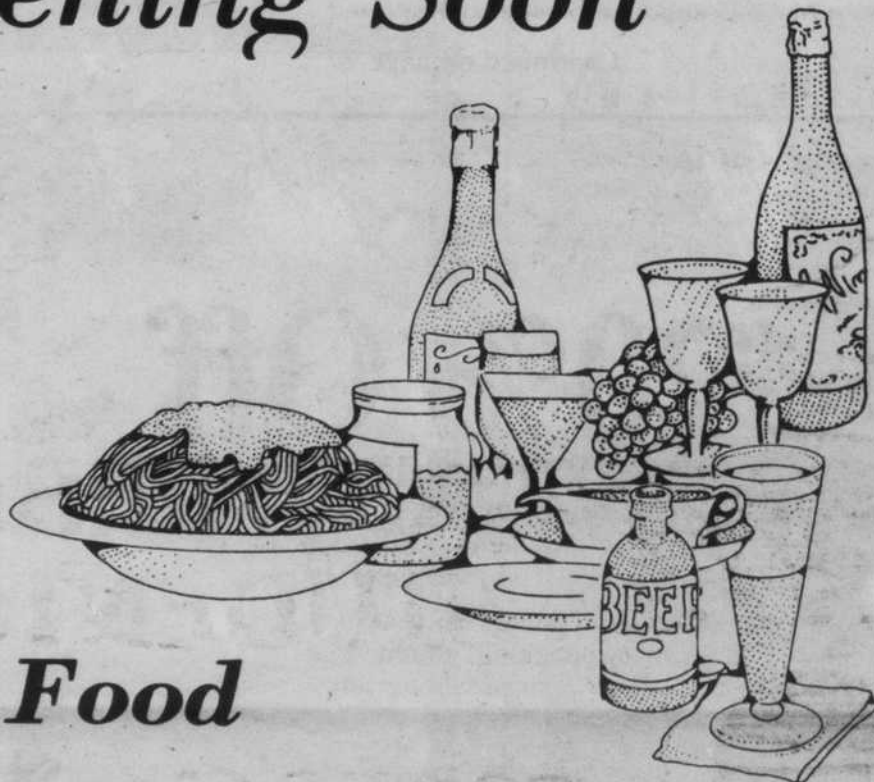
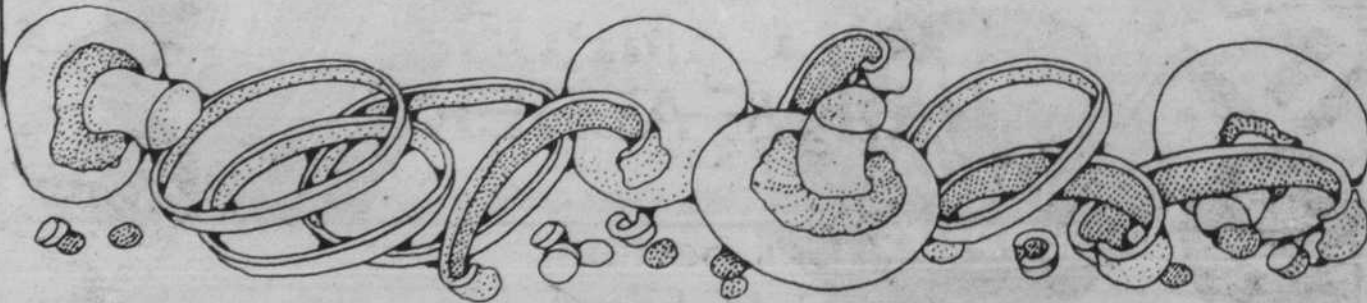


Watch For GUIDO'S Opening Soon

*Beer,
Wine
and
Italian Food*



13th & Alder (formerly Duffy's)



Three students chosen presidential scholars

The final three recipients of \$1,000 Presidential Scholarships for study at the University beginning this fall have been chosen.

The selection of Alice Blankenship of Eugene and Mark Emerson and Wayne Skill, both of Salem, brings to 50 the number of Oregon's most outstanding high school graduates who are receiving the grants which are renewable for up to four years. The other 47 winners were announced in June.

More than one quarter of the first Presidential Scholars have straight A averages and all exceed the 3.75 minimum GPA. In addition, each has demonstrated leadership in extracurricular activities and community service.

Selection was based on each student's achievements, personal statement of educational and career goals and recommendations. More than 625 students were nominated for the scholarships by 129 high schools

throughout the state.

Up to 50 of these nominated but not picked will be offered \$100 textbook scholarships for fall term by the University Bookstore, says James Williams, general manager.

"The bookstore's directors, who approved making these grants, realize that the University's ultimate success is contingent on the enrollment of as many high quality students as possible," he says. "This effort is consistent with our policy of support for academic excellence."

Those to be offered the textbook scholarships will be notified by mail before fall term begins in September, Williams says.

The Presidential Scholarships are funded by donations to the University foundation by private individuals and foundations. When the program is in full operation in four years, the University expects to be awarding 200 scholarships a year.

Research Continued from Page 7

among nonartists, but O'Connell is convinced that any subject would benefit from visualizations.

To test his theory, he has offered classes to non-art majors.

"It increases people's perceptions. It makes them more sensitive to the visual information available to them," he says. "People are shocked to find out how much they are not looking at things."

Many fields can benefit from visual thinking. Pre-visualization techniques are already used in some areas. For example, an athlete might picture himself winning a race or a surgeon might picture herself doing a complex operation.

The increasing power of computers is going to help visual thinking develop, he says.

It is no accident O'Connell is heavily involved in computer graphics. It is a natural progression from pictures on paper to pictures on a screen.

Using computers, architects can see buildings, physicists can use a simple chart to summarize complex material and artists can create new art forms.

The vast memory of computers gives them an advantage in storing pictures, although the computations can be quite complex. For example, clouds may take up to 1,000 calculations per point in the image.

But the advantages are immense.

If an artist paints a particular landscape it may take about 30 hours, about what it would take to do a computer program. If the artist wants to see another angle of the same scene, it would take another 30 hours to paint the picture. The computer can rotate around the whole scene in a matter of minutes.

People need to see things visually in order to understand complex ideas, he says.

"We are real visual animals."

Karen Sprague bends over the tubes of DNA as she carefully takes the minute amount of blue-dyed liquid and spreads it onto the piece of glass. Once she has all of the samples on the specially treated material, it will only be a couple of hours until she knows if she has successfully made a new kind of DNA.

Sprague, a biology professor, is studying silkworm genes to discover how they turn on and off.

What makes genes turn on and off is important because all genes do it, she says. Silkworm genes are easier to study because when they turn on and off there is a tremendous difference.

In bacteria, the controlling region is upstream from the gene and she is testing that idea with the silkworm.

Because silkworm genes are similar, if not identical, to human genes, any findings may have direct application to human gene disorders.

Molecular biology is a competitive field and most people involved heavily in research do little classroom teaching. Sprague teaches only one class a year, but she works closely with several graduate assistants.

"There is a lot of teaching outside the classroom — some of the most valuable teaching," says Sprague.

A major part of research is publishing, she says.

"You don't do research to keep it in your notebook and not tell anyone. You tell everyone so you can go on to new things," she says.

If the experiment she just did doesn't work, Sprague will try to diagnose the problem and rethink all the preliminary steps.

"When an experiment comes out the way you don't want it to, the natural inclination is to be depressed," she says. "But you should be excited. You may be on the verge of discovering something exciting that you haven't anticipated."

"As long as the questions are worth answering I'll keep going."

Monday, September 19, 1983

SUNDANCE
Natural Food Store

LOCATED ON THE CORNER
OF 24th & HILYARD, EUGENE

- Bulk Foods •Herbs & Spices
- Vitamins & Supplements
- Exotic Herbs
- Imported Wine & Beer
- Large Cheese Selection
- New Age Books •Natural Cosmetics

OPEN daily 8 am-11 pm

343-9142

10% OFF WITH THIS AD

Expires 10/1/83 Limit One Per Customer

**RAINBOW
PRODUCE**

- Featuring Local and Organically Grown Fruits & Vegetables
- Many Unusual Items
- Bulk Sprouts
- Huge Selection
- All Fresh & Delicious

OPEN daily 8 am-11 pm

345-6153

10% OFF WITH THIS AD

Expires 10/1/83 Limit One Per Customer