Professor compares fertilized egg to acorn

By JOY THOMPSON

A human individual is not created instantly at the time of fertilization but is developed "through a process extended over time," according to Clifford Grobstein, professor of biological science and public policy in the department of science, technology and public affairs at the University of California at San

Grobstein spoke to an audience of about 200 people on the topic, "Science and the Unborn," Monday at 8 p.m. in Hamilton Hall. He is the second Michael Polanyi lecturer to speak at the University.

Professor Emeritus Waldo E. Haisley, of UNC's departement of physics and astronomy, established the biennial Michael Polanyi Lectures in the History and Philosophy of Natural Science in 1981 as a memorial to his parents, Waldo Emerson Haisley and Arietta Melissa Mendenhall Haisley. Polanyi, whose memory is honored in the lectures, was a Polish scientist who was concerned with relating science to

Grobstein, a member of the National Academy of Sciences, American Academy of Arts and Sciences and the Institute of Medicine, has written extensively on the question of when life begins in the development of the human being. He also has studied the ethical aspects of test-tube babies and the possibility of curing diseases such as sickle-cell anemia through gene therapy.

The status of the unborn for a long time has remained a mystery, Grobstein said. But advances in medical technology, as well as the political battle over abortion policy, have caused scientists to confront this mystery, he said.

"In scientific terms, at least six aspects of individuality must be achieved through the course of (the embryo's) development," Grobstein said.

These aspects are genetic, developmental, functional, behavioral, psychic and social individuality,

In reference to genetic individuality, no life begins on earth today, but a new generation with a new genetic make-up arises through fertilization, Grob-

"A fertilized egg given a supportive environment has a good possibility of becoming an individual like you and me," he said. ". . . But a zygote (fertilized egg) is no more equal to (a fully developed human being) than an acorn is to a handsome-spreading oak tree.'

Grobstein said genetic individuality could not be equated with the singleness of the zygote, because the zygote - as evidenced in mouse studies and in the case of human twins - "could be expressed in one, less than one or more than one genetic offspring."

So even in humans, what is present in the mother's uterus after fertilization is more of a pre-embryo than an embryo, Grobstein said. The genetic singleness of the individual is not established until later developmentally, not genetically, Grobstein said.

The functional individuality of the embryo depends on the development of the neurala plate, the precurser to the central nervous system, Grobstein said. Minimal functional individuality can be said to be achieved by the end of the eighth week of pregnancy, when most people would be able to recognize the human features of an embryo, such as the eyes, nose and

Behavioral individuality, the embryo's ability to

respond and interact with its environment, can be detected in the sixth week of pregnancy with an ultrasonograph, an instrument that produces images on a television-like monitor by emitting electrons and high-frequency sound waves, Grobstein said.

More advanced behaviors such as hiccuping and sucking can be seen two to six weeks later.

Although the central nervous system has developed to the point where the embryo can move, Grobstein said, it has not developed to the point where the embryo can be consciously aware of its environment.

Since the senses have not developed fully enough at this stage to support inner experience, the psychic individuality of the embryo cannot develop until later, he said. More research is needed to determine how much later psychic individuality begins, Grobstein

Social individuality depends on the individual's ability to interact and react with other individuals in the environment, Grobstein said. He did not go into much detail about the embryo's social individuality, because he said that was a social decision rather than a biological or scientific decision.

During a question and answer period after the lecture, a member of the audience asked Grobstein for his opinion of the anti-abortion film The Silent Scream. Grobstein said he thought the film was a "gross exaggeration of the observations."

When asked where he would draw the line as to when abortion was allowable, Grobstein said he could only guess that in terms of the embryo's sentience (lowest, most generalized form of conciousness), abortion during the first three months of pregnacy would not involve any inner experience on the part

Hijackers kill American

From wire reports

BEIRUT - An American hostage was apparently executed Tuesday by Palestinian pirates who took over the Italian liner Achille Lauro Monday.

The seven hijackers, who are demanding the release of 50 Palestinians from Israeli jails, threatened to kill each and every hostage one by one unless Western diplomats agreed to negotiate.

Puerto Ricans still missing

PONCE, Puerto Rico - Authorities are searching for at least 150 people who are feared dead and buried under the rubble of their homes as floods and landslides, which were set off by heavy rains, hit Puerto Rico.

At least 36 people have died since the rains began early Saturday. Gov. Rafael Hernandez Colon said the 150 to 200 people trapped

underneath the loosened mud and rubble had been there since 3 a.m. Monday.

Muslim leader knocks critics

NEW YORK - Black Muslim Minister Louis Farrakhan denounced his critics in front of a charged-up crowd of 25,000 at Madison Square Garden Monday

His message was one of economic and spiitual hope.

"Mayor Koch said I should burn in hell," Farrakhan said. "Dear Mr. Koch: The black people of New York

news in brief

Farrakhan, who leads the Nation of Islam, a Black Muslim sect, said Monday night's speech was his last in a while as he was going abroad to spread God's word and would not be in the United States for a while.

Miller returns as OMB director

WASHINGTON - Economist James Miller became the new director of the powerful Office of Management and Budget Tuesday, replacing David Stockman, who resigned in August.

Miller is considered to be a point man for President Reagan's 1981 war to cut government regulation and red

The sometimes controversial chairman of the Federal Trade Commission returned to the office where he made his debut with the Reagan administration in 1981.

Septuplet parents file suit

LOS ANGELES - Sam and Patti Frustaci, the parents of the famous septuplets, filed a medical malpractice suit Tuesday against the Tyler Medical Clinic for making Mrs. Frustaci conceive seven fetuses.

The suit aganist the fertility clinic and its owner, Dr. Jaroslav Marik, did not specify the amount of damage money being requested, but the medical bills have exceeded \$1 million since the multiple pregnancy was discovered.

Groups want fans to show their colors

By DONNA LEINWAND

The Connells

Someday, students may see thousands of Carolina blue balloons released from the hands of thousands of Carolina blue-clad fans at Kenan Stadium.

Such is the hope of the UNC Cheerleaders, Mikeman Jeff Taylor and the Sweet Carolines, who serve as hostesses

for athletes being recruited by UNC. "We're interested in promoting school spirit," said Annetta Stokes, a senior and co-chairwoman of publicity for the Sweet Carolines. "We'd like to encourage students to wear Carolina blue. We go to other schools and they are just maniacs about wearing school colors."

Paula Wiggins, a senior varsity cheerleader, said: "Wearing Carolina blue is a way for everyone to show support without saying a word. The fans don't realize the impact they have on the game."

The Sweet Carolines sell Carolina blue balloons for 25 cents before football games. They also give tours and answer questions for prospective athletes, their parents and high school coaches.

Taylor also supports the idea of fans wearing Carolina blue, especially for the games against Clemson and Duke, whose fans dress in school colors.

"As far as I'm concerned, the crowd needs to understand that although Carolina football has not been strong in the past few years, crowd support means a lot to the players," Taylor said. "It's important to make a lot of noise. Other schools and universities are said not to have the class that Carolina has. Carolina is a class operation but having class doesn't mean you can't get rowdy."

GET A PIECE

at the

ALL CAMPUS BASH

A Birthday Party and

New Year's Eve Party All in One

Plair

Eve Cornelious

Five elected to fill vacant **CGC** seats

New Campus Governing Council representatives for five off-campus districts were elected Tuesday.

The winners are David Biddell from District 16, Todd Patton from District 17, Bill Fox from District 18, Asa Lee Bell from District 19 and James Wooten from District 21.

Students cast 96 votes in the election about three times last fall's total, Elections Board Chairman Bruce Lillie

"Turnout was fairly decent," he said. "It's still kind of a disappointment, but I guess you have to be realistic."

The tallies: District 16 — Biddell 36, Edward Gilgor 11 and Charles Vocelle 7; District 17 - Patton 7; District 18 - Fox 9, Todd Powell 3, Louis Lupin Scott Kehoe 1 and Tom Vlcek 1; District 19 - Bell 5; District 21 -Wooten 7, Daniel Wistehuff 3 and Scott Canterbury 1. Three ballots were declared void.

By ELISA TURNER

There will be a new face on Franklin Street pretty soon. Jigsaws, a full-menu restaurant, will replace Mexican Underground. The new restaurant is scheduled to open October 21.

> ground owner and partner in Jigsaws, said that the Mexican restaurant was doing "marginal business" and was "borderline financially." He needed to find a new investor to share expenses,

> > "I heard Karen Thompson was interested in investing, so we got together and decided on a different type of restaurant," McLennan said. "Jigsaws will be more like Four Corners

Don McLennan, Mexican Under-

Jigsaws to open on Franklin St. and Spanky's."

Jigsaws will offer a luncheon menu, including sandwiches, soup and salad, and a dinner menu featuring marinated steak and chicken. For late-nighters, the restaurant will have a bar-type atmosphere with assorted beverages and

"Personally, I think Jigsaws will do much better because of the type of atmosphere we're striving for," McLennan said. "We're aiming for the student market, the same as Mexican Underground, but it will probably appeal more to seniors and graduate students,"

McLennan described prices as very competitive with other full-menu restaurants located nearby.

Red Cross sponsors bloodmobile in Union

The local chapter of the American Red Cross will sponsor a bloodmobile

today from 10 a.m. to 3:30 p.m. in Great Hall of the Student Union.

Beer, wine permitted with proof of age

Check in the Pit for the BASH Schedule

Friday, October 11

7:30 pm-1:00 am

Student Union and the Pit

featuring

The Graphic

416 West Franklin St.	(Across from McDonald's)
933-	5700
B.B.Q. \$1.60 Homemade Brunswick Stew 1.35 B.B.Q., Brunswick Stew & Slaw Platter 2.85 6 oz. Hamburger Steak with Sauteed Onions 1.75 Spaghetti & Homemade Meat Sauce 1.60 Veal Parmegian 1.85 Veal Parmegian 2.85 ¼ Fried Chicken on alternate days 1.65 ¼ BBQ Chicken 1.65 Con Rotating Schedule Chicken & Dumplings 1.35	VEGETABLES 6 or 7 Daily Creamed Potatoes 60 French Fried Potatoes 60 Home Fried Potatoes 60 Pinto Beans 60 Blackeyed Peas 60 Butter Beans 60 Snap Beans 60 Creamed Corn 60 Carrots 60 Squash 60 Fried Okra 60 Fried Squash 60
Country Fried Steak & Gravy	Rice
Brolled Fish Parmeglan 1.75 Klelbasa & Sausage 1.95 Baked Ham 1.65 Stuffed Pepper 1.60 Chicken Pot Ple 1.65 Beef Tips over Rice 2.25	Pastrys Baked on our Premises Blueberry Muffin
Fried Trout 1.45 Fried Clarm Strips 1.75 Fried Shrimp 3.25 Sampler Platter All 3 with slaw 4.95	Bread Pudding

Breakfast Monday through Saturday Lunch Monday through Saturday Dinner Monday through Saturday Sunday Breakfast Only

> 6:30 am-10:45 am 11:00 am-2:00 pm 4:30 pm-9:00 pm 7:00 am-2:00 pm

GRAND OPENING TODAY

UPSTAIRS 159th? PURDY'S?

Upstairs 159th is changing and getting better! But this time we want to know what you think! This is your chance to win our name-change contest by renaming your club. The winner gets \$100 cash & a life-time VIP membership to the best place to party in Chapel Hill. Here's how is works:

Only one entry per person

• Winner will receive \$100 cash plus a lifetime membership and more!

• The first 100 entries opened or delivered will have qualify for a \$1 membership

· Should the winning name be entered by more than one person, a drawing will be held to determine the winner. Time & date of drawing will be announced after finalists are notified.

 Use the ballot below for your suggestions (theme, decor, specials or anything else you can think of) to go with the name you enter. Mail it or drop by Upstairs 159th.

BE CREATIVE!

Contest ends Sun., Oct. 13th

AND HURRY! CONTEST ONLY LASTS ONE WEEK! SUN. OCT. 13th IS THE LAST DAY ENTRIES WILL BE ACCEPTED. WINNER WILL BE ANNOUNCED THURS. OCT. 17th

We'll soon be a private club so we can offer you complete service. Memberships go on sale Oct. 10 at bargain prices, so get one soon! Call or come by for details.

929-5430

NAME CHANGE CONTEST ENTRY FORM

Suggested name: Other suggestions			
or comments			
Your Name		Bring ballot by Upstairs 159th or mail to:	
Address		Upstairs 159th 159½ E. Franklin St.	
Grand Prize—\$100 plus free life-time VIP membership		Chapel Hill, NC 27514	