

## OU biologist studies sperm cell's activity

Novocaine, a common pain killer in the dentist's office, has gone to the biology lab to help study sperm cell activity.

"The basic research could have important long-term implications in solving problems ranging from reproduction or contraception to emphysema," said Charles Lindemann, an Oakland University cell biologist. Novocaine (procaine) has been found to "mimic" the action that takes place within the female tract, said Lindemann. The pain killer sets off a tumbling or hyperactive motion of the sperm — important in fertilization.

LINDEMANN HAS received a three-year grant of \$145,000 from the National Science Foundation (NSF) to continue his research on sperm cell mobility.

He was the first to demonstrate that a cellular protein and another cell compound, cyclic adenosine monophosphate, are keys to the control of sperm cell activity.

Lindemann announced that finding in 1983 in the Journal Cell Motility. "Actively swimming sperm are essential for fertilization," Lindemann said. It is now known that, in addition to the swimming motion, the sperm cells undergo a change: They fold

their whiplike tails and begin a tumbling or hyperactivated state prior to fertilization.

Researchers know it happens, they know it is important — but they don't understand why, Lindemann said.

THE NSF grant will support: 1) Lindemann's continuing study of how to control the swimming activity of the sperm.

2) Attempts to use biochemistry to dissect the cell in an effort to understand what changes take place to set off the tumbling action.

"I am studying basic cellular functions, and it may make it more interesting because I am using sperm cells," he said. "But the point is that when you learn something about how these cells function, you learn something about other cells as well."

"When these cells don't function properly in the reproductive tract, you have fertility problems. And when they don't function properly in the respiratory tract, you can find humans suffering from chronic bronchial problems like emphysema."

NOVOCANE (procaine) was discovered in the 1960s to create a tumbling or hyperactive motion in sperm. But at the time it was considered an odd phenomenon.

## State aid to OCC hiked 6.6%

By Tim Richard  
staff writer

Oakland Community College would get a 6.6 percent boost in state aid under Gov. James J. Blanchard's proposed budget for fiscal 1987.

"It's good. It's the highest you could get," said Anthony Jarson, business vice president of the 24,000-student college.

Blanchard asked for a 5.5 percent increase in state funding for all levels of education plus a second year of capital grants for the 29 two-year colleges. The state's 1987 fiscal year begins next Oct. 1.

FOR COMMUNITY colleges, Blanchard proposed a total of \$20.6 million compared to \$19.1 million for the current fiscal year. Increases for individual colleges range from 4 to 6.6 percent.

OCC's share will be \$12.6 million, up 6.6 percent from the current year's \$11.9 million. The college's total budget for operating four campuses is \$41.6 million.

But OCC still ranks at the bottom of the list in per capita state aid, Jarson said. While the boost looks good on paper, it's based in part on enrollment,

*'It's good. It's the highest you could get.'*

— Anthony Jarson  
business vice president

which has been growing at OCC.

"That 6.6 is misleading. It's formula-driven," he said. On a per-student basis, OCC will get \$871 in state funds, "still the lowest in the state," he said. Monroe Community College gets \$921 per student, and all the other colleges are above \$1,100.

State average is \$1,343. Wayne County Community College, serving mainly Detroit, is slated for \$2,415.

Community colleges operate on revenue from three sources: state aid, local property taxes and student tuitions.

"THE STATE is starting to grant capital outlay money to community colleges," Jarson went on.

Blanchard is recommending \$3.25 million for maintenance and \$3 million for capital projects. Colleges must list their projects and apply for the

money. Specific projects aren't listed in the governor's budget.

"It's a far cry from what the universities get," said Jarson, "but it's a very important step for community colleges."

Until the 1978 tax-limitation amendment to the state constitution was passed, community colleges could levy small millages for bonds. Since then, they have had to go to the voters, who put on the brakes during the tax revolt and recession.

Last year, Blanchard came up with \$3 million for community college capital, Jarson said.

OCC WILL be able to hold the line on tuition this year, Jarson predicted.

OCC charges \$28 for in-district students after raising the rate from \$24 in 1985. Typically, OCC has hiked tuition in \$2 steps every second year.

"On tuition, we're not the lowest in the state, but we're below average," Jarson said, pointing to Macomb's \$32.50, Wayne's \$28 and Henry Ford's \$30.

He said OCC is destined for at least an \$80,000 share of a \$4 million job retraining fund in the new state budget, and perhaps more if it qualifies. "Last year we got \$240,000. We can't complain," he said.

Presenting  
**"Emily and Jennifer"**  
Third Annual in the  
Mother's Day Series by  
*Emily*  
Now in Stock  
**\$29.50**  
We also carry a wide range of Hibet plates  
**Georgia's Gift Gallery**  
Collector's Plate & Limited Editions  
A Bradford Exchange Information Center  
815 N. MUIR BL. (in Old Village) • Plymouth • 433-7733  
HOURS: Mon.-Wed. 10-7; Thurs.-Fri. 10-6; Sat. 10-6; Sun. 12-5  
OPEN 7 DAYS

A career in Real Estate? Absolutely! After 38 years of training and working with hundreds of sales associates we have the credentials and track record you are looking for. Since the opening of our first Birmingham office in 1954 we have paid a starting salary to those few who qualify and meet our high standards.

Call - Chamberlain, REALTORS 643-8543  
Douglas C. Whitehouse  
Vice President, C.E.O.

**Chamberlain**  
REALTORS

Natural  
Norwegian  
**Blue Fox  
Jackets**  
from  
**\$383.**  
This  
Week  
Only  
(Limited Quantities)  
"The" Furrier for  
honesty and reliability  
**RICH FUR  
Dittrich**  
Since 1898  
DETROIT 873-8300 • 7373 Third Avenue  
BLOOMFIELD HILLS 642-2000  
3515 W. Woodward Ave.  
OPEN Mon-Sat. 9:30-5 p.m.  
(Bloomfield Thurs. 'til 8:30 p.m.)  
Major Credit Cards Accepted

## Country Squire Shop

Gentlemen's Fine Apparel  
75 W. LONG LAKE ROAD  
Bloomfield Hills

**FINAL  
THREE  
DAYS**

Thursday, Friday, Saturday  
January 30, 31, and February 1.

**WINTER  
CLEARANCE  
SALE**

SPECIAL GROUPS

**1/2 OFF ITEMS**  
in most departments

Open daily 9 to 6 p.m.

There's no sale  
like a  
Saks Fifth Avenue  
sale!  
Our Final Winter  
Clearance  
is right now!  
We're taking even  
further reductions  
—greater savings—  
on all our winter  
merchandise throughout  
the store.

Indicates reductions taken from original prices. There may have been intermediate price reductions on some items prior to this sale.  
Not every style available in every color and size at every SFA store.

**Saks Fifth Avenue**

• Troy, Somerset Mall, Big Beaver at Coolidge • Open Tuesday, Wednesday and Saturday from 10 a.m. to 6 p.m.;  
Monday, Thursday and Friday 10 a.m. to 5 p.m.; Sunday from 12 noon to 5 p.m. • Fairlane Town Center, Dearborn  
• Open Monday through Friday from 10 a.m. to 9 p.m.; Saturday 10 a.m. to 5 p.m.; Sunday from 12 noon to 5 p.m.