology for Rome's Vatican-owned catacombs, Fabrizio Bisconti, said the four apostles faces are the first images found of the four apostles.

Restorers were working in a tomb of a Roman noblewoman in the Santa Tecla catacomb in a Vatican-funded project, and had known about the frescoes.

Using new laser technology that burn off calcium carbonate deposits caused by extreme humidity and low oxygen level, the images came to light, and astounded the project team.

### Monster whale fossil found

Fossilized remains of a huge 12 million-year-old sea creature scientists dubbed 'Leviathan' have been discovered.

Described as an ancient monster whale, Leviathan is thought to have been over 17 m long.

Researchers said that the ancient creature, similar in size and appearance to the modern sperm whale, was an aggressive predator of

large marine life forms such as seals, dolphins, and other whales.

A 3 m-long fossilized skull was unearthed in southern Peru, which effectively ended mere speculation that such an awesome creative might have had existed.

The researchers reveal that the teeth of Leviathan were more than twice the size of those in modern sperm whales.

### Picasso's Jacqueline auctioned at Christie's

A Picasso masterpiece, 'Tete de Femme' (Jacqueline), which had not been seen in public for 43 years, has been sold for £ 8.1 m.



Sketch by Ariya Kongwong

At Christie's Impressionist and Modern Art Evening Sale in London, the painting had been expected to be auctioned for £ 3 m - £ 4 m.

The 1963 portrait of Jacqueline, Picasso's second wife, was created at a time when she was becoming Picasso's most frequent and important muse and model.

It has been said that one of Picasso's reasons for depicting Jacqueline with a long neck was a humorous exaggeration of her short neck. 'Tete de feme' is also reminiscent of Amedeo Modigliani's paintings such as 'Jeune fille brune, assise'.

### Hoard of Roman coins found buried

Discovery of over 52,000 3<sup>rd</sup> Century Roman coins has been made by a metal detector hobbyist in England, *BBC* Says.

The coins were stored in a huge jar buried in a field in Somerset.

Dave Crisp, who found the hoard with his metal detector, reported the discovery to the authorities.

Archaeologists from Somerset County Council excavated the site, and unearthed the clay jar, and estimated the weight of the coins at 160 kg.

It is expected that the coroner will declare the find as treasure, which would allow the coins to be bought at market value by the museum of Somerset, with Mr. Crisp and the site owner sharing the reward.

### Lost ship for over 150 years found

Archaeologists in Canada have discovered a ship that had been abandoned for more than 150 years, the *China Post* reports.

March-Andre Bernier, head of underwater archaeology, said that in 1853 the HMS Investigator had been doomed in the ice and was found in the shallow water of Marcy Bay, Banks Island in Canada's Western Arctic.

The Investigator was one of several search ships commissioned to find the failed expedition of Sir John Franklin in 1845.

Ice has blocked the passage of the lost ship which was steered into the bay on the northern coast of the island.

The British government has been informed of the discovery of its naval shipwrecks that include the bodies of three sailors.

### Award for salvaging Titanic artefacts

An American company has been awarded US\$110m for retrieving and conserving artefacts from the wreck of the RMS Titanic.

A federal judge of a US court praised RMS Titanic Inc. for its extensive efforts, and ruled that the company, which displays the objects in museums all over the world, is entitled to their full market value.

The court will later decide on granting the RMS Titanic Inc. ownership of the artefacts or right to sell and receive the proceeds.

The company is a subsidiary of Premier Exhibitions Inc., and has conducted a total of 7 expeditions four km below the north Atlantic, retrieving over 5,500 items from the wreck site.

For the salvage operations, twenty specialised instruments were invented by the company in its dedicated effort to preserve items (from the Titanic which sank in 1912) that might have been lost and irretrievable.

### Van Gogh painting stolen

Poor security at a Cairo museum allowed a Van Gogh painting to be stolen.

*BBC* reports that Abdel Meguid Mahmud, Egypt's top prosecutor, said that the alarms at the Mahmoud Khalil Museum did not work, and only 7 of 43 security cameras were functioning for a period of time before the theft.

The painting, 'Poppy Flowers' also known as 'Vase and Flowers, is worth US\$50m, and was cut from its frame at the museum during the day.

Depicting yellow and red flowers, the work is believed to have been painted by Vincent Van Gogh in 1887.

It was the target of a theft from the same museum in 1978, only to be recovered a decade later in Kuwait.

### Oldest arrow heads found

The earliest direct evidence of human-made arrows have been revealed by researchers in South Africa.

"Stone points" said to be 64,000 years old were unearthed, and thought to be arrow heads.

Excavated from layers of ancient sediment deposited up to 100,000 years ago, the arrow heads were dug up by an archaeological team led by Professor Lyn Wadley, University of the Witwatersrand.

Further examination showed blood and bone remnants on the ancient weapons.

They also found traces of glue that scientists believed to be plant-based resin used to fasten the stone weapons to a wooden shaft.

The study may determine that the development of "bow and arrow technology" could be 20,000 years earlier than thought.