

An astronomical achievement

By HANNAH DRUM
Staff Writer

Although many people do not realize it, the Morehead Planetarium has brought the stars to UNC in more ways than one.

The planetarium is not only a historical landmark, but a place where learning and cultural enrichment exist together.

Lee Shapiro, the director of the Morehead Planetarium for the last five years, said he wanted the public to explore the planetarium to see the wide variety of things it has to offer.

"Part of our goal is to convince the people that we're delighted they came here in the fourth grade, but we want them to come back again because there is always something to see," Shapiro said.

John Motley Morehead, the UNC alumnus who also helped in the funding of the Morehead-Patterson Bell Tower for the University, began making plans in 1938 for his gift that would serve all North Carolinians.

Morehead met with Harvard astronomy professor Harlow Shapley to discuss the possibilities of building an astronomical observatory or a planetarium.

"And your state needs a cosmic awakening," Shapley was quoted as saying in the Winston-Salem Journal in 1945. "North Carolinians are the most astronomically ignorant people in all America."

Their meeting was a disaster, but

Morehead was convinced that the state needed a place that would serve all the citizens instead of a few highly trained scientists. North Carolina would have its first planetarium.

Since its start, the planetarium has been a source of astronomical information for the community and the nation.

Every astronaut who participated in the United States' space program between 1960 and the mid-1970s studied celestial navigation at the Morehead Planetarium.

Former Planetarium Director A.F. Jenzano developed the program approved by the National Aeronautics and Space Administration, which taught the astronauts how to guide a space capsule by the stars.

All of the astronauts from the Mercury, Gemini and Apollo space missions used the planetarium's chamber and the Zeiss Sky Projector, a special device that projects rays of light on the walls of the planetarium's dome to form images of more than 9,000 stars. The Zeiss Sky Projector is capable of reproducing the appearance of the sky from any spot on the earth at any given time. By the program's finish, the astronauts were able to identify every bright star and major constellation.

Astronaut Neil Armstrong spent almost 130 hours in the planetarium between 1963 and 1969 learning how to guide and navigate by the stars in

case of a malfunction in the space capsule's automatic programming.

Each astronaut received an honorary degree from UNC, and they have the same rights and privileges as do all other UNC alumni.

Shapiro said the astronaut training program was never canceled, but advanced technology has probably outdated the program.

The planetarium's technology has changed greatly in a decade, Shapiro said.

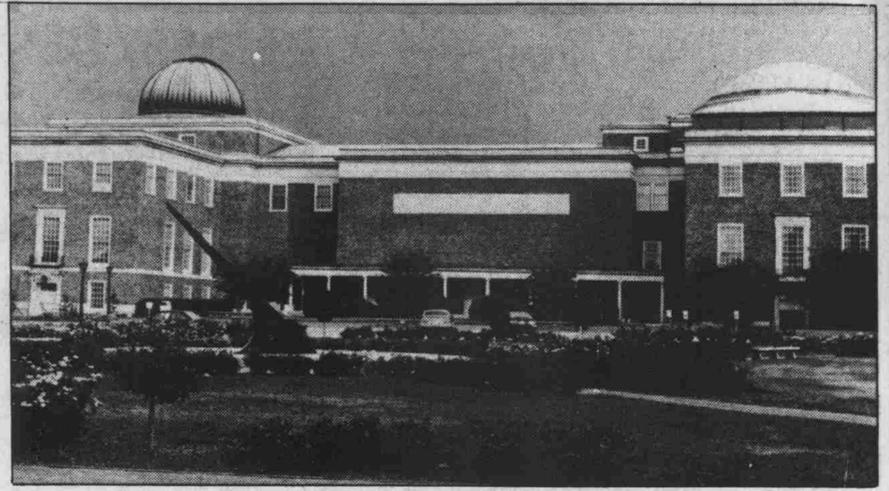
The Zeiss Sky Projector was updated in 1969, and the rest of the planetarium equipment was updated in 1982 and 1985. Today the productions in the auditorium are completely automated.

"Now we have much more media-oriented presentations," Shapiro said. For instance, there are about 100 projectors for slides and special effects.

The special planetarium programs shown to the public are produced in-house by the planetarium staff.

"It takes an awful lot of effort to produce a new show," Shapiro said. Production time for one planetarium presentation is about six months.

The planetarium programming offers special features for people of all ages and interests. Shapiro said that three-fourths of the counties in North Carolina send students to the planetarium each year. The planetarium offers non-credit courses for children, adults and senior citizens as well as classes on



UNC's Morehead Planetarium was completed in 1949

Tar Heel file photo

navigation instruction for UNC students in the ROTC program.

The planetarium also has the facilities to show special films on a 180-degree semi-panoramic screen.

By the time the planetarium project was completed in 1949, it had cost \$3 million, which was more than Morehead had originally planned, but the final product was much more than a planetarium.

Morehead wanted the planetarium building to be more than just a place to learn about stars and constellations. He asked architects

Eggers and Higgins, the same firm that designed the Jefferson Memorial, to add plans for an art gallery that would house the Morehead collection of paintings.

The Genevieve B. Morehead Memorial art gallery, a circular-shaped room with marble columns and walnut wall paneling, contains portraits from the 17th and 18th centuries. The collection includes portraits of George and Martha Washington.

In addition there are four dining and reception rooms, which are now

used exclusively for University and state-related functions.

Shapiro said Morehead insisted that the project remain a private endeavor until the building was completed. He wanted to donate a "silk hat" to the University, but he didn't want to be forced to follow state expense regulations.

The art gallery and planetarium shows operate 363 days a year, excluding Dec. 24 and 25. Admission to the main planetarium feature is \$2.50 for students and \$3 for adults.

Are indoor tanning salons dangerous? That's the burning question

By HANNAH DRUM
Staff Writer

Since the fitness craze of the 1970s, people have associated tanned skin with active lifestyles, and with today's indoor tanning salons active people can tan without having to wait on the sun.

Today many doctors are worried that the health risks involved with tanning by natural sunlight and artificial tanning devices may outweigh the cosmetic benefits of tanned skin.

Medical researchers have found that exposure to the ultraviolet light found in sunlight and indoor tanning bulbs causes premature aging of the skin, wrinkles and, possibly, skin cancer.

In 1985 tanning salons in the United States generated over \$300 million. Regardless of the possible health threats, the popularity of tanning salons continues to increase.

Health Focus

Lou Stephens, owner of Finesse, a salon in Chapel Hill that offers cosmetic, wardrobe and tanning services, said her customers are curious about the possible health hazards of artificial tanning.

"I think people are probably more discriminating today about where and how they tan," Stephens said.

Today's indoor tanning equipment uses electronic bulbs or tubes that produce the same kind of ultraviolet light that is emitted by the sun, and this light can damage and burn the skin.

The first sun lamps used in the early 1970s emitted a type of ultraviolet light that caused severe burning. These ultraviolet "B" (UVB) bulbs

were banned from consumer use in 1975.

Many tanning salons advertise that indoor tanning beds are safe since the bulbs used in modern tanning devices emit about 95 percent ultraviolet "A" (UVA) light, much like the sun. But doctors say the remaining 5 percent UVB light is enough to cause tanning and burning.

The American Academy of Dermatology said UVB light emitted by indoor tanning devices causes skin cell injury and injury to blood-circulating cells in the skin and contributes to the development of skin cancer in laboratory animals.

Recent studies indicate that large doses of UVA light may cause as much skin damage as UVB light.

A staff dermatologist at N.C. Memorial Hospital said that UVA

light may be even more damaging to the skin than UVB because it can penetrate to deeper layers in the skin.

Customers use clamshell-like beds for tanning sessions that can last from 5 to 20 minutes, depending on the customer's ability to tan.

Stephens said a person with blond hair and light skin would only be permitted to stay in a tanning bed for 5 or 10 minutes for the first session since they are usually more susceptible to sunburns. People with red hair and extremely fair skin might not be able to use the beds at all.

"If after the first session you can tell you have been using the tanning bed, you either shouldn't be using it at all, or you should reduce the length of the session," Stephens said.

Tanning equipment manufacturers say eight sessions usually pro-

duce a tan, with one to three sessions needed each week to maintain the base tan.

Although the U.S. Food and Drug Administration has not placed any restrictions on tanning salon operations, some operators set safety guidelines for the protection of their clients.

Stephens, a registered nurse, requires that everyone wanting to use the tanning bed must complete a medical history form to determine if the person would be at a high risk for skin damage or burns.

A person who has had acute sunburns, a family history of skin cancer, allergies or a sensitivity to the sun might not be allowed to use the beds, Stephens said.

In 1980, the FDA set requirements for indoor tanning devices, but it has not placed any restrictions on frequency or length of use. Pro-

ductive eye goggles must be worn while using a tanning device, and each tanning bed or booth must have a timer that automatically shuts it off.

The FDA also suggests that tanning devices display a warning sign: "Danger: ultraviolet radiation. Follow instructions as with natural sunlight. Overexposure can cause eye injury and sunburn; repeated exposure may cause premature aging of skin and skin cancer. If you do not tan in the sun, you are unlikely to tan from the use of this product."

Many doctors prescribe occasional visits to tanning salons for patients because ultraviolet light helps the body absorb and use vitamin D and calcium. Exposure to ultraviolet light can also ease stress and depression associated with the wintertime, Stephens said.

U2 performs with unforgettable fire — and Bruce Springsteen

U2 may not have found what it's looking for, but the band's audiences sure have. People who attended U2's extraordinary performance at Philadelphia's JFK Stadium Friday night found that U2 is the most potent live rock 'n' roll band around today, whether it plays before crowds of 20,000 or 100,000. There are no barriers strong enough to hold back the spiritual force of U2's music.

U2 opened with its current single "Where the Streets Have No Name"

James Burrus Concert

and then jumped into one of its first singles "I Will Follow." Then Bono explained the sling wrapped around his neck and left arm. His injury resulted from a spill he took last weekend at a concert in Washington D.C. He jokingly said there was a

rumor going around that the band had busted his shoulder so he wouldn't be able to play guitar any more. "They can't keep me from playing my harmonica, though," he said. With that the band launched into "Trip Through Your Wires."

When it came time midway through the show to play Curtis Mayfield's "People Get Ready," Bono asked the crowd for a guitar player since he would not be able to play. Bono joked that he usually plays guitar for this song because it only has three simple chords. After two reject volunteers (following the first, Bono quipped, "I thought all the liars lived in Washington"), he finally found a legitimate guitar player. Later he'd find an even better one.

U2 played most of the songs off *The Joshua Tree* and *The Unforgettable Fire*. U2 also played four pre-

unforgettable fire songs — "I Will Follow," "Sunday Bloody Sunday," "October" and "New Year's Day." The band didn't play any of the songs on the B sides of its singles. Also missing from the show were such classics as "Gloria," "11 O'clock Tick Tock," "The Electric Co." and "Two Hearts Beat As One." U2 chose to display its newer material instead.

For U2's first encore the band played "With or Without You" and "Party Girl," a song the band reserves for special occasions.

The last song of the encore was "Stand By Me." Before the song Bono once again asked the crowd, "Does anybody else want to play my guitar?" He then said, "Does Bruce Springsteen want to play my guitar?" And with that the Boss came out to jam with the Edge and sing a duet with

Bono. The band ended the glorious night and the second encore with their usual show-ending song, "40."

As viewed from some of the worst seats in the horseshoe stadium, Bono and the band seemed as small as little plastic army men. The band did break its ban on big screen videos, however. JFK was also kind enough to rent binoculars for the low, low price of \$10. For people who had seats in Delaware, the high-powered specs were worth the investment.

Even with bad seats, though, the show was tremendous. Touching Bono or handing Bono an Irish flag does not make seeing U2 wonderful; hearing U2's music does. The band seems to sense that. Bono is no longer doing stupid stage tricks or trying to incite the crowd into a socially conscious army. U2 is just having a

good time and letting its music speak for itself, whether it inspires people to join Amnesty International or just make them get up and dance.

U2 should consider a national simulcast of one of its shows. That way, everyone could hear U2 in concert. The one-time broadcast show would not mean U2 would just do one show instead of touring. It's just an innovative idea for U2 to reach more people.

Don't be hesitant about seeing U2 in a football stadium. Just see the band wherever it plays or whatever it plays in. It's not worth waiting for U2 to come to Chapel Hill. The band will play with or without you. Take a nice study break this exam period and go see the band either in Atlanta on Dec. 8 or 9 and/or Hampton, Va., on Dec. 11 or 12. You'll find what you're looking for.

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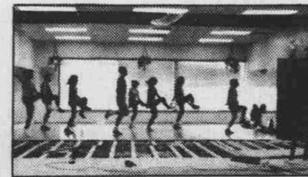
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