

CORNELL  
UNIVERSITY

## STATION NEWS

GENEVA  
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APRIL 19 - 26, 2002

## BRIEFS

Arbor Day  
Ceremony  
2002

This year's Arbor Day Tree Ceremony will honor the memory of George Mittak. The ceremony will take place on the South Lawn of Barton Laboratory at 3:30 pm, on Friday, April 26. A red maple, 'October Glory', will be planted in memory of George, a long time member of the Department of Plant Pathology. George's friends and colleagues donated the funds for this planting. The campus' Geneva Arboretum Association has been coordinating the event with Buildings and Properties; (greenhouse and grounds crew) George's colleagues, his family, and Director Jim Hunter. We hope to see a great turnout, so please come.

*M. Goffinet, Chairman, Geneva Arboretum Assn.*

Volunteers Needed for 3rd Annual Earth  
Day Clean-Up at the Station

Earth day is April 22nd, and the Station is going to celebrate by helping the Arboretum Association replace worn tags on Station plantings and clean Station grounds on April 26th from 2:30 - 3:30 pm. Volunteers are needed. One of them could be you. Please ask permission from your supervisor and then email Gemma Osborne at gro2@cornell.edu if you want to sign up for this event.

*(Continued on page 2)*

The Use of Electronic Images: Legal, Moral and  
Ethical Considerations, Part I

**"Only one thing is impossible for God – and that is to find any sense in any copyright law on the planet....Whenever a copyright law is to be made or altered, then the idiots assemble"**

*Mark Twain*

The legal, moral and ethical issues associated with digital photography, scanning and the use of images found on the WWW are complex. This article attempts to answer queries to Communications Services on the subject from Dave Rosenberger of the Hudson Valley Lab, and pertains to image use by Station researchers in slide presentations, particularly.

Like many laws in the United States, copyright law had its origins in England, when, in 1710, the British Parliament enacted "The Statute of Anne." Eighty years later, the United States Congress enacted the Copyright Act of 1790. Major revisions were made in 1831, 1870, 1909 and 1976 and came about for various reasons. They included broadening the scope of what is covered, changing the term of a copyright, and taking into consideration new technologies. The 1909 revision, for instance, broadened the scope of categories protected to include all works of authorship and extended the number of years of protection, and two important sections of the 1976 revision extended copyright protection under certain circumstances to radio and television broadcasts and allowed library photocopying without permission for purposes of scholarship.

Copyright law throughout its history has always been difficult to understand, interpret, and apply. Peter Hirtle, Director of Cornell's Institute for Digital Collections, in a recent lecture on Copyright Law and Distributed Learning, characterized copyright law as "a quicksand and something that defies all logic."

John Barlow says in *Wired*, 1994, that "As a result of the new technology, everything we think we know about intellectual property is wrong." Also, in 1996, Anne Fujita writes in the *Journal of Technology and Policy*, that, "There is no doubt that the new technology of digitization will have a profound effect on copyright law." In that same year, John Pavlik writes in *New Media Technology* that, "Earlier generations of technology have presented challenges to existing copyright law, but none have posed the same threat as the digital age."

On October 12, 1998, the U.S. Congress passed The Digital Millennium Copyright Act (DMCA) and, two weeks later, President Clinton signed the measure into law. *Educause: Current Issues*, a web-site out of Washington, DC, identifies as key among the topics included in the DMCA are "the provisions concerning the circumvention of copyright protection systems, fair use in a digital environment, and online service provider (OSP) liability including details on safe harbors, damages, and 'notice and takedown' practices."

**The Questions**

As a photographer, I am neither a lawyer nor scholar in copyright law. To attempt to read, digest and assimilate all that is available from the Internet and otherwise on this topic proved to be a daunting task, so I sought advice and enlightenment from two sources: Cornell University Associate Counsel Patricia McClary, and two members of the BioCommunications Association who have dealt with these issues extensively, Charles Hedgecock who is a Senior Research Specialist and photographer for the Arizona Research

*(Continued on page 2)*

*(BRIEFS, continued)*

## UNITED WAY CAMPAIGN CONTINUES

It is not too late to show your support and "participate" in the Station's United Way Campaign. "Our" Campaign will continue through Friday, April 26, 2002. Participation is the focus of our campaign this year. If you've never donated in the past, even a pledge of \$1.00 per week can help people in need - people that you know, people that you work with, people in your community. The "People" in Buildings and Properties know this and have demonstrated their support by raising their participation level to 62%. This is outstanding when you compare to the Station's overall level of 27% last year! In fact, B&P's employee participation has doubled, from 14 last year to 29 this year! Please help your Department, your friends, your co-workers and your community by participating today!

### ATTENTION:

**If you cancel a meeting at a Geneva campus location, please have the courtesy to cancel it in Corporate Time as well so the custodians do not spend time setting up rooms for non-existent meetings. Also, please call Gemma Osborne, ext. 2248.**

We could learn a lot from crayons: some are sharp, some are pretty, some are dull, some have weird names, and all are different colors....but they all exist very nicely in the same box.

*(ELECTRONIC IMAGES, continued)*

Lab's Division of Neurobiology, University of AZ, Tucson and Tom Owoc, a photographer at Wayne State University School of Medicine. In this first of a two-part series, we will deal with the responses to Dave Rosenberger's questions from the two photographers:

**#1** - Should photos used in PowerPoint presentations always include credits to the person who took the photo? What if it comes from a web-site where the ownership is unclear? If the person gave me the photos and said I could use them, do I still need to credit them?

**Charles Hedgecock (CH):** When someone uses a chart, graph, table or other illustration from your work, don't they reference you? This is something you should do without having to be asked—a small favor for the photographer who is allowing you to use their image. As for web-sites where the ownership is unclear, check with the owner of the web-site to be sure they have the rights to the image in the first place.

**#2** - Is giving credit on the photo good enough, or does one need written permission for each use?

**CH:** For educational or personal use "probably not," but asking the photographer will clear this up.

**#3** - Where credits are required, what is needed? Just the person's name at the bottom of the photo?

**CH:** This will be answered by the photographer when you get permission and ask "How would you like the photo credit to read?"

**#4** - Are requirements for a one-time Extension presentation different than they would be for presentations that I might make as a consultant hired by a chemical company? Different than for posting on a web-site? Different than for print media?

**CH:** This is between you and the photographer. What if they don't like that "chemical company" and would be offended by the association? You'll find out when you ask, and, in the case where you are being paid, consider whether they shouldn't be getting paid as well?

**#5** - Provided the source is acknowledged in the presentation, is it legal or ethical to use a digital photo of the front of a magazine cover or of newspaper headlines without express permission of the publisher?

**CH:** Acknowledging the source should cover you, but perhaps Cornell's own legal team could better handle this question.

**#6** - In my own photos, should I always superimpose my name (using PhotoShop) in the lower corner of photographs I use on the web or in shared PowerPoint files so that ownership will be transmitted with the photo, or is that approach presumptive or arrogant?

**CH:** For your own talk, it might be a bit much. If you are concerned that the image may wind up in the wrong hands, having your name as part of the image shows ownership, and, if removed by someone, shows a blatant attempt to circumvent copyright law.

In a separate e-mail; Hedgecock offered this advice: "I sometimes ask people to substitute the words 'Photo on the web' with 'Car with the keys in it.' Thus: 'I found a car with the keys in it, can I just take it? Or should I find out who owns it and ask first?'"

### Tom Owoc's Thoughts:

•As a photographer, I appreciate when someone gives me a photo credit, even though my university technically owns the copyright to any image I produce during work. This brings up an important point: the moment you snap the shutter you, or your institution, owns the copyright regardless of whether it's registered, watermarked or "signed" in any way. Period.

*(Continued on page 3)*

## Not Just Tang, Anymore

As the United States and the other countries of the world explore the outer reaches of space, they need to overcome many challenges, not the least of which is how to feed a team of astronauts for the extended period of time required for long duration space travel and exploration. Because the cost of transportation of food exceeds thousands of dollars per pound, NASA is researching ways to make food production and consumption in space as efficient as possible. To help address these challenges, food scientist Malcolm Bourne was recently invited to attend a NASA Advanced Food Technology workshop, held April 3-5, at the Center for Advanced Space Studies in Houston, Texas.

NASA's goal was to collect data and information that they can use to develop a focused research and technology development strategy for food processing, safety and storage for long-duration space missions. For instance, astronauts on the Mars colony mission projected for the year 2022 will need enough food for the six-month trip to Mars, the two- or three-year stay, and the six-month return trip. Thus, NASA needs to solve the problem of how to stabilize food for four or five years.

To further complicate matters, astronauts are extremely busy in space, working up to 14-hour days. The challenge is to find food that is easy for them to store, easy for them to prepare, and tasty enough for them to eat. Dinner cannot float off in zero gravity, must be quick to prepare, cannot be messy, must be spill-proof, nutritious, and ultimately, and ideally, made from something that can be grown and stored in space. All of this must be done without the aid of a horticultural scientist, or a cook, because space crews are small in number, and require many multi-tasking skills. The current thinking is that astronauts will grow their own soybeans, wheat, tomatoes and other fresh vegetables on their space vehicle, and station. That leaves the question of how to store these foods in a hostile climate such as Mars. This is where Bourne's expertise comes into play.

Bourne is an authority on canning, freezing and drying of fruits and vegetables and in post-harvest storage of foods, which is why NASA invited him to attend. He and 20 other scientists brainstormed ideas. "I pointed out it is possible to store whole grains much longer than processed grains or foods preserved by drying or canning," said Bourne. "For instance, whole grains of wheat or rice can be stored for 30 years and still be of edible quality." Bourne also told NASA they must strive for an absolute quarantine loading situation on Earth so no rats, mice or insects get onto the spaceship. "This quarantine will help make the problem of food storage much easier," said Bourne, who also noted that the technology is available to irradiate, fumigate, heat or freeze food to kill insects that may be present.

While at the workshop, Bourne met with astronaut Dr. David Wolf, who has been on several

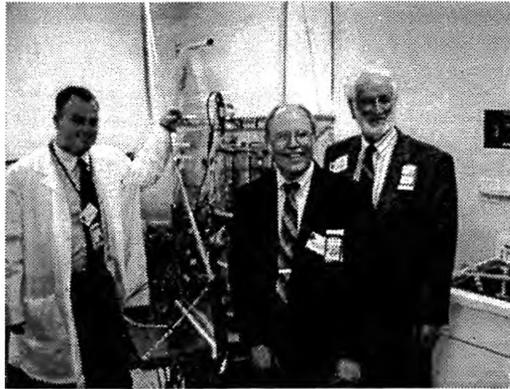
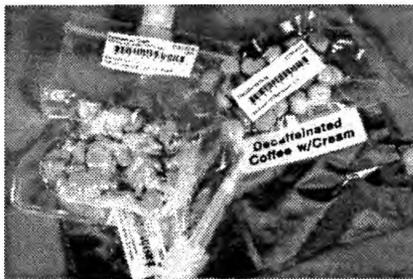


Photo taken in NASA lab, (Left to right) Dr. Steve French of NASA Staff, Dr. Lester Wilson from Iowa State University and Malcolm Bourne.



Some food items that are literally "Out of This World". (Upper left) Au Gratin potatoes to be re-hydrated in space, and macadamia nuts (upper right). The foil package underneath contains instant coffee to which water is added and then sipped through a straw-like device (bottom center of the photo).

(ELECTRONIC IMAGES, continued)

•It is legally sufficient if someone gives you verbal permission to use their images, but it's better to get it in writing "just in case". And if, for example, someone submitted an image to be included in a shared or online database, anyone who uses that image has "implied consent". However, I believe it is always proper to include "(©symbol) John/Jane Doe" if you know who created the image. It's good for business too. The next time they may not grant permission if you fail to acknowledge them.

•Acknowledging your sources, like footnoting a research paper, is generally sufficient to insulate you from ruffling feathers. If it's for informative or educational purposes, and does not result in personal (monetary) gain, you should be okay. But, keep in mind that private universities with "big pockets" are a little more susceptible to lawsuits than "poor" state-funded universities.

•If you're worried about protecting your own images—use the digital watermark in PhotoShop: FILTER>DIGIMARC>EMBED WATER-MARK...

If your name is superimposed in the image it would be easy enough to remove or crop out. Regardless, you own the copyright whether it's indicated or not. Also, always save your original digital camera file. If push ever comes to shove in court there is metadata from the camera imbedded in the file that can help prove it's your (or, at least, your camera's) photograph.

•When in doubt, whenever possible, contact the source for permission. And, to be safe, if you don't have permission, don't use an image—no matter where it came from—if you stand to profit from it in any tangible way.

J. Ogradnick

Part II of "The Use of Electronic Images" will include a response to Rosenberger's questions by Patricia McClary, Associate University Counsel, a discussion of "Fair Use" (that section of the law that is most relevant to all this), and some useful web-sites that detail more fully some of the topics discussed in this article.

(Continued on page 4)

**CALENDAR of EVENTS**

APRIL 19 - 26, 2002

**MEETINGS**

**CALS CHAIRS**

**Date:** Tuesday, April 23, 2002  
**Time:** 3 PM  
**Place:** 264 Roberts Hall

**GENEVA DEPARTMENT CHAIRS**

**Date:** Wednesday, April 24, 2002  
**Time:** 2 PM  
**Place:** Director's Office

**SEMINARS**

**PLANT PATH**

**Date:** Tuesday, April 23, 2002  
**Time:** 3:30 PM, Coffee at 3 PM  
**Place:** Room A130, Barton Lab.  
**Title:** "Using Advanced Internet Technologies to Facilitate Information Exchange on Soil Management"  
**Speaker:** Phil Arneson, Dept of Plant Pathology, Ithaca

**FOOD SCIENCE**

**Date:** Wednesday, April 24, 2002  
**Time:** 10:30 AM  
**Place:** FST Conference Room, Second Floor  
**Title:** "Supercritical Fluid Extrusion (SCFX): Principles and Applications"  
**Speaker:** S.S.H. Rizvi, Ithaca

**LTC**

**Date:** Wednesday, April 24, 2002  
**Time:** 11 AM-4:30 PM,  
**Place:** LTC  
**Title:** Open Lab/FLEX Tutorials  
**Facilitator:** Jane Irwin

**FITNESS**

**Aerobics**

**Date:** Monday and Friday  
**Time:** 12:10 - 1 PM  
**Place:** Sawdust Cafe

**Taekwondo Class**

**Date:** Monday, April 22, 2002  
**Time:** 12:10 - 1 PM  
**Place:** Jordan Hall Lounge

(FITNESS, continued)

**Taekardio Class**

**Date:** Wednesday, April 24, 2002  
**CANCELLED**  
 No Location Available

**CLASSIFIED**

**HELP WANTED:** Need part time work? Billsboro Winery is looking for people to staff its sales room. Thursday - Sunday afternoons. Must be at least 21 years old. Call 789-9571 or e-mail: rmp2@cornell.edu

**FOR SALE:** Used Tonneau Cover for Chevy S-10 reg. box. Excellent Condition \$100 or best offer. Contact Lou Ann at B&P ext. 2301 or 585-526-6620.

**FOR SALE:** 1995 Oldsmobile Cutlass Supreme. \$3,500. Good condition, very clean with 86,000 miles. Tires are two years old and brakes were done last year. \$3,500. Contact Susan Sheffer, X2391 or email sms4@cornell.edu

**FOR SALE:** 1995 Geo Prizm Sedan. 4D, red, automatic, air conditioning, cruise control, mileage 91,000. \$3,900.00. Please feel free to check it out at the Surge Lab parking area or contact me by e-mail: ca33@cornell.edu, or find me in Surge Lab office 109B.

**FOR SALE:** 1994 Transport. 96,000 miles. Very clean with power steering, power brakes, passenger side power sliding door, fiberglass body, no rust. No salt Florida car, stored in a barn. Just completed full service checkup. \$6500. Contact Tim Dreyer at 607-582-6690 or e-mail trd26@cornell.edu

**BEACH HOUSE RENTAL:** Beautiful location, southwest shore of Canandaigua Lake. Getaway, golf, fish, relax. Canoe and rowboat included. By the week or weekend. Suitable small family/two couples. Off-season openings (and off-season rates!) remain in June, September and October. Serious inquiries only. elg2@cornell.edu

**PEOPLE**

**Congratulations to**

Ann and Pete Griner on the birth of Jonathan Theodore, born on April 12, 2002. Also to Keith and Edwina Czadzeck on the birth of their son Luke, born on March 23, 2002. Both babies were born at Geneva General Hospital.

**Perennial Plant Exchange**

Saturday, May 4th, 10 am - Noon

Experiment Station Pavilion

Bring divisions of your favorite perennials.

Come at 10 am to set up your plants.

The exchange will begin at 10:30

Refreshments will be served  
 \$1 donation requested to help cover expenses.

If you have any questions, call Rixana @ 2246 or e-mail at rp14@nysaes.cornell.edu

(TANG, continued)

space missions and spent 130 days on the MIR Space Station. He shared with Bourne and the other scientists some of the trials and tribulations of eating food in zero gravity. Wolf told of a problem he had while working with the Russians on MIR when he was drinking juice from a package that sprang a leak. Purple fruit juice squirted out into the space station, and took on the shape of a blob that was very tricky to catch. Escaped liquids or food particles or even crumbs can clog up instrumentation and cause serious problems. Wolf's story helped illustrate the importance of good food packaging design in space.

Bourne also brought back samples of food packs used by the astronauts. The food is dehydrated so it weighs next to nothing, and then rehydrated in space with water created as a byproduct of combining the hydrogen and oxygen that powers the fuel cells. The food packs and the utensils are coated with a velcro strip so they adhere to the food trays and won't float free.

Bourne, who retired in 1995, and is now a Professor Emeritus, does not have an active project with NASA. However, he still organizes the course, Food Science 447, "International Postharvest Food Systems" at Cornell each Fall semester and is active in writing, lecturing and consulting on food storage, food texture and fruit and vegetable processing technologies.

More on "Food in Space" may be found at the NASA web site at:

<http://www.cdsc.nasa.gov/csc/exhibits/food.htm>

J.Zakour

**Walk America**

Sunday, May 5, '02, 1 PM

If you're interested in participating in the walk (at the lake on an especially nice day) or in giving to this cause, please contact me! I will provide you with a registration card and more information. If you have already registered for the Walk, please let me know so I can add you to my list of walkers. Thanks!

Also, did you know that if you give to the United Way through payroll deductions at work, you can designate your entire donation or a portion of it to go to the March of Dimes?

**Join the Station Team for the Walk that counts! Contact Kathy DeRosa, kad2@cornell.edu, x-2236**