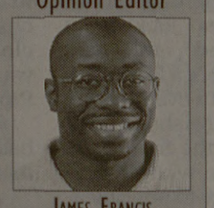
# Of mice and men

## Medical research, advancements stray too far within laboratory environment



Opinion Editor
JAMES FRANCIS
*Junior English major*

Mighty Mouse may have been a cartoon icon almost two decades ago, but today things have changed. Some of the animated character's family, friends and enemies have become catalysts in the furtherance of medical research and advancement. While it is true that people would do anything to find a cure for AIDS and eliminate other ailments facing the world today, questions arise of whether the research for a healthier earth and human being has gone too much in the direction of "Mad Scientism."

Although "healing the world" is a great cause, medical science continues to cross boundaries set by nature and morality everyday.

Recently, the science field encountered a new breakthrough as scientists were able to implant portions of human DNA in mice, in order to further research among genetics and birth defects.

An Associated Press report from New York issued the statement, "Researchers have put human DNA into mice for years, but not on this scale." The experimental mice have functioned normally throughout this research, with some of the specimens actually being able to pass on their transplanted DNA to their newborn young. Some of the male mice, however, were born with small testes and they experienced sterility.

Alcino Silva, a mouse genetics researcher at Cold Spring Harbor Laboratory in Cold Spring Harbor, NY, marveled at the results.

"It's amazing that such large fragments of DNA can be passed on to their offspring," Silva said in the AP release.

The same AP report said, "The Japanese scientists said they are already developing mice with a human chromosome ... to investigate Down syndrome..." In older experiments, DNA taken from humans would attach itself to chromosomes within the mice. In the tests conducted by the Japanese, however, the human chromosomes have managed to separate themselves. With this occurrence, scientists might be able to transplant even larger portions in the future.

The Japanese scientists also have successfully transplanted human chromosomes 2 and 22, with these specimens passing on the spliced genes to their offspring as well.

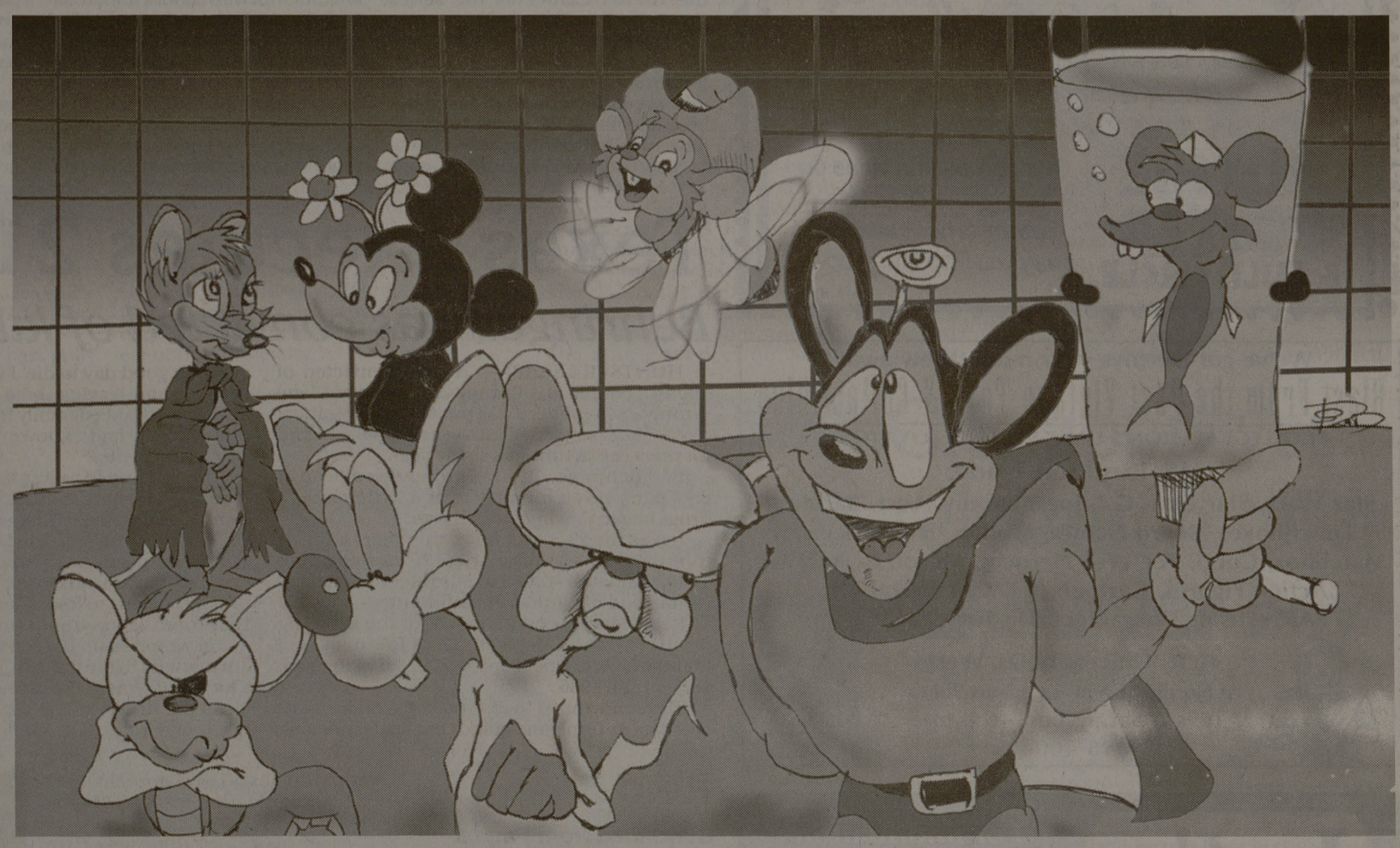
Isao Ishida, a researcher at the Kirin Brewery Co. in Yokahama, Japan, said he and others wanted to "create mice that make human versions of blood proteins called antibodies." This kind of testing would result in appropriate uses for the creation of new types of medicine.

Another notable example of more experimentation on mice for the betterment of mankind was displayed in a Discovery Channel special. The show chronicled a segment about the life of a girl who had been born with a birth defect which resulted in her having one normal ear and one dwarfed ear.

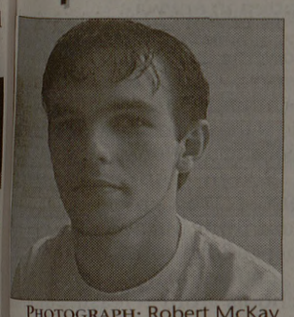
Scientists and researchers working on developing synthetic human skin and body parts generated a human ear and placed it under a mouse's skin to see if the artificial ear could survive in a mammal's matrix of body systems. The ear was surgically inserted onto the mouse's back, creating an animal image of Quasimodo.

Although the scientists assured their viewing audience that the mouse felt no pain and could not tell the ear was under its skin, it can be assumed that no human wants to walk around with synthetic additions either — at least additions that do not benefit the experimental host.

Human-to-mouse DNA transfers are only the beginning in a long line of medical science advancements. As long as scientists and researchers keep in mind that the experiments they are conducting are to make for a healthier population across the world, there might never have to be the worry of dangerous results. Although these "miracles of modern science" so far have not had any degenerative effects on mice, it may only be a matter of time before some scientist with a bright idea leads to world domination by a superhuman mouse with the intelligence of Albert Einstein.



## Campus Voice



PHOTOGRAPH: Robert McKay

*Concerning the state of medical advancements:*

**"When science has the technology to take the next step, whether it is ethical or not, they always seem to take it."**

**Matt Beaton**
senior environmental design major


## MAIL CALL

### Disney not at fault for animal troubles

*This letter is in response to Roby Ray's June 11th column on animal abandonment:*

Blame the people who are really responsible for animal shelter problems in the United States — irresponsible pet owners who buy pets and dump them or who don't get their pets neutered and leave puppies and kittens in their wake. Don't blame Disney for spineless, irresponsible people.

In addition, every year these breeds win dog competitions, there is a large increase in numbers. We should not ban those shows. We should educate the public on the responsibilities of pet ownership.

College students are the worst. Ask any year-round resident who lives in an apartment complex, and he or she will tell you stories of pets dumped by students whose parents won't allow them to bring the animals home.

Personal responsibility is the key. Don't give a pet as a gift. The decision to buy a pet is a serious one, and it should not be done on a whim. I don't think tobacco companies are responsible either. People choose to smoke — they know the consequences, but smoke anyway.

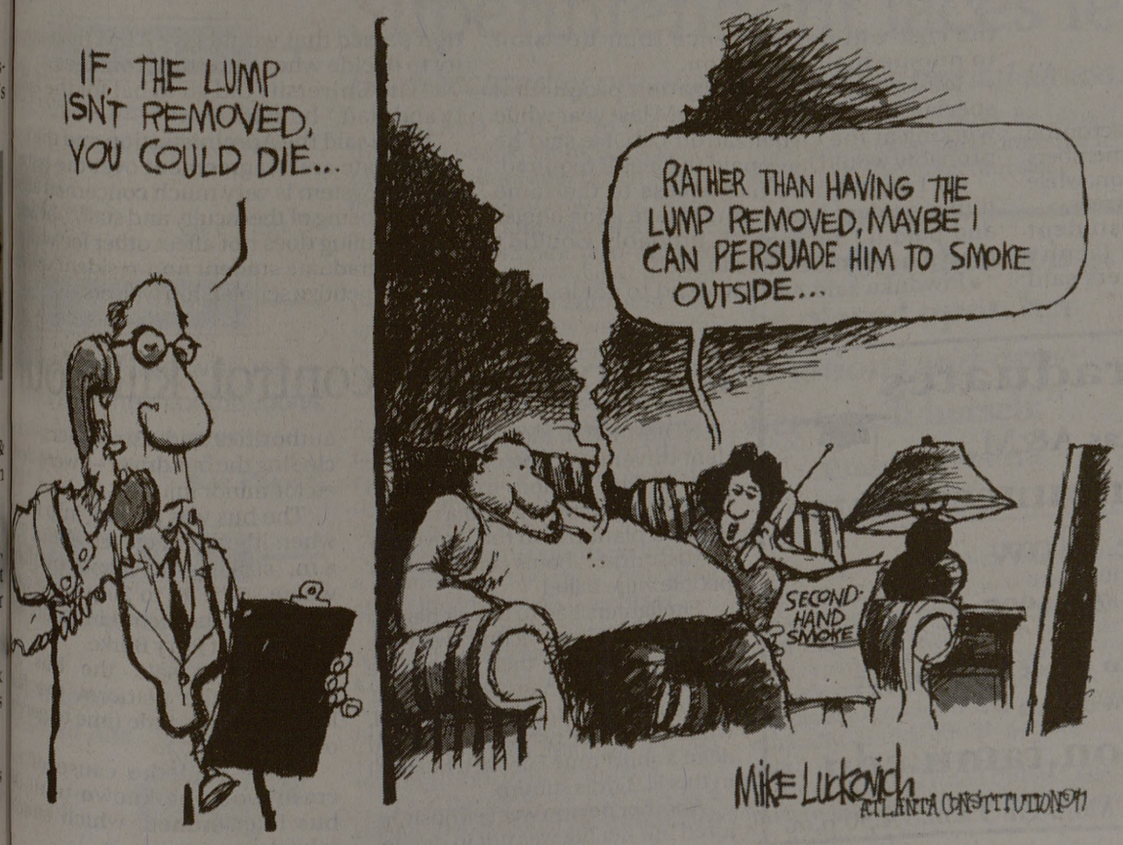
The same can be said for alcohol companies. So now, we need a solution. But like all good Americans, we simply sue the other guy for our own mistakes. Get a spine, folks.

*Khristy Hullett*
*graduate student*

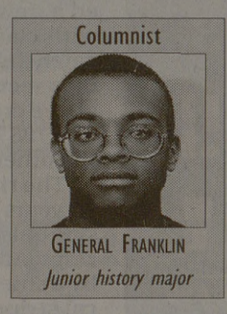
### Kyle Field situation deserves discussion

It is really disheartening to see fellow aggies with their own (economic) agendas and not following the heart of the student body. If there is a more unapparent issue involved (other than greed), please let it be known.

*Darin Keever*
*class of '98*




# Government interference stalls medical technology



Columnist
GENERAL FRANKLIN
*Junior history major*

The acquittal of controversial oncologist Dr. Stanislaw Burzynski will bolster the efforts of alternative medicine in spite of unethical and retaliatory practices of the Food and Drug Administration. Consequently, patients with terminal illness will now have vital access to techniques without the unnecessary and arduous delays of FDA approval.

To understand the defects of the FDA approval process, it is important to get to know Burzynski, the brilliant Polish doctor who spent decades trying to gain approval for his discovery of tumor suppressors found within proteins called antineoplastons.

Burzynski first discovered these "natural cancer inhibitors" while analyzing blood samples for his Ph.D. dissertation in 1968. Using thin-layer chromatography, he found a mysterious protein later called antineoplastons within the blood of ill patients.

Next, he presented his new findings and was awarded his Ph.D. in biochemistry from the Medical Academy of Lublin, Poland.

The discovery of antineoplastons solidified Burzynski's interest in cancer research. After earning a position at the Baylor College of Medicine, he continued probing the actual function of antineoplastons. At the College, the doctor determined antineoplastons were a part of a biochemical communication system which "compliments the function of white blood cells" for the immune system and "protects cell function in the body."

Burzynski's research on this matter was met with great acclaim at the 1976 meeting of the Federation of Associations for Experimental Biology convention. As the Associated Press reported, "A chemical with power to change cancer cells back to normal cells ... has been extracted from urine." These antineoplastons, which also can be found in other body fluids, "detect cells ... out of line and feed them the new [corrective] information."

Moreover, in 1976, Burzynski began the long procedure for FDA approval. Despite his consistent compliance with FDA policies, the agency refused to recognize the validity of his research. To strengthen his claim about the efficacy of antineoplastons, Burzynski attempted to conduct clinical trials in partnership with several independent scientists. This was met with barriers as the FDA denied the petition.

Undaunted, the doctor continued to compile support and additional data until the FDA finally agreed in 1983 to allow research to continue under the agency's approval.

After the experimental requirement of approval was met, Burzynski sought the partnership of 12 major pharmaceutical companies to develop an artificial antineoplaston for cancer therapy. All 12 of the companies refused involvement, wary of the lengthy approval process as well as the FDA penchant for vindictive litigation.

In light of these obstacles, Burzynski continued to work independently with other researchers to complete the approval requirements of antineoplaston, just as the FDA began the first of five frivolous grand jury investigations against him in 1988. In spite of the unethical machinations of FDA prosecutors, four of the grand jury proceedings ended with acquittal — the final investigation resulting in an indictment.

**The efforts of many devoted scientists ... have been thwarted by an overzealous FDA ...**

In 1995, Burzynski was remanded for trial on the flimsy charge "of violating interstate commerce," by giving antineoplaston to out-of-state patients. This indictment was completely false since, as a researcher, the doctor is within the law when he conducts studies and experiments of new medication.

Furthermore, this trial ended in an acquittal for Burzynski because of FDA misconduct and the illegitimacy of the charges. Consequently, Congressman Joe Barton of Houston, chair of the House Oversight Committee, launched a recent probe into the Burzynski matter as well as the overall FDA approval policy during hearings in Nov. 1995.

The efforts of many devoted scientists such as Burzynski have been thwarted by an overzealous FDA, obsessed more with power and influence than with the efficacy of new medicine and techniques. In fact, a top level official named Michael Friedman revealed in a secret Oct. 31,1991 FDA memo, "Antineoplaston are well-defined, pure chemical moieties" which trigger decreased growth of cancerous tumors.

Friedman, as an FDA insider, must be questioned in allowing the scurrilous attacks made toward Burzynski and his research if he believed the data to be legitimate.

Furthermore, evidence of the FDA's motive for profit emerged in a 1983 memo from the office of Dr. Crout, the FDA director of Drug Bureau. In the memo, Crout said, "I never have and never will approve a new drug to an individual, but only to large pharmaceutical firms with unlimited finances."

Certainly, this epic struggle continues between Burzynski and the FDA bureaucracy. The questionable tactics of the agency is demonstrated as one FDA lawyer involved in the Burzynski case stated in Reason magazine, "an angry FDA [lawyer] is willing to slit your throat." Until needed reforms of the approval policy occur, the FDA will continue to thwart medical techniques and materials which would otherwise save thousands of lives.