

advertisement

INFORM CUSTOMERS AND GENERATE SALES

Auto Pilot

Publishes Every Friday in the **Daily Pilot**

FOR MORE INFORMATION
CLICK HERE



Daily Pilot

Newport Beach and Costa Mesa, California

REAL ESTATE | RENTALS | JOBS | AUTOMOTIVE | CLASSIFIEDS

March 04, 2005

- [Home](#)
- [News](#)
- [Sports](#)
- [Business](#)
- [Education](#)
- [Opinion](#)
- [Politics & Government](#)
- [Columns](#)
- [Entertainment](#)
- [Calendar](#)
- [Features](#)
- [Public Safety](#)
- [Religion](#)
- [Obituaries](#)

- [Classifieds](#)
- [Real Estate](#)
- [Rentals](#)
- [Jobs](#)
- [Automotive](#)

- [How to Subscribe](#)
- [Contact the Daily Pilot](#)
- [Customer Service](#)
- [Display Advertising](#)
- [Classified Advertising](#)
- [DBA Advertising](#)
- [Media Kit](#)

- Other TCN Papers:
- [Burbank Leader](#)
 - [Laguna Beach](#)
 - [Coastline Pilot](#)
 - [Huntington Beach](#)
 - [Independent](#)
 - [Glendale News-Press](#)

LOS ANGELES TIMES

EDUCATION

Published March 1, 2005

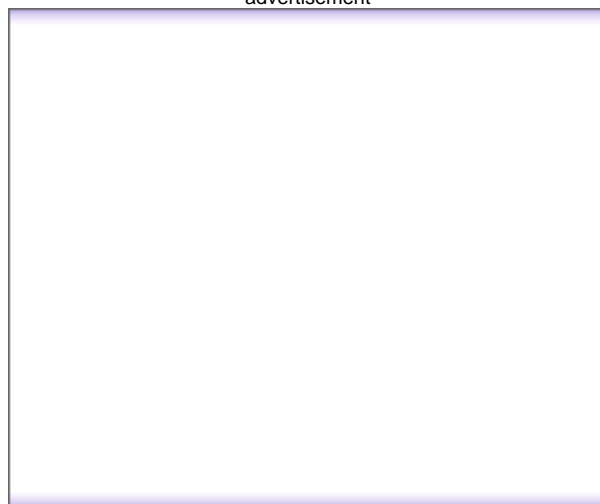
Rodent-brain research grant: \$45,000

• Being one of three UCI researchers to win a Sloan Research Fellowship with almost no limits on what you can study: priceless.

By Andrew Edwards, Daily Pilot

Three members of UC Irvine's Center for Complex Biological Systems have won what just about any young professional would want -- thousands of dollars without any strings attached.

UCI announced Monday that three researchers, Natalia Komarova, Frances Chance and Thorsten Ritz were among 116 academics nationwide to be awarded Sloan Research Fellowships.



advertisement

MORE STORIES

- [School gets award nomination](#)
- [School leader to take on new post](#)
- [Girls Inc. doles out dough](#)
- [Drug-sniffing dogs to search schools](#)
- [Singing in the key of 'Annie'](#)

Ritz said he and his colleagues were given \$45,000 grants they can spend on any research projects they choose.

"Since it is one of these awards that give you more leeway to use the funds, I will use it for projects that are -- how do you say -- risky," Ritz said.

The Alfred P. Sloan Foundation has awarded fellowships to younger scientists since 1955, and Ritz, a 33-year-old physicist, plans to study how animals

can sense the earth's magnetic field. Ritz said birds have an ability to sense

magnetism, but he wanted to find out if another organism had similar abilities, though he did give any more specifics.

"Other people may get ideas," he said.

Ritz said the fellowship provides him more freedom than other grants because he is not under pressure to provide results quickly. His research could be considered more risky than other projects, he said, because, scientists have not compiled a lot of data on his topic.

Komarova, 33, uses mathematical models and concepts of evolutionary biology to study cancer treatment. Her research takes a theoretical approach, using paper and pencil more than lab tools.

"I don't have, mice and I don't have petri dishes," Komarova said.

One application of Komarova's research, she said, is to calculate the probability that a cancer cell would resist a type of medication. She said her work can be applied to help doctors develop a drug cocktail that could defeat malignant cells.

Chance, 31, uses slices of rodent brains, mixed with a bit of scientific theory, to study attention and how the brain processes information in different environments.

"I'm interested in how circuits compute," Chance said.

She said her studies could be used to understand attention-deficit disorder better and develop electronic-image-processing technology.

"I think there might be uses for computer vision, because some of our work focuses on vision processes," she said.

Another benefit of her studies, she said, is the value of learning more.

"It's just cool to know how the brain works," she said.

* ANDREW EDWARDS covers business and the environment. He can be reached at (714) 966-4624 or by e-mail at [andrew.edwards @latimes.com](mailto:andrew.edwards@latimes.com).