



PEP-II INJECTION SYSTEM HALFWAY THERE

by Elliott Bloom

THE PEP-II PROJECT reached a major milestone recently—the injection lines are now half complete. At about 11 AM on October 5, an 11-GeV electron beam was extracted from the linac and, for the first time, flew to the end of the PEP-II injection bypass channel, stopping in a dump at Sector 28. A small, steady beam spot was seen on the dump screen. This achievement was accomplished on schedule and on budget by a collaboration of the PEP-II injection group and a number of technical division groups, including the Accelerator, Power Conversion, and Plant Engineering Departments; the fabrication shops; and the Alignment Group.

During the installation of the high-energy (e^-) extraction line and the high-energy and low-energy



J. Rosell

bypass lines starting last April, more than 100 people worked on the installation, and about 2.7 miles of beam line were installed in the five months of downtime.

Many people at SLAC contributed to the success of this effort. Injection

system engineer Bruce Feerick and his crew of designers ensured that the beam line components were well prepared. Julia Weinberg and her vacuum crew designed and planned the field welding of miles of beam pipe, which was carried out to near perfection by the crews from the fabrication shops. Patrick Smith did an outstanding job as head of the installation team. The commissioning team, led by Dave Schultz, brought the line to operation faster than expected. The list goes on and on.

As congratulations to all for a job well done, this PEP-II milestone was recently celebrated with a party outside the new PEP-II physics and engineering building. As the photographs show, everyone enjoyed the chance to celebrate their accomplishments.



J. Rosell

The Interaction Point needs you

WHAT MAKES a newsletter happen every month? Good question. *The Interaction Point (TIP)*, SLAC's employee newsletter, is possible only with a great deal of cooperation from many people. Since *TIP* no longer has a staff writer or photographer, the newsletter relies entirely on submissions from SLAC employees.

Who can submit articles?

Anybody in the SLAC community may submit an article to *TIP*. The deadline for submitting articles is the first of every month; the newsletter comes out in the last week of the month. Items are published on a space-available basis and are subject to edit. The author's name and phone number should be included with each submission; an e-mail address may also be included. Submissions should be in ASCII text format and sent electronically to tip@slac or by SLAC mail to *TIP*, MS 68.

The 5 journalistic questions

When writing a newsletter article, remember the five journalistic questions: *What* (what was done?). *Where* (where was it done?). *Who* (who did it?). *Why* (why did they do it, why is it important, why should SLAC employees want/need to know about it?). *When* (when was it done, when is it going to be important?). Each article should make the readers want to read it by pulling them in with a good lead sentence.

Check your facts, remember your audience

Before submitting an article to *TIP*, always double-check facts with the source of information, and be sure names are spelled

correctly, both in photo captions and main text.

Write for your audience. *TIP*'s audience is varied—it includes technical and nontechnical staff, scientists and non-scientists. To address such a broad readership, assume the audience has no technical background—no math or science after high school, and high school may have been several decades ago. The writing should be simple, but not simplistic, because most of *TIP*'s readers have, in working at SLAC, absorbed a degree of technical experience and would recognize and not read articles that patronized them.

In addition:

- Avoid jargon wherever possible.
- Use the active voice.
- Include quotes and people's names whenever possible. Most people appreciate recognition.
- When giving examples, use everyday objects or events, for instance, "the tank holds the equivalent of 11 Olympic-sized pools"; "it takes half a day to walk the length of the thing-amajig."

Think visually

When submitting an article to *TIP*, think visually—remember the old adage, "a picture is worth a thousand words." Whenever possible, include or suggest a photo or illustration to accompany the article. In general, photos are preferred that:

- Help tell the accompanying story.
- Portray many people, as opposed to a few individuals.
- Portray individuals and groups in action rather than in static or posed portraits.
- Represent diversity at SLAC.

- Focus on SLAC personnel rather than outsiders.
- Exhibit good composition, clarity, and contrast.
- Do not portray people in unflattering, embarrassing, or uncharacteristic ways.

The Technical Publications Department has access to thousands of clip art images that can be used when photographs are not appropriate or available.

A note about word count

One column in *TIP* is roughly equivalent to 250 words, which does not take into account space for an illustration. There are approximately 555 words in this article. Call the editor (Evelyn Eldridge-Diaz, ext. 4128) before you start writing to get an idea of what the space constraints may be for the next issue. As always, *TIP* encourages your submissions.

—Evelyn Eldridge-Diaz

Welcome Guests and New Employees

Mahesh Damodare, Accelerator Theory & Special Projects; Stephen Ellis, Computation Group; Andrew Gremett, Information Resource Management; Koji Harada, Theory; Boris Kayser, Theory; Jason Kumar, Theory; Han-Jin Liu, SLD; Stephan McNiel, PEP-II B Factory; Eugene Mirabelli, Theory; Rose Rafael, Information Resource Management; Andrew Ringwall, PEP-II B Factory; Ester Ruiz-Morales, Theory; Reiner Seitz, Experimental Group E; Tsumoru Shintake, Experimental Group I; Kenneth Staal, Manufacturing; Rainer Tamoschat, Experimental Group I; Mohammed Yousuf, Accelerator Theory & Special Projects.

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Something's happening here...



Adele Panofsky and the bones of the paleoparadoxia, soon to be displayed in the SLAC Visitor Center.

WHAT IT IS will be clear, as the SLAC Visitor Center takes shape. The building addition near the auditorium and the breezeway will soon house exhibits relating to the history and scientific mission of the lab.

Exhibits being planned, according to project director Helen Quinn, include a klystron, parts of an accelerator, and a typical detector.

“We will certainly have a display about the people and research involved in SLAC’s three Nobel prizes,” says Quinn. Items in this display may include replicas of the Nobel medal, log books, and photos. SSRL will be represented by exhibits and a multimedia display.

In addition to the actual displays, a Virtual Visitor Center is planned that people can access on

the World Wide Web. For those who want more detail than a label or poster can provide, the Web site will offer in-depth explanations, with graphics and photos. SLAC employees can also use the site to find information about the lab’s research projects.

The Visitor Center will also house a plaster-cast replica of the paleoparadoxia fossil found on the SLAC site in 1964 during the excavation of the experimental areas and the beam switchyard. After the display case is prepared by a SLAC construction crew, Adele Panofsky, who has devoted many years to studying and assembling the specimen, will reassemble the replica, which is approximately the size of a present-day hippopotamus.

The paleoparadoxia display is being assembled first owing to its size and weight. Once this exhibit is installed, physics displays will follow. When the Visitor Center opens, it will be a useful staging area for tours and other SLAC events.

—P.A. Moore

Gender wars: accusations and backlash

THE GENDER BATTLE for the workplace is not going away; in fact, it is causing a backlash that is harmful to both sexes. Men are afraid to shake hands with a woman; male supervisors will not give unsatisfactory performance ratings to women employees for fear of reprisal.

These were some stories that emerged from the audience at a recent talk on sexual harassment, presented by Katherine Cantwell, who for the past two years has been the SLAC liaison to Stanford University for this issue. (Owing to changes in University policy regarding issues of confidentiality, Cantwell will no longer serve as sexual harassment officer for SLAC.) The talk presented a summary of what Cantwell has learned in her tenure.

“In the past, sexual favors were considered the quid pro quo of the workplace. You do something for me, then I’ll do something for you.” This assumption has led to an unequal work ethic, one that allows for favoritism and breeds resentment. The effect? A hostile work environment, according to Cantwell.

Such an environment is characterized by physical, verbal, or visual abuse. A key point to remember, said Cantwell, is “harassment is not determined by the intention of the person acting but the perception of the person receiving.” The difference between these two points of view can often be addressed with training programs on the subject of gender and diversity.

Those who feel that they are

involved in a hostile situation can appeal to the Campus Help Center, Chaplain, or ombudsperson. When asked about her role as ombudsperson, Leah Kaplan said that she is there to listen and to refer people to sources of help. “I do a lot of phone consultations. People seem to like the anonymity and it helps them to talk about what is happening in their lives.” Kaplan can be reached at 723-3682.

Cantwell finished her presentation with a plea: “Don’t let political correctness kill all humor in the workplace. By taking responsibility to speak up clearly and quickly in these situations, we can deal with them before they escalate and defuse the situation.”

—P.A. Moore

DOE TRADE Conference

SIX SLAC EMPLOYEES attended the 19th annual TRADE Conference held last month in Chicago. TRADE (Training Resources and Data Exchange) is a Department of Energy (DOE)-sponsored organization dedicated to the exchange of ideas, techniques, and resources for improving training. The conference also serves as a forum for discussion of issues that are of interest to the DOE community.

The topic for the 1995 conference was "Success through sharing: TRADE now or pay later"—an appropriate topic in this time of budget cuts and downsizing. One way to share training is through computer-based training (CBT) programs. Over 90 CBT programs are currently available through TRADE. To facilitate the sharing process, many of these programs are being written so that individual sites can customize the course content at minimal cost.

CBT topics currently available include computer security, emergency management, environment, safety, health, fire safety, radiological safety, hazardous waste, materials control, maintenance, operations, quality, security, and transportation. Additional titles are added regularly. It has been demonstrated that well-designed CBT, as compared to classroom

lectures, improves retention of the material. The self-paced training model has been shown to be beneficial to the diverse staff at SLAC.

A fairly new tool is the use of the World Wide Web (WWW) as a source of information such as course catalogs and schedules, and training. Ruth McDunn demonstrated the SLAC ES&H Training Home Page at the conference (the URL is <http://www.slac.stanford.edu/esh/training/training.html>). Efforts are being made to develop an on-line DOE-wide training catalog/calendar and the WWW examples provided by SLAC and LLNL were well received as model systems.

Web-based training (WBT) is essentially CBT made available through a WWW browser. WBT has several advantages over CBT. The self-paced training can be completed at a time convenient to the student at any computer with WWW access, multi-media elements are fairly easy to include, and the programming language is free (so far).

At SLAC the training for the Employee Orientation to ES&H (Course 219) and General Employee Radiological Training (Course 115) can be completed on the WWW. At present, however, the tests for these courses must still be taken at one of the four physical

testing sites. The URL for these two courses is http://www.slac.stanford.edu/esh/training/study_guides/study_guides.html.

Additional WBT courses are under development. It is hoped that users and visitors who will only be at SLAC a short time can use WBT to complete their training before they arrive. Upon their arrival, it should take only a few minutes for them to take the challenge exam, rather than spending several hours in training. This progressive approach to training should serve to improve the efficiency and effectiveness of the training programs at SLAC.

More information about CBT is available by contacting Ruth McDunn at ext. 3054 or by e-mail to isis@slac.stanford.edu.

—Bob Flood

1996 University Holidays

THE DATES FOR the observance of the designated University holidays in 1996 are as follows:

New Year's Day 1996

Monday January 1

Martin Luther King Day

Monday January 15

Presidents' Day

Monday February 19

Memorial Day

Monday May 27

Independence Day

Thursday July 4

Labor Day

Monday September 2

Thanksgiving

Thur./Fri. November 28–29

Christmas

Mon./Tues. December 24–25

New Year's Day, 1997

Wednesday January 1

Attention: SLAC Café customers

IN SPITE OF many notices asking that the metal eating utensils not be taken from the SLAC cafeteria, metal knives, forks, and spoons have continued to disappear. Consequently, metal utensils are being discontinued from use in the café; only plastic silverware will be provided. If the ceramic plates continue to disappear as well, they, too, will have to be discontinued and paper plates will be substituted.

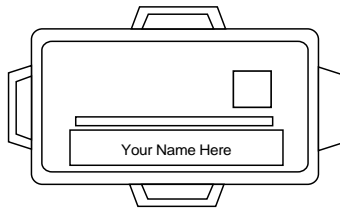
We apologize for the annoyance; however, we cannot at this time maintain the high volume of disappearing wares.

—Facilities Management

USSF-SLAC

AN UNOFFICIAL, unusual, and very successful collaboration between SLAC personnel and the US Forest Service (USFS) took place early in September, when four SLAC employees spent two weeks in the Marble Mountain Wilderness in Northern California restoring an abandoned USFS fire lookout tower atop English Peak at 7300 feet. The four SLAC volunteers were Martin Donald (PEP), Steve St. Lorant (EFD), Martin Berndt and E. K. Johnson (PCD, both retired).

Donald instigated the adventure on a previous hiking trip when he and others noticed the abandoned building. "This should be rebuilt! Why don't we do it?" The seed was planted. Donald approached the USFS with the



TWO MAJOR CHANGES are about to occur in SLAC's dosimetry program. These changes will affect everyone at SLAC.

SLAC's present dosimeter consists of two elements attached to the back of the photo-identification badge. Producing and reading these dosimeters is completely manual and very time consuming. SLAC is changing to an automated system that will allow much faster preparation and reading of dosimeters. At the beginning of January 1996, SLAC will change to the Panasonic dosimeter. Radiation workers who are monitored quarterly were issued this type of dosimeter in addition to the regular one as a trial run in the third and fourth quarters of 1995. Those who haven't been issued a Panasonic dosimeter on a trial basis may have seen them

collaboration

idea, and they were enthusiastic in their support. A plan was submitted and accepted in July 1995, a budget allocated, and a date set.

USFS agreed to furnish material and to pack food and supplies into the mountainous area using their mule trains, while the volunteers would supply the "skilled" labor.

St. Lorant used his mountaineering skills to secure himself for the reroofing job. Berndt repaired and glazed windows, skills gained as a young boy when he and his brothers repaired windows they broke. Meanwhile, Donald and Johnson got their share of exercise wielding handsaw, hammer and paint brush, and repairing window frames and trim.

A followup trip is planned for June 1996 to finish the project.



Photo courtesy of Martin Berndt.

No power tools, no electricity, but what a view! The Trinity Alps to the South, Mount Shasta to the Southeast, the Russian Mountains to the East, and to the North, mountains as far as Mount Ashland in Oregon. Steve St. Laurent plays king of the mountain while E. K. Johnson looks on.

Installing new siding, painting, finishing the interior, restoring the sighting table, and other details still remain. Any volunteers?

—Martin Berndt

Dosimeter changes ahead

around the site; the plastic dosimeter case is orange.

The new Panasonic dosimeters will be issued in different-colored plastic cases, called hangers. Persons monitored quarterly will continue to have orange hangers. Dosimeters for those monitored annually and the temporary dosimeters will be placed in clear, colorless hangers. SSRL users will get dosimeters in blue or gray hangers. The only difference among all these dosimeters is the hanger color.

The other change concerns those people who are monitored annually. The exchange of annual dosimeters is presently divided into ten monthly groups, a method designed to distribute the annual monitoring workload over most of the year. Beginning January 1, 1996, all annual dosimeters will be exchanged at the beginning of each new calendar year.

The new dosimeters will be distributed at the end of this year.

Every person being monitored by the current system will receive a replacement Panasonic dosimeter, which will arrive through the normal distribution channels. The new dosimeter will have a label on the front showing a dosimeter number, the wearer's name and SLAC employee number (if any), and an organization code that is helpful in distributing the dosimeters. Beginning January 8, 1996, all old-style dosimeter badges—GERT, RWT, Temporary, and SSRL badges—will no longer be valid, and the guards will collect the old-style badges from anyone still using them as of that date. While the dosimeters will change, all current training requirements (radiation safety training and orientation to ES&H) will continue to be in effect. See your organization's dosimetry program point of contact for information concerning your dosimeter.

—Bob Flood

A new look for the SLAC Web

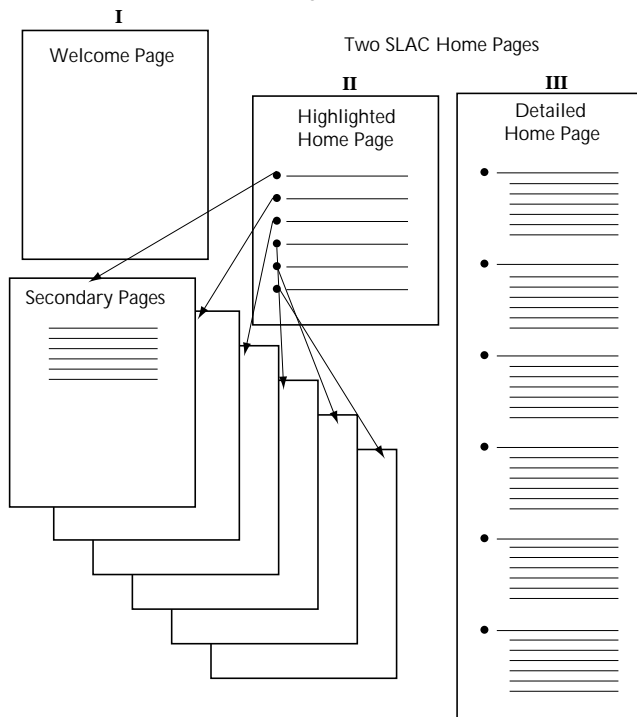
PEOPLE WHO HAVE TRIED to bring up the SLAC Home Page on their WWW browser recently will have noticed some major changes. The page that now appears by default at the URL <http://www.slac.stanford.edu/> is no longer the SLAC Home Page, but the SLAC Welcome Page, a new page designed as the entry point for SLAC's Web face to the general public.

For SLAC insiders, the previous SLAC Home Page has been replaced by two new pages, both represented in the red button bar near the top of the Welcome Page. The "Highlighted Home Page" provides a concise, "at-a-glance" way to access hierarchically a variety of types of information in the SLAC Web. The longer "Detailed Home Page," more like the previous SLAC Home Page, provides essentially the same information on a single page. (Regular users may wish to set their browser's preferences to default to one of the Home Pages rather than the Welcome Page.)

Regular users of the WWW at SLAC will also notice that the former red-on-white SLAC seal has been replaced on the Home and Welcome pages with a new colliding particle logo. The committees involved in the migration to this new set of pages needed a visual way of alerting SLAC's external and internal Home Page users to the changes in the Home Page structure. This need coincided with a more general desire to make SLAC's WWW graphics more visually dynamic



The Three-Page Model



and representative of the lab's scientific focus. Terry Anderson (Tech Pubs) designed the main graphics for the new pages with input from Rene Donaldson and Kathryn Henniss. The colliding particles design was subsequently endorsed by the Institutional Page Committee whose recommendation was then ratified by the Associate Directors' Committee on Computing.

The new Welcome Page, which replaces the draft Institutional Page, was developed by Marty Breidenbach [SLD], Katherine Cantwell [SSRL], Kathryn Henniss [TechPubs], and Helen Quinn [Research Division, Theory], the group charged with the development and maintenance of SLAC's "public" Web presence. The Welcome Page contains links to information about the history of SLAC and its facilities, SLAC's research programs, the Virtual Visitor Center, and other information which may be of interest to the general public. "Like most information on the Web, the Welcome Page and the public pages attached to it, are evolving documents," said Quinn. "There's definitely room for others at SLAC to help us develop these pages," said Quinn. "We hope people will send us comments, suggestions, and contributions."

See New Look, p. 7

Evolution of the WWW at SLAC

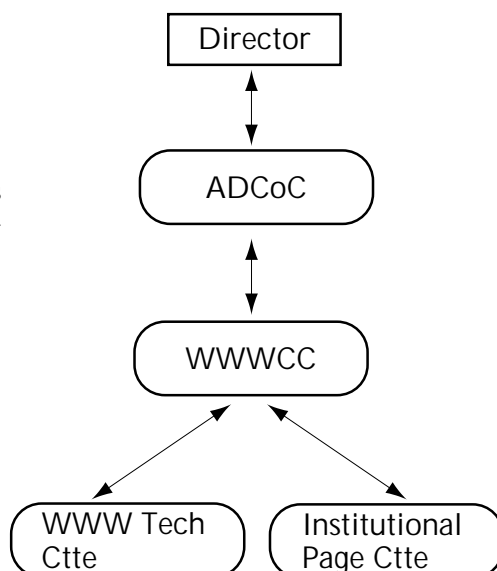
FOR MANY YEARS, the Web at SLAC was managed and developed by a small group of innovative volunteers. As more groups develop Web pages and resources, and as the Web is increasingly relied upon as a site-wide communication tool and a popular means of presenting SLAC to the external world, there is a need for more structured oversight and support of Web activities. A small number of committees and groups have since evolved to address specific needs or interests.

Recently, the Associate Directors' Committee on Computing (ADCoC) established the WWW Coordinating Committee (WWWCC), charged to develop and recommend policies and standards which ensure the information provided on SLAC's Web pages is appropriate and consistent with Stanford University and DOE policy, presents an acceptable public image, and meets the Laboratory's goals. The WWWCC is also charged with two other responsibilities: making recommendations to the ADCoC about Web issues such as support, training, and development; and ensuring that its efforts support, rather than hinder, SLAC's Web development.

The WWWCC's members, who have been chosen to represent

SLAC's divisions and constituencies, will play a key role in communicating to and for their parts of the organization. Members of the SLAC

WWW Oversight at SLAC



WWW user community are encouraged to communicate with these representatives about any issues, problems, or ideas concerning present Web efforts and future developments and needs. The members of the WWWCC are: Andrea Chan (PEP-II, ext. 3524, MS 17, achan@slac.stanford.edu), Les Cottrell, (Central Computing, ext. 2523, MS 97, cottrell@slac.stanford.edu), Jenny Huber (SLUO and SLAC

Experimental Groups, ext. 4169, MS 94, huber@slac.stanford.edu), Pat Kreitz (WWWCC chairperson, ext. 4385, MS 82, pkreitz@slac.stanford.edu), Ruth McDunn (ES&H, ext. 3054, MS 84, isis@slac.stanford.edu), Sharon Minton (BSD, ext. 4458, MS 02, sminton@slac.stanford.edu), P.A. Moore (Directorate, ext. 3826, MS 81, xanadu@slac.stanford.edu), David Whittum (Technical Division, ext. 2302, MS 26, whittum@slac.stanford.edu), Steve Williams (Research Division, ext. 2276, MS 80, steve@slac.stanford.edu), and Tony Johnson (ex-officio member and chair of WWW Technical Committee, ext. 2278, MS 71, tony_johnson@slac.stanford.edu).

The WWWCC will work closely with existing committees and groups to obtain suggestions and ensure smooth coordination of Web development at SLAC.

Although the WWWCC's Web page (<http://www.slac.stanford.edu/slac/www/wwwcc/charge.html>) and periodic articles in *The Interaction Point* will be used to communicate the committee's efforts to the SLAC Web community, the members and chair are counting on you to communicate your concerns, needs, and ideas to them.

—Pat Kreitz

pkreitz@slac.stanford.edu

New Look, from p. 6

The decision to have two home pages—a short page and a long one—is the result of the collaborative efforts of the WWW Style Committee (Karen Heidenreich, Kathryn Henniss, Judy Nowag, Joan Winters, and P.A. Moore, chair). The members of this committee solicited and responded to input from a wide range of WWW users at SLAC. “We are convinced that the

new ‘three-page model’ (SLAC Welcome Page plus the two new Home Pages, see diagram on facing page) will better serve the diverse user styles that exist in the WWW user community,” said Moore.

“We thank those who participated in the prototype page test this past summer,” said Joan Winters, the designer of the original SLAC Home Page and the co-

developer (with Pat Kreitz) of the two new home pages. “Those of us who have worked on designing and implementing the new page model look forward to learning about users' experiences using it.”

—Kathryn Henniss

henniss@slac.stanford.edu

Record number in 24th Run/Walk



First-place winners in the 1995 SLAC Run/Walk are, back row (left to right) Al Lisin, Helen Quinn, Bobby McKee, Michael DiSalvo (Men's first overall), Jim Allan, Karen Fant, and Doug Keeley; front row, Sharon Holmes, Dale Pitman (Women's first overall), and Chris Traller.

EIGHTY-FIVE RUNNERS joined walkers and roller-bladers along the Klystron Gallery for the 24th annual SLAC Linac Run/Walk on November 16. Among the registered runners were 18 women, one short of the record set back in 1982.

The roller-bladers, sent off first by official starter Lowell Klaisner, were quickly followed by the lead pack, led by Michael DiSalvo (Power Conversion). DiSalvo ran the first mile in 5:36, finishing with the winning time of 22:166—more than a minute ahead of second-place finisher Chris Burge (non-SLAC).

The real excitement was in the women's race. Perennial winner Dale Pitman finished in 24:59, 11th overall, just one second ahead of Meredith Bluett-Mills (non-SLAC), and 24 seconds off her personal best, set in 1987.

Placing third overall and winning the male 40–49 division was Bobby McKee of Mechanical Engineering. Jim Allan of OHP won the male 30–39 division, placing fourth overall. Winning the male 20–29 division was first-timer Greg Mitchell from the E154 experiment. Doug Keeley of SSRL won

the male 50–59 division for the third year in a row and Al Lisin took the honors in the male over-60 division.

Al Lisin officially left SLAC last March but has missed only one SLAC race since 1979. Only Bob Gex of the library has run more SLAC races than Al. Gex was cheered across the finish for no less than the 17th consecutive year.

Third among the women was Chris Traller, who won the women's 30–39 age division just seven seconds ahead of Karen Fant, who won the age 40–49 award. The women's 20–29 division was won by first-timer Sharon Holmes of the Klystron Department, and Helen Quinn, Theory, won the 50–59 division.

The first place man and woman this year received gift certificates from Runner's High of Menlo Park. Everyone who attended the Run/Walk participated in a raffle with prizes donated by several local sports-related businesses.

Next year, the 25th annual SLAC Run/Walk, promises to be the best yet. See you then.

—Bob Traller

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. 2282 or sending e-mail to nina@slac.stanford.edu.

December 14–16

Symposium on Nuclear Astrophysics:
A Celebration of
Willy Fowler
Ramo Auditorium
Cal Tech

December 14

10-Year Service Awards
Cafe Dining Hall
December 18, 7:00 PM
OS/2 Users Meeting
Auditorium

December 19, 8:00–2:00

SUBB Mobile
Blood Drive
Auditorium Lobby

December 21, 11:30–1:00

SLAC Holiday
Celebration
Cafe Dining Hall

December 25–January 1

SLAC Mostly Closed

1996 EVENTS

January 8–12

SLD Week
(TBA)

January 15–18

BaBar Collaboration
Meeting in Paris
D. Hitlin, V. Luth,
A. Pacheco

January 30, Noon

Stanford String Quartet
Auditorium

February 5–9

SLD Week
(TBA)

EVENT CALENDAR