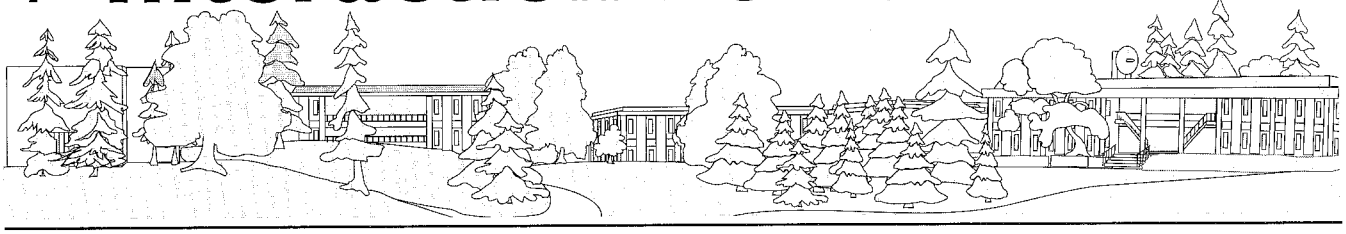
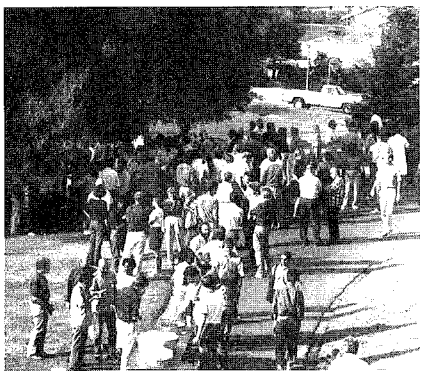
The Interaction Point

Events and Happenings
in the SLAC Community
November 1990, Vol. 1, No. 7



Friedman, Kendall, Taylor, and Us, Too

ALL REJOICE IN SLAC'S NOBEL PRIZE



by Bill Kirk

THE NEWS RELEASE from Stockholm started this way:

> The Royal Swedish Academy of Sciences has decided to award the 1990 Nobel Prize in Physics jointly to Professors Jerome I. Friedman and Henry W. Kendall, both of the Massachusetts Institute of Technology, Cambridge, MA, USA, and Richard E. Taylor of Stanford University, Stanford, CA, USA, for their pioneering investigations concerning deep inelastic scattering of electrons on protons and bound neutrons, which have been of essential importance for the development of the quark model in particle physics.

The news release then went on to describe the significance of this SLAC–MIT experiment, tracing the series of discoveries in this century that have disclosed ever-smaller layers in the structure of matter: atom, nucleus, proton, quark. . . . It was interesting to read about the earlier work of such

(cont'd. on pg. 2)

1970 SLAC Employees Here in 1990

Louise Addis
James Alexander
Matthew Allen
Richard Allen
Eugenio Alvarado
Sal Alvarado
Roger Anderson
Leroy Andrade
Apolinar Arechiga
Marie Arnold
Kathy Asher
Wes1ey Asher
Alonzo Ashley
John Ashton
Gary Aske
Edward Austin
Ronald Baggs
Margie Bangali
Loy Barker
Antonio Barrera
Frank Barrera
Robert Beach
Mary Beerbohm
Robert Bell
Winston Bell
Anthony Benedetti
Leonard Berg
Willard Bergen
Martin Berndt
John Bernstein
Boris Bertolucci
Richard Bierce
Stanley Billitzer
James Bjorken
Vern Bland
Dick Blankenbecler
Elliott Bloom
Richard Blumberg
Shirley Bobo
David Bostic
Gordon Bowden
Adam Boyarski
William Bozdeck
Marty Breidenbach
Barbara Brenner
Loren Brest
Stanley Brodsky
John Broeder
Wouter Broers
John Brown
Karl Brown
Michael Browne
Willys Brunk
Mickey Bryant
Fatin Bulos
Kirk Bunnell
George Burgueno
Carolyn Burton
Donald Busick
Bobbie Byers
Carl Caldwell
Richard Callin
Richerd Cancilla
Arthur Candia
Merrill Card
John Carey
Steven Carlson
Emmett Carmena
George Chadwick
Chuck Chin
Eugene Cisneros
Charles Class
Percy Clay
William Clayton
Joseph Cobb
John Cockroft
Fred Coffer
Gerard Collet
Harry Collins
Carol Colon
Steven Combs
Nada Comstock
Patrick Conroy
Theodore Constant
Ruth Consul
Les Cottrell
David Coward
George Crane
Kenneth Crook
Roderick Curry
Percy Cutler
Cathie Dager
Bill Davies-White
Robert Davis
Norman Dean
Abel Delacerda
Bernard Denton
Hank Deruyter
Herbert deStaebler
Charles Dickens
Deborah Dixon
Jean Drayer
Sidney Drell
Katherine Duggan
Doug Dupen
Richard Early
Robert Eisele
Justino Escalera
Judge Ewing
Zoltan Farkas
Salvatore Fazzino
Larry Feathers
James Ferrie
Theodore Fieguth
Gerhard Fischer
Joel Fitch
Randall Fowkes
Jean Francis
Charles Freudenthal
Jerome Friedman
David Fryberger
Richard Fuendeling
Alexander Gallegos
Edward Garwin
Roger Gearhart
Franco Generali
Leonard Genova
Robert Gex
Donald Gill
John Gill
Frederick Gilman
Boris Golceff
William Graham
Charles Granieri
John Grant
Michael Gravina
Harry Greenhill
Charley Griffin
Anthony Gromme
Richard Gross
Albert Guidi
Frank Guidi
Celik Guracar
David Gustavson
Edward Guthrie
Finn Halbo
Robert Hall
John Halperin
David Hamilton
Vern Hamilton

(cont'd. on next page)

(cont'd. from pg. 1)

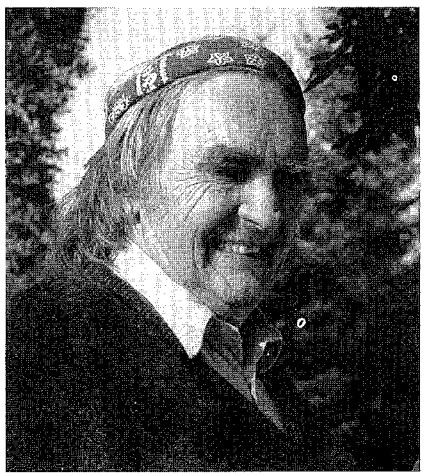
renowned physicists as Rutherford, Heisenberg, Chadwick Hofstadter and Gell-Mann. These and others are the people who paved the way for the SLAC–MIT group to know what experiments to do and even, to some extent, how to do them. This is just a long-winded way of saying what everyone already knows: that science builds upon the science that has gone before. Probably Isaac Newton said it best when he said something like, "If I have seen further than other men, it is because I have stood upon the shoulders of giants." [*Editor's Note: Speaking of giants, if the Swedish Academy had decided to break its long-standing tradition of never awarding the Prize to more than three individuals, the 1990 Nobel Prize in Physics would probably have included James D. Bjorken and Wolfgang K. H. Panofsky—Bj and Pief.*]

But in this day and age of big machines and bigger laboratories, it takes a lot more than just the shoulders of Newton's giants to discover new things. It takes the minds and hands of engineers and librarians, of technicians and secretaries, of machinists and programmers, of designers and administrators.

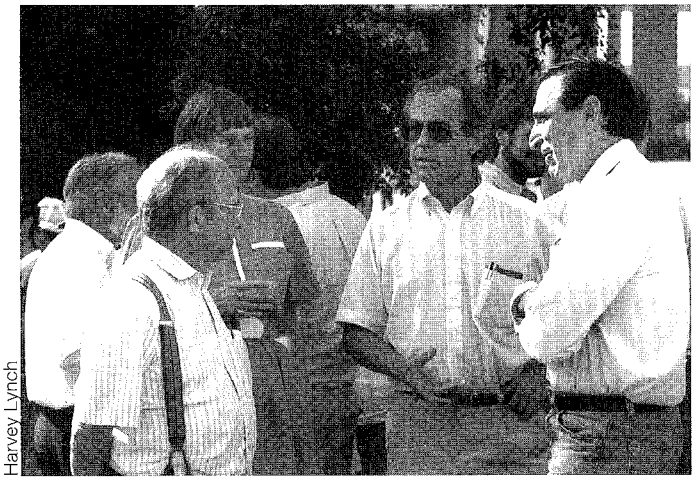
After thinking about these things, I dug out of an old file a copy of the SLAC *Picture Book* for 1970, by which time it had become very clear that the SLAC–MIT experiments were onto something big (since it was quarks, maybe "something small" is better). That *Picture Book* contains 45 pages, each with 30 pictures and names. These are the 1350 people who were making the SLAC laboratory work in 1970—who were responsible in direct or indirect ways for supporting the experiments that were going to win the Nobel Prize in Physics in 1990.

(cont'd. on next page)


Harvey Lynch


Harvey Lynch


Harvey Lynch



Harvey Lynch

Now a question: Of the 1350 members of the SLAC staff in 1970, how many do you suppose are still working here in 1990? The answer is an amazing 366! All of these people deserve special mention, because all of them had a hand in winning the Prize. These 366 Prize co-winners are the 20-year veterans who are listed on this and the preceding page.

One more thing: In going through the 1970 *Picture Book*, I ran across many pictures of people who for one reason or another are no longer with us—retired, deceased, or moved on. I won't try to list all of them, but let me list some of them in order to represent the rest of the 1970 staff, and to generate a little nostalgia among SLAC's old-timers. Here are some names from the past:

John Alcorn
Joe Ballam
Arpad Barna
Aaron Baumgarten
Anna Laura Berg
Bob Boesenberg
Habib Brechna
Kurt Breymeyer
Lucille Burch
Lee Cain
Harry Changnon
Kris Ciolkosz
En-lung Chu
Jim Cook
Barbara Coppock
Mack Dillard
Dorothy Edminster
Paul Edwards
Joe Faust
Chris Ferrari
Win Field
Joe Fish
Axel Golde
Bob Gould
Fred Hall
Slim Harris
Ralph Hashagen
Charley Hoard
John Jasberg
Ted Johnston
Glenda Jones
Joe Jurow
Al Kilert
Libby Kopecky
Larry Kral
Marie LaBelle
Ray Larsen
Jean Lebacqz
Barbara Lopiccolo
Ken Mallory
Bob Mills
Helen Morrison
Jim Moss
Bob Moulton
Bob Mozley
Dick Neal
Carl Olson
George Owens
Jean Paist
Pief Panofsky
Bob Pedersen
Bob Phillips
Fred Pindar
Franz Plunder
Jim Pope
Joe Pulis
Willy Roberts
Gene Roe
Betty Roe
Ray Sandkuhle
Matt Sands
Dick Scholl
Leroy Schwartz
Ed Seppi
Louise Shreve
Vi Smoyer
Harry Soderstrom
Arlene Spurlock
Leo Stodolsky
Mil Strachan
Glenn Tenney
Alex Tseng
Frank Veldhuizen
Bill Wadley
Bob Watt
Herm Zaiss
Walter Zawojski
Martha Zipf

When Dick Taylor attended a press conference on the morning of October 17, a few hours after he had been notified of his Nobel Prize, he was asked a question about the size of the group of people who had carried out the experiment. He ended his response by saying,

(cont'd. on pg. 6)

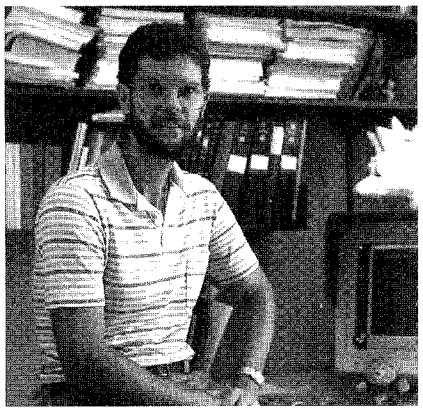
1970 SLAC Employees Here in 1990

Earl Hamner
Murray Hargain
Virginia Harmon
James Hay
Dennis Healey
Norbert Heinen
Richard Helm
Keith Henderson
Larry Henderson
Arthur Hernandez
Bill Herrmannsfeldt
Harold Hoag
Everett Holt
Robert Hom
Frederick Hooker
Dale Horelick
Samuel Howry
Earl Hoyt
David Hutchinson
Damir Ibrisimovic
Cynthia Imelli
Thomas Inman
Victor Itani
Harold Ito
Homer James
Lucille Janasik
Theodore Jenkins
David Jensen
Sharon Jensen
Earl Johnson
Ralph Johnson
Robert Johnson
William Johnson
Ted Johnston
Marvin Jones
James Jue
Henry Kang
Walter Kapica
Francis Karas
Albert Keicher
Paul Kaiser
Lewis Keller
Eddie Keyser
John Kieffer
Alexander King
Tony King
William Kinker
William Kirk
Wayne Knapp
Grayson Knight
Roland Koontz
Cheryl Kreuzer
Michel Lateur
J.J. Lauer
Robert Laughead
Martin Lee
David Leith
Robert Leonard
Evaughn Lewis
Bernard Lighthouse
Santiago Limon
Wayne Linebarger
Alexander Lisin
Shirley Livengood
Edmund Loens
Gregory Loew
Constance Logg
William Lusebrink
Richard McCall
James McDonald
Herbert Mcintye
Frank McLaughlin
Donald McShurley
George Maclin
Alfonso Manuel
John Mark
Kenneth Martell
Charles Martin
Howard Martin
Frank Martinez
Roger Miller
Juan Miranda
Phil Norton
Benjamin Nunoz
Daniel Nauenburg
David Nelson
Gerard Nelson
Ralph Nelson
Roger Nelson
Ruth Thor Nelson
Robert New
Bob Nicholson
Annette Nicholson
Robert Noriega
Pierre Noyes
Louis Nunes
John Nuttall
Allen Odian
David Olaine
Lanny Otts
Dale Ouimette
Gerard Oxoby
Anna Pacheco
Ronald Pacheco
Mary Parish
Jean-Louis Pellegrin
Martin Perl
Henning Petersen
Raymond Pickup
William Pierce
Charles Poole
Thomas Porter
Charles Prescott
Gerard Putallaz
James Rann
Gordon Ratliff
Daryl Reagan
Bette Reed
John Rees
Benny Revillar
Burton Richter
Eugene Rickansrud
Ronald Rinta
David Ritson
Raymond Robello
Antonio Roder
Bernie Romero
Franklin Roos
Fred Rosche
Aldo Rossi
Frank Rothacker
Fredrick Rouse
Georgia Row
Barbara Rupp
Bobbie Russell
Edwin Russell
Benjamin Salsburg
Domingo Sanchez
Gustavo Sandoval
Edward Schulte
Ada Schwartz
Heinz Schwarz
Ronald Seefred
David Sherden
Thomas Sherry
Lloyd Sides
Duane Sincerbox
James Sirois
Knut Skarpaas
Harold Smith
Vernon Smith
William Smith
Gary Snowberger
Joseph Sodja
Erik Sorensen
Raymond Staff
Edwin Stephenson
Glena Stewart
Ronald Stickley
Steve St. Lorant
James Styles
Bohdan Sukiennicki
Lester Swartzentruber
Lennox Sweeney
Dmitri Talaska
Gilbert Tavares
John Taylor
Rita Taylor
Thomas Taylor
Henry Thomas.
Ralph Thompson
Anthony Tilghman
Crystal Tilghman
Eduard Tillmann
Raymond Tolles
Richard Torres
Jose Trevino
Alford Triplett
John Truebenbach
Jack Truher
Yung-Su Tsai
George Tunis
Kenneth Underwood
Lester Uyeda
Myrna Valdez
Felix Vargas
Nicholas Vassallo
Zohrab Vassilian
Francesco Villa
Ilse Vinson
James Wahl
Jack Walker
Harry Walsh
Peter Walsh
Dieter Walz
Helmut Walz
Gary Warren
Thomas Weber
Herbert Weidner
Minor Wheeler
Jerry White
Alan Wilmunder
Edward Wilson
Perry Wilson
Richard Wilson
Ken Witthaus
Armin Wolff
Lawrence Womack
Edward Wong
Barbara Woo
Anne Wood
Donald Wood
Patricia Wurster
Ray Ynegas
Bobbie Young
Joe Zink

RESEARCH DIVISION INCREASES SCIENTIFIC STAFF

by Steve Williams

Richard Dubois. . .

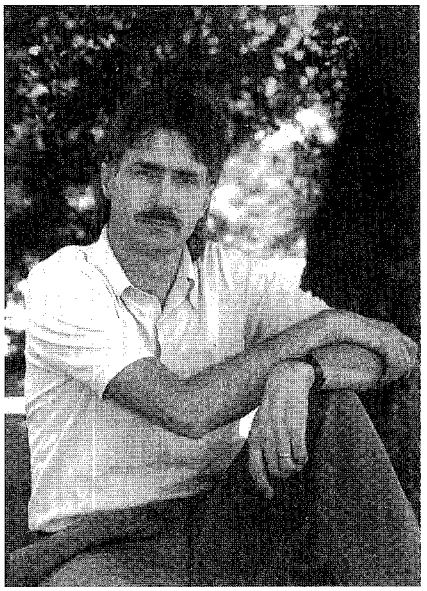


RICHARD DUBOIS has joined the SLAC staff as a physicist in the SLD group. There he will pursue his interests in Z physics, especially with his contributions to the development of the offline analysis. He has made contributions to the calorimetry and 3d event display software.

Richard is an avid squash player and an active promoter and player of "Ultimate Frisbee," the noontime, soccer-like game seen on SLAC's campus green.

Richard lives in Burlingame with his wife Debby and two cats. We welcome him to SLAC.

Greg Hallewell. . .



GREG HALLEWELL, SLD, received his Ph.D. from London University in 1982. His post-doctoral work was done at Rutherford Laboratories NIMROD accelerator and CERN where he did research on π^+p elastic scattering at 2.5 GeV. A second post-doc at Rutherford brought him to the CERN OMEGA spectrometer where he played a central role in the readout electronics for one of the first large-scale Ring-Imaging Cherenkov Detectors. This spectrometer was used to study charm photoproduction at 170 GeV.

Greg was invited to come to SLAC as a Group B post-doc in 1984 largely because of his experience with Cherenkov Ring Imaging. He has now joined SLD as the czar of the high voltage and CRID gas systems.

He is married to Bernadette, has a seven year old son, three cats, two tortoises, and numerous fish. He has a vague recollection of skiing as a favorite pastime, but the hectic demands of the SLD have kept him from the slopes lately.

Arthur Snyder. . .

ARTHUR SNYDER has recently joined the TPC Group. He received his Ph.D. from the University of Illinois in 1975. Most recently he spent six years at Indiana University, the last four at SLAC as a Mark II collaborator at SLC. In that collaboration he has helped implement the muon upgrade to the detector.

Now as a physicist in the TPC Group, he will participate in the running and analysis of the experiment and also pursue his interests in B physics by helping to develop the proposal for a B Factory. Arthur is married and has one daughter. We welcome him to the SLAC staff.

EQ Flyer Available

In September several million colorful Earthquake flyers were inserted into all of the Sunday newspapers in the Bay Area.

Since many people at SLAC didn't get one of these excellent brochures, the Environment and Safety Office obtained copies for everyone. They were recently sent to "All Hands." At the same time, a number of the Spanish and Chinese versions were also distributed. If you didn't receive one, the SLAC Library has additional copies.

—Rich Huggins

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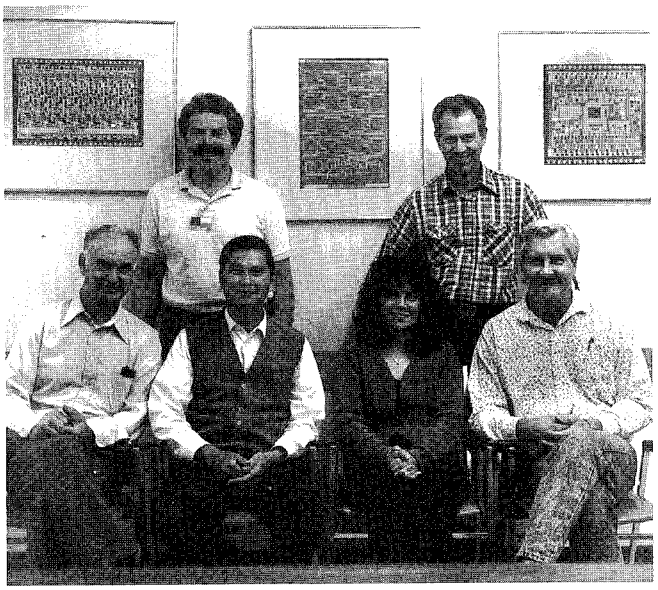
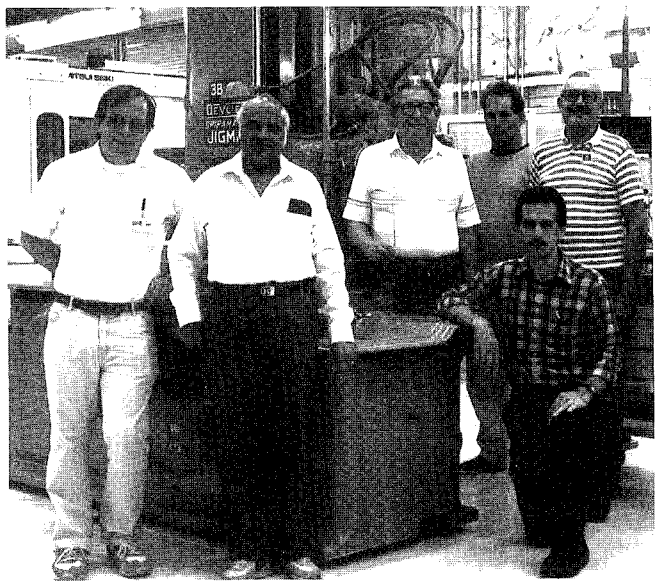
QUALITY ASSURANCE TEAMS FORMED IN ELS AND MFD



Electronic Services QA team members, front row, left to right, Alan Wilmunder, Joseph Yu, Jennifer Russell, and Ron Antrim; standing, left to right, Jack Hahn, Facilitator, and Frank Generali. Not pictured are Jessie Simpson and Team Leader, Ed Schulte.



Mechanical Fabrication QA team members, front row, left to right, Ossie Millican, Kris Narula, and Loren Godshall (kneeling); back row, left to right, Team Leader, Ray Pickup, Jim Hammer, and Lionel Janke.

HAVE YOU EVER ASKED yourself, how is it that some companies have been able to make significant quality and productivity gains? It seems that at least part of the answer is that these organizations have tapped into the potential of the work force through some form of improvement team. Take the Rochester division of IBM, recipient of the 1990 Malcolm Baldrige National Quality Award as an example. In a recent article in the *New York Times* the Rochester plant manager is cited for "formalizing of the procedure for forming problem-solving teams" —an important change in the road to the award.

Since June of this year SLAC has been experimenting with improvement teams as part of its quality assurance (QA) program. One of the QA Teams is focusing on the Mechanical Fabrication Department (MFD) and the other is working in the Electronic Services Group (ELS). The decision-making process in these teams is "bottoms up," where proposals flow from the working level to department management for consideration. The fuel of the QA Team process is the ideas of the people that support, supervise, and perform the hands on work.

The teams are small (6–7 employees) informal groups that meet one hour per week. Participation of both the department and the people on each team is totally voluntary. The team elects its own leader, with the SLAC Quality Coordinator providing training on data analysis techniques and facilitating group brainstorming sessions.

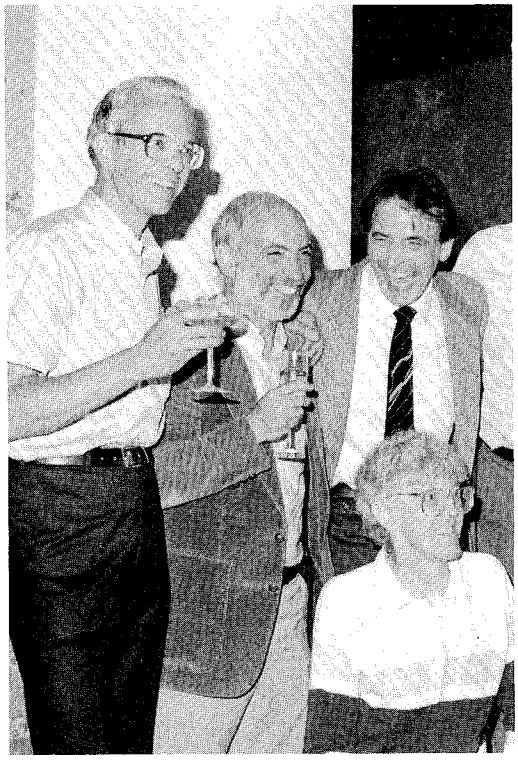
The problems that surface from data analysis and in-house customers are ranked by our members. Problems that are the most important and within the control of the team are targeted for improvement. The team then develops a proposal to be considered by the department head to resolve the problems at hand. A sampling of improvement projects that have been implemented or are under consideration include: a blueprint dimensioning and tolerancing training program; programs to reduce the delays in fabrication of electronics due to lack of required parts; a reporting system to monitor the quality of electronics drawings; a calibration program and applications list for crimping tools; measurements to determine the capability of milling machines; an improved method for air cleaning of parts to reduce inaccuracies during machining; and use of protective paper and procedures to minimize handling damage of mechanical parts. Each of these activities tends to chip away at the quality problem in small manageable pieces.

If you have an idea on how to improve quality in MFD or ELS please let us know, and your suggestions will be considered by the team. A proposal is currently being developed to expand the QA Team program. Team members and ideas in other areas will be solicited as the program develops.

—*Jack Hahn*

Four Nobel Laureates Celebrate Together

From the left, Physics Nobel Laureates Burton Richter, Arthur Schawlow, Richard Taylor, and Melvin Schwartz. Richter shared the 1976 Prize with Samuel C. C. Ting of MIT for the discovery of the fourth kind of quark (the charm quark). Schawlow shared the 1981 Prize with Nicolaas Bloembergen for the development of laser spectroscopy. Taylor shared the 1990 Prize with Jerome Friedman and Henry Kendall for their "pioneering investigations. . .which have been of essential importance for the development of the quark model. . ." Schwartz shared the 1988 Prize with Leon Lederman and Jack Steinberger for experiments that demonstrated the separate identities of the electron neutrino and the muon neutrino.

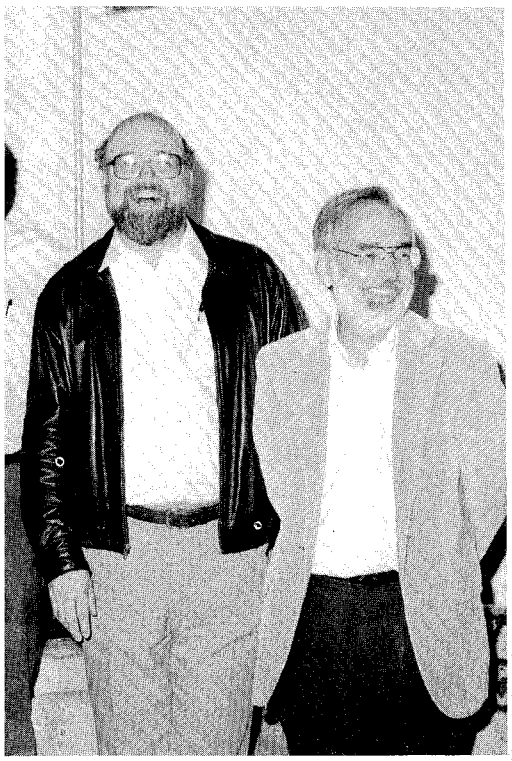


Above: Helen Quinn helps to answer reporters' questions on the morning of October 17.

Below: Dick Taylor at press conference on same morning

(cont'd. from pg. 3)

"I'm here because I'm the oldest and probably the loudest of that group." [*Editor's Note: It might be true that he is the oldest, and it is almost certainly true that he is the loudest. When he came to the 8 a.m. meeting on the morning of October 17, he was greeted with spontaneous applause and with the comment, "Well, all that screaming and yelling finally paid off."*] By "that group," he meant the 30 or so people who were most directly connected with carrying out Experiment E4b and its follow-on experiments on deep-inelastic electron scattering. But he then went on to make it abundantly clear that the work would not have been possible without the elaborate detection equipment, the powerful new linear accelerator, and the infrastructure and support of the whole diverse SLAC laboratory. That is the literal truth. All of SLAC can take pleasure and pride in the historic experiments for which Friedman, Kendall, and Taylor have just been awarded the 1990 Nobel Prize in Physics.



Harvey Lynch

Seen in a happy moment of celebration at Taylor's house are some of the members of the early electron-scattering experimental crew at SLAC. From the left are Dave Coward, Marty Breidenbach, Elliott Bloom, Dick Taylor, Charles Gordon, Charles Prescott, and (kneeling) Les Cottrell.

Even at five, Dick could crack the whip!

Rita Taylor

NOT ONLY HAS DICK TAYLOR'S LIFE CHANGED since winning the Nobel Prize for Physics on October 17, but the life of his wife, Rita, has been affected also. In a recent interview, Rita was quick to thank all her friends and even strangers who sent congratulatory notes. And though the volume of mail has lessened over the past month, the praises from colleagues and friends still remind her that it has been an incredible journey for a coal miner's daughter: from a sleepy town in the Canadian Rockies to the Royal Palace in Stockholm.

Rita and Dick Taylor in 1949, before they were married, in front of Rita's dormitory at the University of Alberta. While in school Rita paid for her education by working at such diverse jobs as pin setter in a bowling alley, telephone operator, bank clerk, and model for art classes.

Rita arrived at the SLAC Library in August 1964 fresh from setting up a model library for the linear accelerator in Orsay, France. She proceeded to apply her experience here, where as preprint librarian she helped to build a world-class collection. She moved with grace from the world of card files to the world of on-line databases, while giving professional talks and advice about preprint handling to many other libraries. Rita also edits the "Anti-Preprint" section of "Preprints in Particles and Fields" and tracks elusive high-energy physics conferences to their secret lairs for announcement in "PPF Conference Previews."

It wasn't always easy for Rita to pursue her own interests while taking care of their son Ted and managing the Taylor household, especially during the years when Dick was building and then running his Nobel-winning experiment. One way for her to see more of Dick was to prepare and take dinner to him and the other members of his shift. Some of Dick's colleagues still remember Rita's stews and soups, and Barbara Cottrell recently reminded Rita that she made the rest of the wives look bad by bringing Coquilles St. Jacques one night. And, later, just hanging around the experimenters infused Rita with excitement and gave her an idea of what it was Dick was doing.

Opera buffs, however, know Rita best as the endlessly resourceful producer for Savoyards, the Stanford Gilbert and Sullivan opera company. A common interest the Taylors have shared since college is theater and opera. They were both instrumental in the early years of Savoyards, and Rita remembers the performance of "Iolanthe" where the capes were made from the old Mem Aud curtain that they bought for $1.05. Now Savoyards has grown and has a budget many times what it had then. Rita has remained active in Savoyards for 15 years, and during that time, if Gilbert and Sullivan wrote it, Rita has undoubtedly produced it.

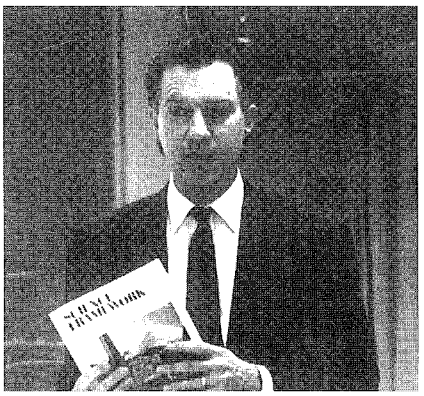
In a recent interview at the University of Alberta, Dick Taylor answered a reporter who asked him if he thought it would have been possible to win the Nobel Prize had he gone to the University of British Columbia instead of the University of Alberta. It didn't take Dick long to reply that, yes, he thought he might have won the Prize if he had attended the University of British Columbia, but not had he married any other woman. Clearly, in his response, Dick sums up the contributions Rita has made over the years, not only to his career but also to the SLAC and Stanford communities.

—Rene Donaldson

GROUP DISCUSSES IMPROVEMENTS IN EDUCATION

Helen Quinn, Science Education Officer, talks to Northern California group about SLAC's programs for improving education (see last month's Interaction Point).

EVERYONE AGREES that science education in our schools needs improving, but few ever do anything about it. Not so with this Northern California group of about 40 that met here Monday, October 29. Participants included school district and county science curriculum planners; representatives of laboratories, science museums, and other groups who run science education programs for teachers or students; and college faculty who work in the area of teacher preparation. The program included a report from



Dr. Thomas Sachse

Thomas Sachse, who heads the California State Department of Education, Science Area, on the new State framework and plans for a new type of activity-based testing of students' understanding of science. The new framework calls for more "hands-on" activity at all levels of science education and less learning of lists of facts. Participants shared information about the programs of their various institutions and then toured SLAC. Since the tour was so timely, it focussed on the experiment for which the recent Nobel Prize in Physics was awarded.

—Helen Quinn

Emergency Drill Set For for December 5

ON WEDNESDAY, DECEMBER 5, SLAC will be hit by a moderate earthquake and, if that isn't enough, we'll have a hazardous materials spill too. At least that's the scenario of the Emergency Exercise for the drill of SLAC's Emergency Organization. An 18-member committee has been hard at work designing the drill since September.

About 50 SLACers will be participating in this first large-scale test of our organization since last year's Loma Prieta Earthquake. The internal portion of this exercise is designed as a moderate test of existing plans and procedures to see what needs improving. We'll make the changes and then develop more demanding tests of different components of our Emergency Organization so that we can continue to upgrade our capabilities.

The external, off-site response to the hazardous materials spill will be fairly complex, involving the coordination of several organizations. The Palo Alto Fire Department handles our emergency responses, so the local SLAC Fire Station will call for assistance from Palo Alto. There will be several pieces of fire equipment responding. The "contaminated victims" will be taken to Stanford Hospital.

This is all part of the Directorate's policy initiated two years ago to improve SLAC's capability to handle emergencies. It is also one of the areas to be scrutinized next year by the DOE Tiger Teams. *—Rich Huggins*

Dabney Receives Mention in Writer's Competition

JANICE DABNEY, Technical Division, recently received an honorable mention in **Writer's Digest** annual writing competititon for her free verse poem, "The Great Blue Heron, Sentinel Bridge." Judging was based on three criteria: originality, salability, and general excellence; 2500 poems were submitted.

Janice, who read some of her poetry in KKUP in Cupertino last May, has published in numerous journals and has won previous awards.

Wellness Surveys Due

JUST A REMINDER for all employees to return their Wellness Survey to Eileen Derr, Bin 25.

FY1991–FY1996 Institutional Plan

EVERYONE'S READING IT—GET IT WHILE ITS HOT

SLAC'S *FY1991–FY1996 Institutional Plan* is now available from Sharon Bolton, Budget Office. If you would like a copy, please send a note to her at Bin 3 with your name and SLAC mailing address or send an electronic message to SECBU@SLACVM.

Welcome to New Employees:

Eugenio Alvarado, Facilities; **Max Artusy**, Power Conversion; **Frank Bermudez**, Accel. Operations; **Jane Buscemi**, Environment and Safety; **Craig Butler**, Plant Maintenance; **Richard Cellamare**, Environment and Safety; **Brian Choi**, Plant Engineering; **Michael Culhane**, Group B; **Monte Davrill**, Cryogenics; **Vittorio Del Duca**, Theory; **Joseph De Melo**, Environment and Safety; **Evelyn Eldridge-Diaz**, Info. Services; **Eleanor Feingold**, Computation Research; **Josef Frisch**, SLC; **Dennis Gee**, Info. Services; **Robert Getsla**, Controls; **Alice Gheen**, Group A; **Alexander Grillo**, Controls; **Michael Grissom**, Environment and Safety; **Jane Hawthorne**, Group B; **Brent Hendry**, Affirmative Action; **Paul Hoyer**, Theory; **Michael Hug**, Environment and Safety; **Vivian Johnson**, Personnel; **Hossein Kamel**, Power Conversion; **William Kaminskas**, Cryogenics; **Jai Young Kim**, Accel. Operations; **Tony Lin**, Computing Services; **Stan Mao**, Radiation Physics; **Albert Menegat**, Klystron Testing; **Matthew Neibel**, Cryogenics; **Gerassimos Petratos**, Experimental Facilities; **Anton Piwinski**, A/T Beam Dynamics; **Daniel Plouffe**, Alignment; **Vallury Prabhakar**, Mechanical Design; **Gregory Punkar**, Group I; **Max Schleicher**, Computing Services; **Carl Schmidt**, Theory; **Margarita Shenker**, Accounting; **David Stoker**, Group E; **Betty Strickland**, Benefits; **John Synodinos**, Group C; **Starlyne Thompson**, Plant Engineering; **Roberto Vega**, Theory; **Anthony Waite**, SLD; **Han Wen**, TPC; **Richard White**, Accel. Operations; **Timothy White**, Environment and Safety; **Max Zolotorev**, SLC

ROSES AND THANKS FROM ITALY TO OPERATORS

Iris Walker

OUR TELEPHONE OPERATORS recently received a dozen red roses from Giampireo Mancinelli, an Italian visitor from Perugia University, in appreciation for their services. To Thelma he said, "With you every call has been a lot of fun!" and to Fran, "The telephone is finally alive." Giampireo was at SLAC working on SLD from July 1989 through September 1990.

Fran has been an operator since July 1976 and Thelma since January 1988.

—Nada Comstock

Left: Posing with their posies and their Italian friend, Giampireo Mancinelli, are operators Fran Balkovich, left, and Thelma Bynum.

SLAC EMERGENCY RELIEF ASSOCIATION NEEDS YOUR HELP

THE SLAC EMERGENCY RELIEF ASSOCIATION (SERA) is a personal assistance organization formed in 1968 by employees to aid those of the SLAC community whose financial conditions have become desperate due to emergencies beyond their control.

Unlike most assistance groups, SERA's operating expenses are less than one percent! This is possible because the entire effort is volunteer. SERA is a charitable corporation whose three directors, elected semi-annually by the membership, together with a secretary and treasurer, do the necessary work.

In these hard times disbursements have increased, and there is a greater need for support. SERA's income comes primarily from the tax-deductible donations of its members. A payroll deduction of 50 cents or more per month is necessary to become a full voting member. A $6 lump sum donation or the authorization of a larger monthly donation (the current average is $2.50) is also possible. In any case, SLAC employees should consider joining this worthwhile enterprise. Employees who are already members of SERA might consider increasing the amount of their donations. Those who are not members of SERA can use the coupon below to join the group today.

Please indicate your donation and drop it in the mail today!

—Judy Nowag

CONTRIBUTION TO THE SLAC EMERGENCY RELIEF ASSOCIATION

I WANT TO DO MY PART TO HELP.

___ My check is enclosed. I would like to donate $_____ to SERA. (or)

___ I authorize payroll deductions of $_____ per month for SERA, to continue until further notice.

_____
(Signature)

_____
(Please Print Name)

_____
(Date) (Employee Number)

RETURN TO SLAC EMERGENCY RELIEF ASSOCIATION (SERA), MAIL BIN 70.

FERO, HENDRICKSON FIRST PLACE FINISHERS

Left: First place winners: front row, left to right, Linda Hendrickson, seated; Mike Fero (no, he did not run with 3-week old Allison), and Sharon White. Second row, left to right, Karen Fant, Chuck Perkins, and Ed Miller (standing). Back row, left to right, Nancy Witthaus, Tracy Usher (hidden), Rene Donaldson, Matt Allen, and Gabor Bartha.

(cont'd. from pg. 12)

Gabor Bartha, behind Mike by 27 seconds, and Sharon White, behind Linda by 40 seconds. Gabor and Sharon both won the 29 and under age groups. Brian Varghan, also in the 20–29 year old age group, placed third overall with a time of 21:57.

In the 30–39 age groups, Tracy Usher, Group A, and Karen Fant, Klystron, won with respective times of 23:04 and 28:28. Chuck Perkins, Mechanical Engineering, and Rene Donaldson, Information Services, won the 40–49 year age group, Rene placing first for the second consecutive year. Chuck's time was 24:24 while Rene beat her previous victory by almost 3 minutes (*no times mentioned, folks*).

Impressive in their showing were the winners of the 50–59 and 60–69 age groups. Ed Miller, Controls, won the men's with a time of 26:17 and Nancy Witthaus, wife of Ken Witthaus, Group E, finished first in the women's for the second straight year. Matt Allen, Technical Division, won the 60–69 age group, sailing in with a time of 27:04 to beat first-time whippersnappers half his age (*no names mentioned, Terry*).

Dr. Margaret, mistress of ceremonies, thanked the Race Committee and all of the volunteers who made it possible. The committee was chaired by Eileen Derr and consists of Dave Bostic, Dick Phelps, Karen Fant, Pat Wurster, Jim Clendenin, and Tom Knight. Herb Weidner was a consultant, and at the last minute, Steve St. Lorant acted as "field general." A hearty thanks to all involved and to the runners and walkers who participated. [*Editor's Note: The race videotape will be shown at the holiday party.*]

—*Rene Donaldson*

Thumbs Up for Ron

Ron Baggs, Experimental Group E, gives the "thumbs up" sign as he crosses the finish line of his first SLAC race. In two years Ron has lost 90 pounds and lowered his cholesterol by about 130 points. He attributes running or walking 4–6 miles daily (8 miles on the weekends) to lowering his blood pressure which was life-threateningly high two years ago. Way to go, Ron, and thanks for the inspiration!

95 COMPLETE 19TH ANNUAL 3.8+ MILE RACE

Dr. Margaret Deansley starts race and at the same time wonders if she will be able to get out of the way fast enough.

NINETY-FIVE SLAC TYPES FINISHED the 19th Annual SLAC Race, the largest number of runners ever to participate in the 3.8 mile (*oh, yes, plus 66.5 feet*) event. Held on November 1 in disgustingly glorious weather, the race not only attracted the largest number of runners in its history but also the largest number of women athletes. Thirteen females finished this year, four more than last year. At the sound of the gun, the batallions raced along the linac gallery from the Sector 30 starting line, gradually finding niches as the mob fanned out.

Linda Hendrickson, first place women's division, shows her stride at the finish line.

Mike Fero, a SLAC user from MIT, finished first for the third consecutive year with a time of 21:08, but this year when he accepted his gold and posed for his photo there was a new addition, three-week old Allison Leigh Fero. Linda Hendrickson, Controls Software, easily took the gold in the women's division with a time of 27:23. This was Linda's first SLAC race, her second race ever, so she will obviously be a noteworthy contender next year.

Second-place overall winners, men and women's divisions, were

(cont'd. on pg. 11)