

# Daily Nebraskan

Wednesday

**Weather:** Wednesday, mostly sunny and warmer, high around 60 with NW winds at 10-20 mph. Wednesday night, mostly clear and not as cold, low in the mid 30s. Thursday, mostly sunny and warm, high in the low to mid 70s.

**A&E:** Pontiac Ranch — Page 6.

**Sports:** Endicott named to U.S. National 'B' team —Page 8.

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University of Nebraska-Lincoln

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## Budget Office releases increase guidelines

By Lee Rood  
Senior Reporter

College deans and department directors can start dividing their share of the pay-raise pie now that guidelines for staff and faculty salary increases have been established.

Included in the guidelines released Tuesday by the University of Nebraska-Lincoln Budget Office is a 4 percent required pay increase for all University of Nebraska-Lincoln staff and faculty members who have performed satisfactorily.

Kim Phelps, assistant to the vice chancellor for business and finance, said faculty members

will receive an average pay increase of 11.04 percent, and non-faculty members will be given an average raise of 9.37 percent.

But not all employees will receive that kind of increase, said Phelps, who is also UNL budget director.

Phelps said UNL deans and directors were given an 8 percent increase of the 11.04 percent for faculty pay raises in their departments. Of that 8 percent increase, 4 percent will be given to all faculty with satisfactory performance.

The remaining 3 percent of the 11.04 is an average amount that will be given to departments to take care of previously-identified

salary problems and discrepancies in pay with peers at other institutions.

Deans and directors were also given 8 percent increases to distribute to non-faculty employees.

The remaining 1.37 percent of the recommended 9.37 percent average for non-faculty pay increases will be given to UNL vice chancellors who will distribute the money to take care of inequity situations.

Promotional salaries in the guidelines also included increases.

Employees promoted to assistant professor will get \$120 more for the academic year than they would have received last year, on top of the

4 percent recommended pay raise for satisfactory performance.

Those promoted to associate professor will get \$820 more per academic year, and those who become professors will receive \$1,520 more.

Phelps said he thinks the guidelines provide for fair distribution of pay raises.

"I would anticipate after three years of minimal increases it would be well-received," he said.

The University of Nebraska Board of Regents will vote on recommended raises at its June meeting. If approved, the raises will go into effect this summer.



Mark Davis/Daily Nebraskan

Director of Instrumentation Rich Shoemaker, shows some of the features on the lab's largest magnet.

## Magnets aid chemical research

By David Uezen  
Staff Reporter

Working near very powerful magnets can cause credit problems, said Rich Shoemaker, a University of Nebraska-Lincoln scientist who has had to replace several credit cards.



Shoemaker, director of instrumentation at the chemistry department, works with two Nuclear Magnetic Resonance spectrometers which contain very powerful magnets.

"It's hazardous to Bank in the Box cards," Shoemaker said. "I've forgotten to take my wallet out and butted right up against the thing. I've gone through three Bank in the Box cards."

Nuclear Magnetic Resonance, or NMR, provides a way of precisely identifying the structure of molecules, an important aspect in chemical research, Shoemaker said.

NMR works on the principle that the nuclei of many atoms behave like microscopic magnets, and when placed in a very large magnetic field, can be made to essentially "line up" with that field.

When this happens, the nuclei can be made to "transmit" a radio signal by applying a very strong, short burst of a characteristic radio frequency.

The NMR instruments excite atoms in a molecule to "transmit" their unique signals, and then proc-

esses all the unique signals simultaneously to determine what kind of signals are present and how much of each kind.

Shoemaker has been the instrumentation director since Feb. 1, just after he finished his doctoral dissertation.

"The agreement we had after I was offered the job was that I would start full time after my dissertation was accepted," he said.

Shoemaker worked part time in the chemistry department as a graduate student.

"I have since finished up my Ph.D. dissertation and all subsequent paperwork," Shoemaker said.

He will be receiving his Ph.D. at commencement May 7.

Originally from central Pennsylvania, Shoemaker went to high school in Glenview Springs, Colo., and then attended Midland Lutheran College in Fremont where he received his bachelor's degree in chemistry and natural science.

Shoemaker entered UNL graduate school in 1983. Working with professor Tom Apple, Shoemaker helped design and build two solid-state Nuclear Magnetic Resonance spectrometers, and then did 4 1/2 years research with the NMR instruments.

Shoemaker spends most of his time helping researchers with using the NMR instruments and their data.

"Most of my time is involved with graduate students and post docs and professors in applying NMR in enhancing their research efforts."

Most of that time is spent in education and training graduate students working for researchers to find the most appropriate experi-

ments to help solve research problems.

But much of that time is spent in maintaining the NMR instruments. Shoemaker keeps them running, makes repairs and troubleshoots problems as they arise.

"My background in actually designing and construction of spectrometers from scratch sort of comes in handy there," he said. "I'm pretty much acquainted with NMR instruments down to the last resistor."

Part of the NMR instrument is no more than a high-tech FM radio receiver. In fact, Shoemaker once traced a problem in one of the instruments by tuning into radio station KFRX-FM.

Shoemaker traced the station's signal through the instrument's circuits until he found a break.

The magnets in the NMR instruments are super conducting magnets, and need maintenance frequently, he said. Liquid nitrogen and helium, used to keep the magnets cold, need to be replenished often.

Super conductors allow electricity to flow without resistance, and after an electric current is established, do not need a power supply.

But the environment requires very cold temperatures, Shoemaker said. The magnets in Shoemaker's laboratory are kept at four degrees Kelvin.

The combination of liquid nitrogen and liquid helium keep the magnets at this temperature.

The liquid nitrogen needs to be replenished about once every week to 10 days, Shoemaker said. The liquid helium needs changing less frequently — about once a month

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## Suicides decline; help available

By Dan Dwinell  
Staff Reporter

The University of Nebraska-Lincoln has an extremely low suicide rate, said Glenn Gray, complex director of Cather, Pound and Neihardt residence halls.

But Gray said dead week and finals week can be a rough time for students. "Obviously the pressure of finals that students receive is a lot," he said. Gray added that moving back home during the summer also contributes to stress.

Finals are just one of the things that can trigger a suicide, said Mary Kenning, director of the Psychological Consultation Center at UNL.

Kenning said that breaking up with a boyfriend or girlfriend is enough for someone to consider suicide.

"Over the past four years there has been an increase among adolescents and young adults (in suicides)," she said. Kenning said the peak ages for suicide are 24 to 44.

There are several warning signs associated with people who may be considering suicide, Kenning said.

If someone talks a lot about suicide and various methods of suicide, and says statements such as "I'm better off dead," or "After I'm gone . . ." and gives things away, a friend might want to find some help.

"These are pretty strong warning

signs," she said.

Kenning said the best way to help someone you think is suicidal is to confront the person directly and show some concern for their safety.

For a person who has been considering suicide there are many places to receive help, Kenning said.

One option is to call Lincoln Personal Crisis' 24-hour hotline.

One of the volunteers, who asked to be identified as "Rosalie," said she has had a couple of calls throughout the past two years.

It's a policy of the center to keep the names of both the caller and the volunteer confidential.

"Many don't really want to," she

said. "They just have those feelings and I can usually talk them out of it."

Rosalie said that one of her callers did "complete the job."

Another option is the Lincoln/Lancaster County Health Department. The center has reduced rates for student counseling, Kenning said.

Gray said the university residence halls are doing what they can to prevent suicide.

He said all of the staff members are trained and students assistants on each floor are trained to assist depressed residents.

Gray said the university also provides programs and gives away brochures to help prevent suicide.

## Graduate student attempts suicide

From Staff Reports

A graduate student at the University of Nebraska-Lincoln attempted suicide Wednesday night.

According to Lt. Ken Cauble of the University Police Department, the student overdosed on non-prescription pain pills. Cauble said the Selleck Hall resident was walked around by friends until an ambulance arrived.

The student was admitted to a hospital, but no information was available on the student's condition.