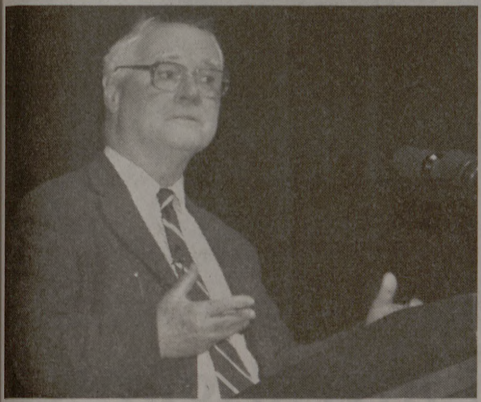


Trotter lecture touts scientific heavy-hitters

By Robert Stackhouse
THE BATTALION

Two distinguished professors pitted religion against the human mind Tuesday in the second Trotter Endowed Lecture Series, bringing differing viewpoints to the ongoing debate about God's place in the world of science, as well as the rest of the universe.



JP BEATO III • THE BATTALION

Dr. Alan Guth, a physics professor from the Massachusetts Institute of Technology, and the Rev. Dr. John Polkinghorne, an Anglican priest and former professor of mathematical physics and president of Queens College in Cambridge, were this year's lecturers.

Guth and Polkinghorne presented two sides to a story that is as yet unfinished. "God is the ordainer and sustainer of natural laws," Polkinghorne said. "In my view, religion and scientific theory can live in harmony."

The big-bang theory ties into what Polkinghorne has to say about God's role in the universe. "No explanatory system of the universe can have an unexplained starting point. Nothing comes from nothing," he said.

Guth, however, struck a more humanistic tone. "Do we really need the concept of God to understand the universe. I don't really see how God helps this idea. I do believe there is a purpose for our existence, but I believe it is a purpose that we must find for ourselves," Guth said.

Regardless of their views, both scientists bring a lot to the table when it comes to scientific theory. Guth is known as the father of the inflationary universe theory — a tie-in to the classic big-bang theory — which proposes that the universe started in an extremely small state, where the laws of physics are not applicable.

"Inflationary theory takes advantage of results from modern particle physics, which predicts that at very high energies there should exist peculiar kinds of substances which actually turn gravity on its head and produce repulsive gravitational forces," Guth said.

A form of matter possessing high energy would be capable of producing a sort of reverse gravity that drives objects away from each other, a concept known as gravitational repulsion. Assuming that a small portion of this matter was present at the very beginning of the universe, Guth's theory proposes that only an amount one billion times smaller than a proton is all that was necessary to set in motion the expansion of our universe.

"The universe today is in fact not slowing down due to gravity," Guth said. "It is in fact accelerating. This acceleration is attributed to repulsive gravity material, which goes by the name of 'dark energy' because we don't know what it is."

This dark energy is believed to comprise 60 percent of the matter in the universe, according to modern astronomers.

Polkinghorne takes a more metaphysical approach to his theory of the origin of the universe. He suggests that the existence of scientific law does not discount the existence of God, nor does the existence of God discount science.

To explain the phenomenal ability of mankind to explain the mechanics of the universe around us



JP BEATO III • THE BATTALION

Dr. Alan Guth, professor of physics at the Massachusetts Institute of Technology

with the use of physics, Polkinghorne said that the physical laws of the universe and human imagination share a common source.

"The reason is our minds and the structure of the universe have a common origin," he said. "That is God."

The Trotter Endowed Lecture Series was established in the memory of Dr. Ide P. Trotter, former dean of the Graduate School at Texas A&M, in Fall 2001.

Artificial skin provides hope for burn victims, despite high cost

By Justin Pope
THE ASSOCIATED PRESS

BOSTON — For many of the badly burned survivors of the Rhode Island nightclub disaster, the best hope for a successful recovery may lie in a substance that is manmade and half-alive.

Artificial skin nurtures the body's own skin cells, sometimes even deceiving them as they struggle to grow and replace burned tissue. The technology is promising — but doctors warn it's costly and not always completely effective.

Covering a patient who is 50 percent burned can require \$50,000 worth of the material, said Dr. Paul Taheri, director of

the University of Michigan Trauma Burn Center. The new skin also remains vulnerable to infections.

"While it's awfully useful, it's not the thing that we hoped: to be able in one setting to completely replace skin that has burned," said Dr. Colleen Ryan, a co-director of the burn unit at Massachusetts General Hospital.

"It's never like God made it again," she added.

The Feb. 20 fire at The Station nightclub in West Warwick, R.I., killed 98 people and injured more than 180, many of whom were critically burned. Investigators believe a rock band's pyrotechnics ignited polyurethane foam used for soundproofing, causing

the fast-moving blaze.

Burned, dead skin must be replaced with something that does everything the old skin did: regulate temperature, keep in fluids and keep out invaders like bacteria.

One option is to move a thin layer of healthy skin from elsewhere on the body to cover the burn. But if more than 50 percent of the body is burned, there obviously isn't enough healthy skin. Skin from cadavers can help temporarily, but after a few weeks will be rejected by the body's immune system.

Two companies that have attempted to market artificial skin have had mixed success.

San Diego-based Advanced Tissue

Sciences Inc., the maker of one leading product called TransCyte, has been forced to turn production over to British firm Smith & Nephew after filing for bankruptcy protection.

The other leading product, Integra, by Integra LifeSciences of Plainsboro, N.J., reported record fourth-quarter profits last month, but its artificial skin product accounts for only \$4.3 million of the company's \$117.8 million in annual revenue, estimates First Albany analyst William J. Plovanic.

"There's a big difference between a good technology and a good business," Plovanic said.

TransCyte helps repair the upper, or epithelial layer of skin, while Integra is

used to reconstruct the lower layer, called the dermis.

TransCyte contains skin cells called fibroblasts, which act as a kind of skin stem cell, growing, if conditions allow, into the variety of tissues that comprise healthy skin.

But they don't just grow; they need something to cling to, and TransCyte is made of a kind of scaffolding, not unlike a garden lattice that encourages vines to grow up around it.

Patients with third-degree burns, however, may require Integra to replace the dermal skin layer. It also provides a kind of scaffolding that helps the dermis regenerate itself, in part by tricking it into thinking there are healthy epithelial cells above it.

Giuliani's 'Leadership' needs million mark

NEW YORK (AP) — Former President George W. Bush's book, "Leadership," has sold more than one million copies in print since its release in October. Jonathan Ham, president of Miramax, which published the book, said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership. He said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership.

Ham said the book's success is a testament to the power of leadership.

SPRING BREAK 2003

PICTURE YOURSELF SOMEWHERE FUN!

***\$99**
Round Trip

With Student Advantage Card

***\$129**
Round Trip

With College ID

Or Save 15% on walk-up fares With Student Advantage Card

Always affordable. Always convenient. Always hassle-free.
Visit www.greyhound.com or call 1-800-231-2222

GREYHOUND

Heading For A Wedding?

Compass College Ministries would like to invite engaged couples and those thinking of getting engaged to join us for a 6-week seminar on how to build a lasting marriage.

\$75 Per Couple Fee Includes:
Seminar Notebook, PREPARE Evaluation & Reading, Marriage Enrichment Material and more!

(979) 779-2434

Call for details on upcoming classes and registration info.

SPECIALTIES PHOTOGRAPHY

Engagement
Bridal
Wedding Day

979 260 9016

www.specialphoto.com
3514 East 29th St. Bryan

Planned Parenthood
of Houston and Southeast Texas, Inc.

Birth Control
(including the new patch)

Emergency Contraception

Pregnancy Tests

Treatment of Infections

HIV testing

Breast Exams

Annual Exams

1.800.230.PLAN www.pphouston.org

Bryan Clinic: 4112 E. 29th St., Bryan, TX 77802
Bring in this ad for \$10 off office visit

Satchel's

at Northgate

Lunch Specials

Soups, Salads, Sandwiches

303 Boyett @ Northgate • Across from Tradition's Dorm • 260-8850