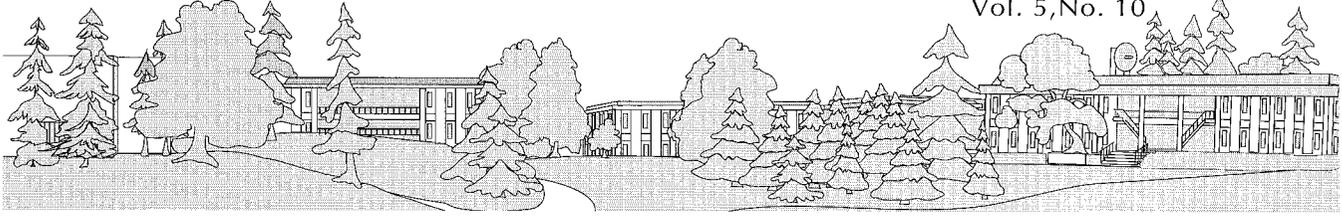


# The Interaction Point

Events and Happenings  
in the SLAC Community  
October–November 1994  
Vol. 5, No. 10



## FAMILY DAY 1994—WHAT A FUN DAY!



Tom Nakashima

### by Karen McClenahan

Family Day on October 8 was an outstanding success, attended by approximately 2,500 employees, users, contractors, and their friends and families. Old favorites, such as the game booths and dunking tank, were joined by several new events for all ages. The smallest children were entertained in Fun City, where they were kept busy with crafts and games, or they patiently waited in line to ride the ponies nearby. Older children and adults

valiantly projected themselves from the Human Accelerator, only to be whipped back each time by long bungee cords. The Sports Bar and Fan Club in the Breezeway featured premium beer on tap and wide-screen TVs showing continuous football games and sports bloopertapes, while adults and children alike crowded into the auditorium to scream during *Jurassic Park*. All day, everyone enjoyed the free food, cotton candy, soda, and especially the popsicles, since the day was very hot.

Ten volleyball teams from various SLAC departments competed. The championship was decided in three games between Alfonso Pacheco's defending champion team, Mexico, and Noe Figueroa's team, the Eagles. The Eagles won, taking two out of three games. Noe, who works in Document Control, will share the trophy with his teammates, who are from his church. Congratulations to all the volleyball players for such a great tournament.

See **Family Day** Continued on page 8

# Kaye Lathrop—Rounding the next corner

NO ONE would deny that Kaye D. Lathrop is a complex man. In 1976 he received the E.O. Lawrence award for developing methods to solve the neutron transport equation, knowledge that eventually came to be used world-wide. In 1980 he was presented with the American Nuclear Society Exceptional Performance Award. And just a few years ago, this same man completed the Markleeville Death Ride, a bicycle marathon described in the October 1990 issue of this publication. The treasured prize for finishing this ride was a five-pass pin which exhibited a scarlet skeleton on a black background. It looks “rather like satanic cult jewelry” as the winner tells it; he wears it proudly on the front of his bike helmet.

At a party in the Breezeway on October 28, SLAC thanked Kaye for his years of service to our organization. Kaye held the position of Associate Director of the Technical Division for ten years and has most recently filled the job of Associate Director at large by heading up the ES&H Coordinating Council, among other duties. On December 1 he will receive the official title of Professor at the Stanford Linear Accelerator Center (Applied Research), Emeritus.

When Kaye came to SLAC in October of 1984 from Los Alamos, he looked forward to helping build the SLC and make it a technical success. He also hoped to strengthen the Technical Division and to make it a more capable, competent, and responsive organization that could be proud of its work. He is pleased with the results, as well he should be.

During his tenure as Associate Director of the Technical Division, Kaye also taught graduate physics courses at Stanford, most recently instructing “incredibly demanding” students in classical mechanics for physics majors—a feat he found challenging because he had never had such a course! He explains that he “started teaching as sanity-restoring therapy” but acknowledges that the interactions with the Stanford students proved to be very rewarding. His office staff knew that “Kaye’s students” were on the list of potential callers who should be put through to him immediately. His teaching added many hours of class preparation to his already full day, but his step was lighter when he headed off to campus than when he was heading to one more meeting in the Yellow Room.

So it’s no surprise that Kaye



**Kaye Lathrop**

says he and his wife Judy will undoubtedly both teach in some capacity after their house is finished in Colorado. Kaye will also continue serving on various advisory and review committees, but he’ll leave plenty of time for hiking, biking, and skiing. He even plans to get a senior season pass at Telluride! Kaye relates that “many people ask us what we are going to do, as though finding something to do was a very difficult chore. What is difficult is being free to choose what you do, and we are looking forward to that.” We wish you well, Kaye, as you round the next corner with your five-pass amulet bringing you only the best of fortune!

—Janice Dabney

## Correction

Authorship of the article “How to stop a phone phreak and protect your voice messages” in the September *Interaction Point* was incorrectly attributed to Ute Hayes. The author was Brenda Eberle, of Telecommunications.

—Ilse Vinson

## Babar Group formed

I AM PLEASED to announce the establishment of a new group within the Research Division, effective October 1. The new group, called the BaBar Group, has responsibility for managing the design and building the detector for the B Factory. It will be led by Professor David Hitlin of Caltech,



who has a distinguished history of collaboration in SLAC projects and who has contributed valuable direction to the B detector program since its inception. Please give Dave and his team your full and enthusiastic support.

—David W.G.S. Leith

*The Interaction Point* © 1994, is published by Information Services of Stanford Linear Accelerator Center. Editor: Evelyn Eldridge-Diaz. Staff Writers: Ray Isle and Jill Mhyre. Photographs: Staff. Deadline for articles is the first of every month. Items are published on a space-available basis and are subject to edit. Submissions may be sent electronically to TIP@SLACVM or by SLAC mail to TIP, MS 68. Phone 926-4128.

# Romance alive and well at SLAC

AUGUST SAW THE WEDDING of two SLAC employees, Heidi Fairfield Berndt of the Housing Office, and Martin Berndt, who retired in August, but for the past twenty-six years worked as an electrical engineer in the Power Conversion Department.

Heidi and Martin first started spending time together a few years ago. Heidi had just weathered a particularly painful divorce, and Martin's wife Barbara had died very suddenly in 1989. Heidi and Barbara had been friends, and she knew Martin slightly since they both sang in the Trinity Lutheran Church choir in Palo Alto. Heidi remembers, "At the time, all I knew was that he was the guy who always came late to choir rehearsal and stood in the back—he was always rushing over from his work at SLAC."

After Barbara's death, Martin and Heidi spent some time together, "having conversations along the lines of, 'How does one put one's life together after such a big loss?'" They soon became close friends, finding comfort in one another's

company. "Martin had season tickets to the theater and I had season tickets to the symphony," Heidi says, "so eventually we started going to both." Several years went by before the memories of the past had faded enough for either one of them to think about falling in love again, but in time what had started out in sympathy and friendship blossomed into romance.

The wedding took place on August 20 at the Bethany Lutheran Church in Menlo Park, with many relatives and friends from SLAC in attendance. Afterwards, a reception was held at the Stanford Park Hotel, with "lots of food and lots of dancing," Heidi says. "Ute (Hayes) and Toni (Campos) of Housing started off the dancing—I told them to get out there and get these

Lutherans on their feet!" Also present were Martin's hiking buddies from PCD and Årsella Raman of the SLAC library, who first invited Heidi to come sing at Trinity Church over fifteen years ago. "And Årsella's responsible for everything," Heidi says, "because that's where I first met Martin."  
—Ray Isle



Heidi Fairfield Berndt and Martin Berndt

## What you can do about lost or stolen property

OCCASIONALLY, SLAC-owned and personal property is lost or stolen, and often this property is never recovered. These losses cost SLAC or the property owner time and money. Some items, like a computer hard drive filled with data files, are irreplaceable.

SLAC employees can help protect SLAC-owned and personal property by using office and work-space door locks and equipment tiedowns, and increasing their awareness of the work area. For example, it is a good idea to ask strangers in your work area if you can be of assistance. This enables you to assist people who have SLAC business more quickly, and deter those who don't. In general, do not allow strangers to remove equipment from your work areas. Protect property from theft or unauthorized removal. Be aware.

### SLAC-owned property

When you first realize that a SLAC-owned item is missing, check with office co-workers to determine whether the item was moved or is in use. This should be done within an hour

of the item's disappearance. If no one has seen the item, notify the Laboratory Protection Manager (ext. 3317). He will dispatch a Security Officer to complete a "Missing" or "Stolen" incident report. If the missing item is found, the report will be closed and retired. If the item is presumed stolen, the report will be forwarded within 24 hours to the Administrative Services Office of the Business Services Division.

### Personal Property

Stanford University does not assume liability for personal and other non-SLAC property. If you experience the loss of personal property at SLAC, Laboratory Protection will conduct a preliminary investigation and provide information to the San Mateo Sheriff's Department if requested. However, it is the property owner's responsibility to notify the San Mateo Sheriff's Department. To report a theft, call either (415) 363-4911, or call the SLAC Main Gate at ext. 2551, and security personnel will be able to provide you with the appropriate number to call.  
—Rick Yaeger

# 9000 dead Finns can't be wrong—or can they?

## ANTIOXIDANT VITAMINS?

What are they? What will they do for you? And what about that study done in Finland that says they're a terrible idea? These questions and more were addressed at a SLAC New Options for Wellness lecture in September. The guest lecturer was Michael D. Pierce, D.C., a local expert on nutritional concerns.

Antioxidants themselves, in some forms, are a natural part of our body's immune system. During the process the body uses to produce energy, certain free radicals, such as O<sub>2</sub><sup>-</sup>, O<sup>-</sup>, or OH<sup>-</sup>, are produced as well, by-products of oxygen's role in the system. These free radicals can damage the integrity of your body's cells, causing a kind of internal rust. Antioxidants in the body are produced in the liver, and fight against this process; the antioxidant essentially donates one of its electrons to the free radical, preventing the radical from stripping an electron from a vital cell structure instead.

By taking vitamins with antioxidant characteristics, we can strengthen the body's immune response, helping to prevent disease and stress. At this point, you may be wondering, well, what exactly are these antioxidants? The answer is simple: the most important of them are vitamins you've certainly heard of before. Vitamin A, beta carotene, vitamin C, and vitamin E are the

four most important antioxidants. Others include selenium, a mineral; glutathione, one of the antioxidants occurring naturally in the body; and L-Cysteine, an amino acid.

At the lecture, Dr. Pierce pointed out that, in his opinion, within fifteen years we will undoubtedly take the benefits of anti-oxidants for granted, much the way we take the benefits of fiber for granted now. His suggestions for an optimum dose of the vitamins in question are shown in the table below. It should also be noted, however, that the benefits of mega-doses of vitamins such as those mentioned here are still unproven; different studies have produced different results. While it's pretty clear that 3,000 mg of vitamin C per day won't do you any harm, there's also some question as to whether it will actually do you any good.

What's not under discussion at all, though, is that a diet high in fruits and vegetables is good for your body in any number of ways. The recently released Department of Agriculture "food pyramid" recommends, for example, two to four servings of fruit per day, and three to five of vegetables. Dr. Pierce himself recommends a diet including two carrots per day (for beta-carotene and fiber), two oranges per day (vitamin C and bioflavonoids), two apples (they help clear out the liver), and one banana (potassium)—plus additional servings of

other vegetables. He did admit that most people might find this a bit much, but the essential point remains that it's almost impossible to have too many fruits and vegetables in your diet. (One carrot, for example, will provide you with 10,000 iu of beta carotene—almost the entire amount recommended by Dr. Pierce.)

And what about that study done in Finland, the general gist of which was "don't take antioxidants, they cause cancer?" Well, as Dr. Pierce pointed out, in that study the 9,000 Finnish men tested had all smoked at least one pack of cigarettes a day for the past 36 years. The men were given high levels of vitamin A and vitamin E, but they weren't given selenium—which plays a crucial role in the absorption of vitamin E into the body. And finally, at high levels vitamin E is competitive with vitamin A in the liver, neither of the antioxidants having much of an effect. What all this added up to, Dr. Pierce concluded, was that if you smoke a pack of cigarettes per day for thirty-six years, it simply isn't going to matter what vitamins you take.

So the next time you feel like lighting up a cigarette and then frying a pound of ground beef in a sizzling pool of saturated fat, take a deep breath, gather your wits, and eat a carrot instead.

—Ray Isle

### ANTIOXIDANTS: RECOMMENDED SUPPLEMENTATION

Nutrient	RDA	ODA	RS
Vitamin A	4000 iu	10,000–75,000 iu	5,000 iu
Beta Carotene	4000 iu	10,000–75,000 iu	10,000 iu
Vitamin C	60 mg	500–5,000 mg	3,000 mg
Vitamin E	10 iu	200–800 iu	800 iu
Selenium	55 mcg	50–400 mcg	200 mcg
Glutathione			200 mg
L-Cysteine			75 mg

RDA: Recommended Daily Allowance to prevent vitamin deficiency disease. ODA: Optimum Daily Allowance based on nutritional prevention of serious medical conditions developed by Shari Lieberman, PhD.

### ANTIOXIDANTS: FOOD SOURCES AND POSSIBLE TOXICITIES.

**Vitamin A:** Found in liver, fish liver oils, green and orange vegetables. Toxicity is possible above 50,000 iu daily for months to years.

**Beta Carotene:** Found in liver, fish liver oils, green and orange vegetables. Non-toxic. Reversible orange color to skin at high doses.

**Vitamin C:** Found in citrus fruits, red peppers, green vegetables. Non-toxic. Diarrhea at high doses.

**Vitamin E:** Found in whole grains, vegetable oils, green leafy vegetables. Nausea, diarrhea and heart palpitations possible at doses above 1200 iu per day.

**Selenium:** A mineral that varies with the soil contents. No toxicities at doses up to 750 mcg per day.

# Mid-life: time for change, not crisis

LIKE TWO BOOK-ENDS, mid-life and adolescence encapsulate adulthood. In both periods people struggle with profound changes in their body, their social position, and their levels of responsibility. In two lectures sponsored by New Options for Wellness (NOW), Dr. Margaret Deansely talked about the physical and emotional changes of mid-life, which she insisted did not have to be a crisis, but "a time for well-earned change."

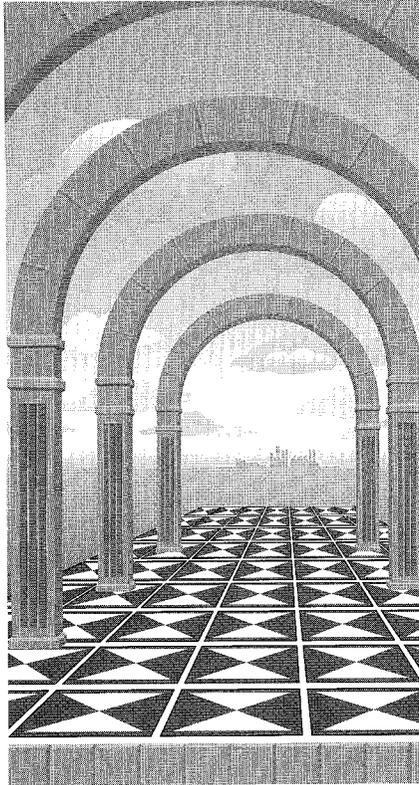
Physical changes often precipitate this period for both men and women. When women reach menopause, they not only lose their fertility, but "the petals fall off the flower, and everything approaches the floor." Driven by genetics, people slowly come to look like the older members of their families. "You see yourself looking like your mother, and that wasn't the plan."

Men may not lose their fertility, but "it takes longer and longer to do less and less;" everything requires "more mental and physical investment." Over a period of 50 years, testosterone levels slowly decline. Compounding this effect, blood pressure pills may have the a side-effect of impotence. And just as in women, men's metabolisms change, leading to a greater tendency to put on weight.

Mid-life is probably most noted for the emotional challenges it presents. Women begin to relate to people differently, and establish new identities. Identity problems come into effect when children leave home, and women find themselves "on lists we never intended to sign up for," such as survivors of breast cancer, wives of recovering alcoholics, recent divorcees ...

Men reach a point in their lives when "they do the arithmetic," realize they have only so many

years left, and decide they need to do the things they have always wanted to do. This realization is often precipitated by the death of a colleague who "never got to do it his way," by a younger supervisor,



by a 'boring' marriage, or by financial pressures. In response to these stressors, some simply grow a beard or have an affair. Others quit their job or buy a new sports car. Dr. Deansely knows one man who disappeared after his fiftieth birthday party.

To help people ease the mid-life transition, Dr. Deansely supplied a list of suggestions. She cautioned her listeners not to take her advice at face value, but to think about her recommendations, and their lives, and to advise themselves, based on all available information.

In advising women she emphasized that "fulfillment is no longer possible through someone else, but needs to be self created."

When children leave home, and friends and relatives move or pass away, women need to learn self-reliance and self fulfillment. One way to achieve emotional independence is to "avoid physical and mental laziness." Secondly, she advised women to "escape the prison of self," to analyze why they say no, or why they insist on doing things certain ways. Women should feel free to stand up for themselves and do things their own way.

Dr. Deansely recommended that both men and women adopt a new interest to renew their vitality. Everything from learning Italian to collecting stamps to lifting weights are options in the quest for self-renewal. She explicitly encouraged physical hobbies and distributed an article entitled "Use It Or Lose It," by Walter Bortz, M.D. Bortz believes that "what we once considered to be marks of aging we now know are the results of disuse." Vigorous exercise, four times a week, can give a seventy-year old the oxygen-carrying capacity of a thirty-year old.

Her third major suggestion was to seek legal and financial advice early. This information is important for long-term resource management as well as for preventing future legal problems. It is much easier to discuss these matters when everyone is well, than to wait for a crisis and be pushed into a decision.

In summary, she suggested that people make changes in their lives before crises erupt. She recommended that couples talk about their mid-life concerns with each other to negotiate healthy changes. After all, midlife is still the middle of life, and "it isn't how old you are, but how you are old."

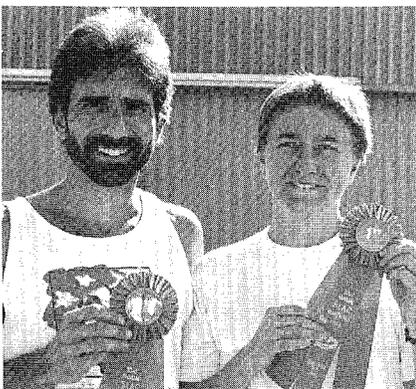
—Jill Mhyre

# No surprises in 23rd Run/Walk



First place runners, left to right: Al Lisin, Jim Allan, Doug Keeley, Chris Traller, Bob Traller, Michael DiSalvo, Karen Fant, and Steve Louie.

THE 23RD ANNUAL SLAC Run/Walk went off as it does every year on the first Thursday of November, with SLAC's own ringers taking the burden of competition from the rest of our shoulders! Dale Pitman was first female overall with a time of 26:22, and



Overall first-place winners: Michael DiSalvo, left, and Dale Pitman.

Michael DiSalvo took first male overall with a time of 22:13. Seventy-three runners participated, and about 40 walkers. Heard from former hot-shot runner Dr. Deansly: "I didn't know you had to state your age to run in this thing!" First-place results are, by category:

## Male

Al Lisin, over-60 (28:25)  
Doug Keeley, 50-59 (23:48)  
Bob Traller, 40-49 (23:30)  
Jim Allan, 30-39 (23:44)  
Steve Louie, under-30 (26:47).

## Female

Karen Fant, 40-49 (29:46)  
Chris Traller, 30-39 (32:55).

Ideas for next year's run are being bandied about, like offering an additional, shorter alternate route. If you have any comments about the run this year or for next year, call Karen Fant at ext. 4466!

—Karey Krauter

## Telecommunications' WWW Home Page

ALL USER DOCUMENTS relating to Telecommunication services can now be viewed on the World Wide Web (WWW). These documents include the *SLAC Telephone Users' Guide*, *A User's Guide to Video Teleconferencing at SLAC*, and an information sheet for new cellular phone users. You can also access a directory listing whom to contact for Telecommunications services.

The *SLAC Telephone Users' Guide* is particularly informative about the basic Telecommunications services: phones, voicemail, cellular phones, pagers, and video teleconferencing. It will tell you how to get service, how to report problems, a list of ATOMs, emergency information, other useful lists such as faxes at SLAC, and department contacts.

Telecommunications appreciates any feedback or questions about the new home page or any of its documentation. Please pass them on to the Telecommunications Manager, Janet Dixon (e-mail address [dixon@slac.stanford.edu](mailto:dixon@slac.stanford.edu), ext. 3688).

—Ilse Vinson

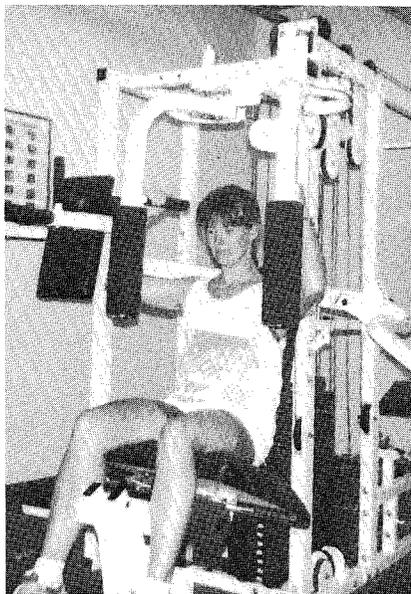
## Welcome Guests and New Employees

**Kenji Abe**, Experimental Group A; **Roberto Aiello**, Controls; **Nick Allen**, SLD; **Ralph Assman**, Accelerator, Theory & Special Projects; **Boris Batterman**, SSRL BES Research; **Richard Bierce**, Experimental Group B; **Jay Cremer**, SSRL Research; **Erez Etzion**, SLD; **Scott Everling**, Metrology; **Alan Fisher**, PEP-II B Factory; **John R. (Bob) Flood**, Operational Health & Physics; **Thomas Galetto**, Accelerator; **Patricia Garriz**, Environmental Protection & Waste Management; **Francis Gaudreault**, Metrology; **David Graul**, Accelerator; **Christoph Greub**, Theory; **Samy Hanna**, Klystron; **Sang June Hahn**, SSRL BES Research; **Kazumi Hasuko**, SLD; **Kathryn Henniss**, Publications; **John Hiller**, Theory; **Victoria Hopkins**, Purchasing; **Georgia Jurickovich**, Library; **Valery Khoze**, Theory; **Markus Lautenbacher**, Theory; **Romeo Lubrin**, Power Conversion; **William Lusebrink**, Information Resource Management; **Richard Malic**, Mechanical Design; **Darren Marsh**, PEP-II B Factory; **Thomas Marvin**, Research Division; **Gary McCarty**, Theory; **Jeffrey Moore**, SSRL Beam Line Operations; **Shinya Narita**, Experimental Group B; **Ralph Olsen**, Power Conversion; **Bennett Poling**, Accelerator Research & Operations; **Victor Popov**, Power Conversion; **Ricardo Principe**, Power Conversion; **Pantaleo Raimondi**, Accelerator; **William Ross**, B Factory; **Xiaoyan (Ms) Shen**, Experimental Group C; **Jose Silva**, Mechanical Design; **Micaela Silvestre**, Environment, Safety & Health; **Florent Staley**, Experimental Group A; **Maxine Stokely**, Environment, Safety & Health; **Fumihiko Suekane**, Experimental Group B; **Scott Thomas**, Theory; **Rudolph Toledo**, Mechanical Fabrication; **Ping Wang**, Experimental Group C; **Michael Wendling**, SCS; **Jerry Wilson**, Klystron; **Gary Woodcock**, SSRL Accelerator Research & Operations; **Kairong Ye**, Controls; **Christopher Ziomek**, Klystron.

# Hefty addition to exercise room

AT LONG LAST the SLAC exercise facility has undergone capital improvement! With money accumulated from years of user fees, the SLAC Exercise Facility Committee recently purchased a universal-like multi-gym. The new equipment has two weight stacks, and features a leg station, a lat station, a chest station, a hanging chair-dip station, and cables for leg and arm pulls. A poster next to the station describes correct and injury-free usage, and Chris Traller, ext. 3667, is available for an introduction to the machine.

In addition to the new weights, the facility features stationary bicycles, a nordic track, a rowing machine, a tread mill, and a stepping machine. Changing rooms with lockers and showers are located right next to the exercise room. The gym is located in the west end of the Electronics Annex, Building 34, and can be opened 24 hours a day by members who have keys. Membership in the SLAC exercise facility costs \$20 per year, with another \$10 as a key deposit



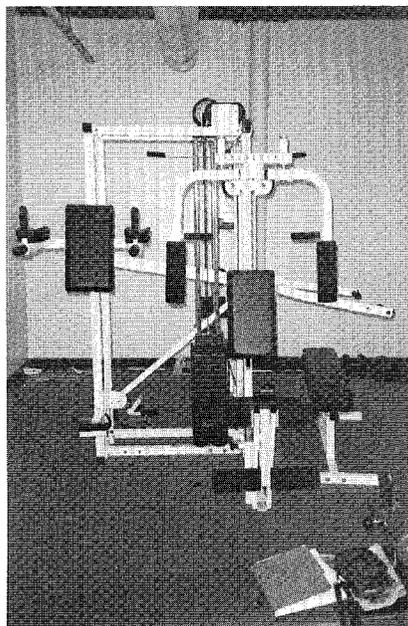
Karey Krauter uses new machine in exercise room.

for new members. Contact Chris Traller at ext. 3667 or Bob Gex at ext. 4388 to join.

The annual fee covers new equipment purchases and the maintenance of existing equipment. In the future, the Exercise Facility Committee hopes to purchase a dumb bell rack, a new stair master, and also a new bicycle. A regular maintenance contract is also being negotiated for the existing equipment.

The Exercise Facility Committee does have some advice for users to help preserve existing equipment. First, to make the upholstery on the equipment last ten times longer than it would otherwise, users should always wear a shirt while using the equipment, and always wipe down the equipment with a towel after using it. Second, to avoid theft, users need to keep the door locked, especially at the end of the day.

—Ray Isle



All meetings are held in the Orange Room, unless another location is listed. Larger meetings and conferences have a contact listed. Please notify the Public Affairs Office of any additions or changes by calling ext. 2204 or sending e-mail to nina@slac.

**November 28, 7 PM**

OS/2 Users Meeting  
Auditorium

**November 29**

SLUO Annual Users Meeting  
Auditorium  
U. Nauenberg/M. Helton

**November 30–December 2,3**

B-Factory Detector Collaboration Meeting  
Auditorium  
V. Luth/A. Pacheco

**December 2, Noon**

SLUO Executive Committee (TBA)

**December 5–9**

SLAC/KEK Design Review  
Beige Room  
G. Loew/E. Mitchell

**December 6–8**

DOE B-Factory Review  
J. Dorfan

**December 8**

SU Alumni Association Course  
Auditorium

**December 12–16**

SLD Week (TBA)

**December 14, 10 AM–2 PM**

PEP-II Rally  
Auditorium  
J. Dorfan/D. Jones/  
L. Klaisner/R. Nixon

**December 14, Noon**

Stanford Quartet Noon Performance  
Auditorium

**December 19, 7 PM**

OS/2 Users Meeting  
Auditorium

**December 21, 8:30 AM–3 PM**

SUBB Mobile Blood Drive  
Auditorium Lobby

**December 22, 11:30 AM–2 PM**

SLAC Holiday Celebration  
Cafe Dining Hall

**December 25–January 2**

SLAC Holiday Shutdown

**EVENT CALENDAR: NOVEMBER–DECEMBER 1994**

**Family Day** *Continued from page 1*

THE FAMILY DAY Committee extends thanks to all the hard-working volunteers, and all of the people who attended. It made the day so much fun for everyone.

Photos: Bruno Brugnoletti and Tom Nakashima.

