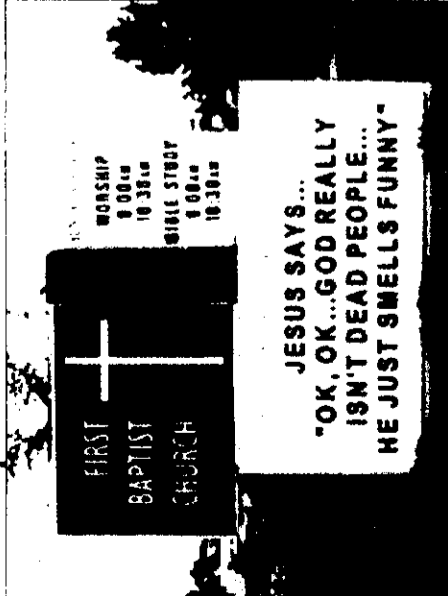


## Dikika (continued from page 3)

grasp objects with a thumb-like big toe, as the feet of chimps and other apes can. For hominin mothers and infants, the consequences were momentous. While chimp babies cling to their mothers' hair with muscular hands and grasping toes, a baby hominin probably had to be carried, limiting the mother's ability to provide for herself. She may have had to depend on her mate and the larger group—which may have strengthened social bonds and could help explain why humans are largely monogamous, unlike most apes. Brain evolution expert Dean Falk speculates that the helplessness of baby hominins could even lie at the root of speech, which could have evolved from "motherese," the sounds a mother makes to comfort her baby when she has to set it down.



**FIRST BAPTIST CHURCH**

WORSHIP 8:00a  
10:30a  
BIBLE STUDY 8:00a  
10:30a

**JESUS SAYS...  
"OK, OK...GOD REALLY  
ISN'T DEAD PEOPLE...  
HE JUST SMELLS FUNNY"**

The Dikika fossil also hints that brain development may already have started to take longer, a change that prolonged the dependence of human young on their parents. From the Dikika baby's teeth, the team estimated her age at three years; her brain, preserved as a sandstone cast inside the skull, had a volume of about 330 cc roughly the same as a small three-year-old chimpanzee's. This could mean her brain was growing no faster than a chimp's, so it might have taken longer

to reach its adult size, slightly larger in an australopith than in a chimp.

During human evolution, ever longer brain growth led to the extended period of dependence we call childhood. In most mammals, including other primates, the young move on to forage for themselves after they finish nursing. In the Dikika baby, Zeresenay already sees hints of this uniquely human life stage. "This is extraordinary," he says. "We've captured a moment in time for an individual, but also a moment in the life history of a species." A cascade of other changes may have begun around the same time. "It's no good growing a big brain if you don't have a long life span," says Holly Smith, an expert on hominin development at the University of Michigan. "You need that for the investment in a big brain to pay a return." She sees the beginning of a longer childhood as a sign that human ancestors were also living longer than their ape cousins, a trend that ultimately led to humans outliving other apes by decades. Growing bigger brains had other consequences. Gray matter is the gas-hog of our bodies. A fifth of the calories you consume go to fuel your brain. Within a million years of the Dikika baby our ancestors learned to supplement the mostly vegetarian diet of Lucy and her kin with nutrient-packed meat, devising stone tools to strip flesh and crack bones for the protein-rich marrow. Good nutrition made even bigger brains possible.

And that led to more inventions, and then bigger brains. The rest is history. The Dikika baby's biography is short, but the evolutionary steps she embodied have had profound and enduring effects. Although bipedalism and big brains carried a high cost, particularly for the mothers of our lineage, these traits ultimately combined to produce smarter babies who would eventually be able to master technologies, build civilizations, and, yes, explore their own origins. <http://www9.nationalgeographic.com/ngm/dikikababy/>

## Outreach (continued from page 1)

During the mid-90's, Atheists of Florida began production of the *Atheist Forum* at Miami Public Access, and Morgenroth participated in several of the productions discussing the current status of women in our society as a result of the continuing imposition of religious dogma.

## Classifieds

We're ready to begin compilation of our classified section of the A of F newsletter. This service will be free to all active members to sell or barter items, offer business services, place personal ads, or anything else the editor accepts, which will probably be just about anything.

Submit entries to the classifieds section by e-mail with the subject title of "Classifieds" to editor Michael Harvey at [mharvey7@tampabay.rr.com](mailto:mharvey7@tampabay.rr.com) or assistant editor Ed Golly at [ATHALFLE@aol.com](mailto:ATHALFLE@aol.com). You may renew the ad as many times as you like as long as you're a member.

If we receive three or more ads we'll set up the column, or wait until we get enough volume of ads.

## Atheists of Florida CHAPTER MEETINGS

MIAMI: Every week on Tuesdays at 6:30 The Field Irish Pub, 3281 Griffin Road, Dania Beach.

TAMPA BAY: *Pinellas Park Public Library*—Second Sunday of each odd-numbered month (Jan., Mar., etc.), 1:30—4:30, 78th Ave North & 52nd Street  
*Tampa*—Second Sunday of each even-numbered month, 1:30-4:30, Jan Platt Regional Library, 3910 S. Manhattan Ave.  
Social dinners follow all meetings at nearby cafeterias

# Atheists of Florida

## Dedicated to the absolute separation of State and church

A Founding Member Society of the Atheist Alliance International  
(The Democratic Alliance of Autonomous Atheist Societies)

Volume XIII No. 2 October 2006

## Norma Cossey

### Her confidence in Atheists of Florida was inspiring

THE SEPTEMBER 2005 NEWSLETTER reported on the death of Norma Elina Cossey who had been a member of Atheists of Florida and an annual sponsor of the Mark Twain Scholarship Fund. Cossey died Feb. 8, 2005 at her home in Lantana, Florida. Shortly afterward, A of F received notice that she had named the organization a beneficiary of 5% of her estate.

We have now received correspondence from the attorney who is representing the estate including distribution of partial settlement of the estate.

There are two separate aspects of the estate. Some assets are undergoing probate, while the remainder are in Mrs. Cossey's Living Trust.

A partial distribution from the Probate Assets has been received in the amount of \$10,000. The attorney anticipates more distribution from the Probate Assets before the estate is closed, which we may receive as soon as January 2007.

The trust assets were distributed and Atheists of Florida's share amounts to \$50,000 plus an additional \$3,250 from another trust estate account. The total amount received from the Cossey estate to date is therefore \$63,250.

We will probably place the funds in a CD pending the meeting of the Board of Directors in February (see below). Mrs. Cossey's confidence in Atheist of Florida should be an inspiration to us all.

## Public outreach

OCTOBER HAS BECOME THE BUSIEST month for outreach events for Atheists of Florida.

As times change, so do our outreach events. Last year, the Miami Book Fair International denied our application because we sold more novelties than books. Circus McCurkis has seen our stand in the park for at least the past ten years. This year, they will return to their roots and theme the event as more of a social gathering and picnic, refusing to allow any kind of sales at the event.

However, the Saint Petersburg Times Festival of Reading is scheduled for the last Saturday of October, the 28th, and we'll have our stand among the vendors. Since most of our meetings are held in public libraries which prohibit any sales of merchandise, atheists in the Tampa Bay area can visit our setup and see the generous display of small and bumper-size stickers, books, lapel pins, and assorted novelties we offer for sale. There is no admission charge to the event and parking is free.

This year the Festival of Reading will move to the campus of the University of South Florida in downtown St. Petersburg. Limited parking is available on site and for \$5 at public lots with free shuttle to the campus. All information is available at [www.festivalofreading.com](http://www.festivalofreading.com).

This year we applied for a stand at both the Florida Strawberry Festival in Plant City and the Florida State Fair. So far, we have been politely rejected by the former,

## Atheist Forum

The *Atheist Forum* has begun another season of production at Tampa Bay Community Access. We are always seeking assistance on the crew, particularly from within our membership. The *Forum* has now been continually produced for four-and-a-half years in Hillsborough County, and all programs are archived on DVD.

This season, Public Access is beginning to charge for classes. This may be a result of the fact that the vast majority of those who come in for orientation and initial training never end up producing a program. Those members end up consuming a significant amount of staff time and equipment wear only to lose interest and never produce anything. So if you want to assist on the crew, please be sure you are willing to make a serious commitment and will assist us on a regular, dependable basis.

## Florence Morgenroth (1922—2006)

One of the most influential founding members of Atheists of Florida was Florence Morgenroth who, we regret to report, died about two months ago.

The Tampa Bay chapter was formed immediately after founder Christos Tzanetakis incorporated the organization with the State in 1992, and Flo seemingly never missed a chapter meeting.

Probably her primary motivation for becoming an atheist activist was Flo's recognition of the status that women had suffered throughout recorded history as a result of religious dogma. She was inspired to write one of our first publications, *Women: Religion and Power*, which remains on our outreach stands to this day.

(continued on back page)

**"At the core of all well-founded belief, lies belief that is unfounded."**

—Ludwig Wittgenstein

## The skull of Dikika...

a 3.3 million-year-old infant discovered by Ethiopian paleoanthropologist Zeresenay Alemseged. The find is the most complete ancient infant and arguably the best fossil of its species, *Australopithecus afarensis*, ever found.

ZERESENAY ALEMSEGED HAS TWO BABIES. One is Alula, who spends most of his time in his mother's arms in a cozy bungalow in Addis Ababa, Ethiopia's capital. The other is a little girl of three, who spent 3.3 million years locked in sandstone, until the Ethiopian scientist and his team discovered her remains and painstakingly teased them out of the rock. It was a long, slow second birth for a baby from the dawn of humanity.

Until now all fossils of babies this ancient could have fit in a diaper. This new arrival is not only the most complete ancient infant but arguably the best fossil of her species, *Australopithecus afarensis*. That's the same species as the superstar fossil called Lucy, a 3.2-million-year-old adult female found in 1974. Unlike Lucy, the baby has fingers, a foot, and a complete torso. "But the most impressive difference between them," says Zeresenay (Ethiopians' first names are their formal ones), "is that this baby has a face."

No bigger than a cantaloupe, the little bundle of bones may also bear witness to a key event in the evolution of hominins, as humans and their ancestors are known: the beginning of our long, dependent childhood, when we grow our large brains. "Outside of its completeness, the major importance of this find is the light it will shed on how this species lived and grew," says Bill Kimbel, an expert on *A. afarensis* and a member of the study team. "Now we can begin to read its biography."

It is a curious coincidence that the world's oldest baby, who died while still of nursing age, lived her short life in a region named Dikika—"nipple" in the local Afar language, after a distinctly shaped hill. The hill is just across the winding Awash River from Hadar, the site in Ethiopia's Rift Valley where Lucy and the fossils of many other hominins have been found.

The region is plagued by extreme heat, flash floods, malaria, and occasional shoot-outs between rival ethnic groups, not to mention lions, hyenas, and other uninvited nocturnal guests. It is one of the most difficult places on Earth to hunt for fossils—and one of the most fruitful. For decades the low-lying northern end of Africa's Great Rift Valley, the Afar depression, has been the domain of foreign-led expeditions. Zeresenay, one of a new generation of Ethiopian paleoanthropologists, changed that in 1999 when he led a band of Ethiopian fossil hunters into the Afar badlands. By December 2000, the search had turned up plenty of fossil mammals, such as elephants, hippopotamuses, rhinoceroses, and antelopes, but no hominins. Yet Zeresenay, who is based at the Max Planck Institute for

Evolutionary Anthropology in Leipzig, Germany, knew his team was looking in the right place. These animals would have thrived in the gallery forest that flanked the ancestral Awash River. Early hominins would have lived in these shady woodlands as well.

The prehistoric forests of Dikika are long gone, and there was no shade on December 10, when team members forced themselves out into the hot sun to look again. Tilahun Gebreselassie was the first to see the Dikika baby's tiny face peering out from a dusty slope. It was no bigger than a monkey's, but a smooth brow and short canine teeth told Zeresenay right away that this was a small hominin. His team had struck fossil gold, for not only was the baby's skull in perfect shape, but tucked beneath the head in a hard ball of sandstone were many bones of the upper body as well. "This is something you find once in a lifetime," Zeresenay says. He doesn't know how the Dikika baby died, but the river must have rapidly buried the body in pebbles and sand, protecting it from scavengers and weather before gradually hardening into rock.

While most hominin fossils have to be glued together from hundreds of fragments, Zeresenay faced the opposite challenge. He had to etch away hard sandstone with a dentist's drill, navigating between tiny vertebrae and ribs so anatomical details could be seen. "I cleaned it grain by grain," he says. "You don't want to destroy it by rushing." The task has taken five years so far.

The payoff: details rarely seen in a fossil australopith, among them a full set of both milk teeth and unerupted adult teeth. All of her tiny ribs were positioned, as in life, along a sinuous spinal column. Several fingers were still curled in a tiny grasp, and where her throat once was, Zeresenay found a rare example of a hyoid bone, a bone that later became crucial to human speech. The discovery offers an early glimpse of the evolution of the human voice box, says Fred Spoor of University College London, another member of the study team.

From the waist down the Dikika baby looked like us. One of her humanlike knees was complete with a kneecap no bigger than a dried pea. But her upper body, like Lucy's, had many apelike features. Her brain was small, her nose flat like a chimpanzee's, and her face long and projecting. Her finger bones were curved and almost as long as a chimp's. Her two complete shoulder blades, the first ever found from an australopith, were similar to those of a young gorilla—a shape that might have made it easy for her to climb. *A. afarensis* walked on two feet, but some scientists think this species also spent time in trees. Either way, the Dikika baby was a distinctly different creature from the apes that her ancestors had diverged from several million years earlier. The differences rippled through later human evolution, affecting everything from family ties to the origin of speech. As apelike feet evolved to support and propel an upright body, they could no longer

(Continued on back page)

There is no scientific evidence to support the idea of intelligent design

