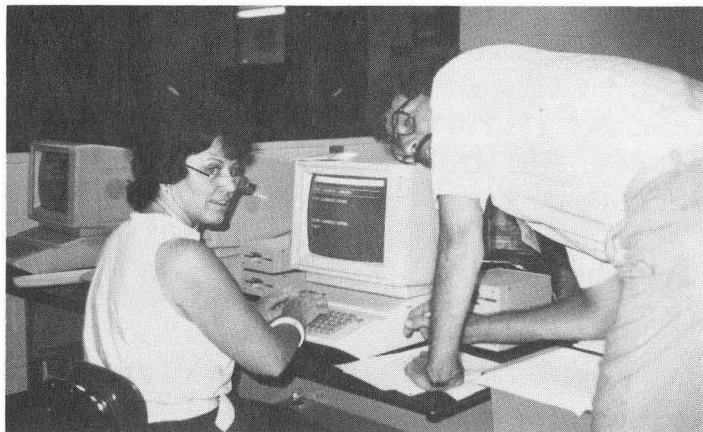


FFLA Offers Teachers Summer of Learning at Lab

by Betty Fox

Sixty high-school science and mathematics teachers (15 each in biology, chemistry, physics, and mathematics) are spending four weeks at Fermilab participating in the Summer Institute for Science Teachers (SIST). The Institute is sponsored by the Friends of Fermilab Association (FFLA) for the purpose of updating and increasing knowledge for teachers in various disciplines.



Betty Fox (Naperville Central High School) and Nick DiGiovanni (Zion-Benton High School), both of whom are participants in the Biology Section of SIST, at work in the computer lab.

The teachers spend three mornings each week attending lectures on specialties in their fields. For example, the biology teachers are being presented with "Cell Structure and Function Theories" by Dr. Guenter Albrecht-Buehler from Northwestern University, "Ecological Theories" by Dr. Terry Marsh from North Central College and Dr. Herbert Lamp from the University of Chicago, "Animal Behavior Concepts" by the staff of the Brookfield Zoo, and "Molecular Genetics Theories" by Dr. Hewson Swift from the University of Chicago.

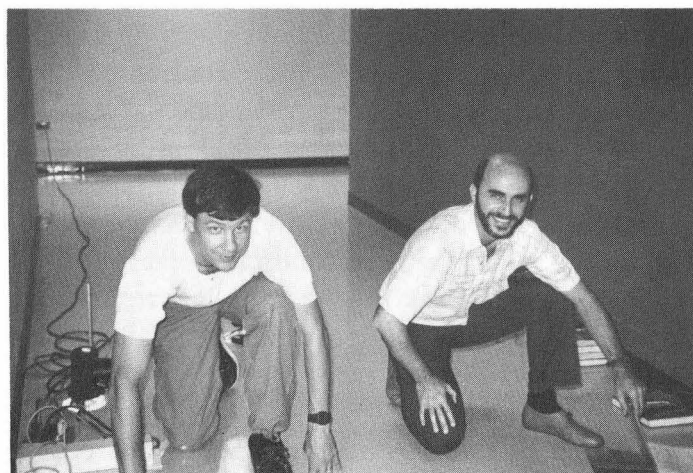
All 60 teachers spend the remaining two mornings of each week in plenary sessions learning about the latest developments on the research forefront of several disciplines. Topics vary from "Lasers and Holography" by Dr. Tung Jeong of Lake Forest College, to "Making Every Minute Count in the Classroom" by Dr. David R. Johnson of Nicolet High

School in Milwaukee, Wisc., "AIDS: Separating Fact from Fear" by Dr. James Hagen of Loyola University, and "Superconductivity" by Dr. Frank Fradin of Argonne National Laboratory. Selected topics cover all four areas of interest (biology, chemistry, physics, and mathematics). Many speakers are challenging the participants to carry these topics to the classroom in some form so that more of their students will be motivated to join the science community.

The teachers spend their afternoons trying new labs, learning computer programming and word-processing, writing programs to incorporate video disc images into a tutorial program for students, and writing a self-guided tour booklet for high-school students to use at Brookfield Zoo. Group presentations are a vital part of the program. This provides an opportunity for collaboration with colleagues to develop usable materials for the classroom with new equipment and techniques.

An overnight outing at the Indiana Dunes and Forest Beach Conference Center provides an opportunity for all the teachers to experience the benefit of field work. The teachers will hike over the dunes with Dr. Marsh, Dr. Lamp, and Richard Billings of

Continued on page 4



Pete Ogilvie (Wheeling High School) and Jim Ruebush (St. Charles High School), coordinators of the SIST Physics Section, preparing a photoelectric demonstration.

Subscriptions Now Available for Third Annual Chamber Music Series

The Fermilab Auditorium Committee is pleased to announce its Third Annual Chamber Music Series offerings. Building upon the successes of their last two fully-subscribed series, they have assembled a mixture of ensembles that are consistently described by superlatives of every sort for the 1987-1988 series.

Borodin Trio, Saturday, October 10, 1987, at 8:00 p.m.: "The Borodin reminds me of the good old days of the Heifetz-Piatagorsky-Rubenstein get-together." Founded in 1976 by three musicians widely respected as soloists and teachers, the Borodin Trio continuously demonstrates its eloquence as a first-class ensemble.

Parley of Instruments, Saturday, January 30, 1988, at 8:00 p.m.: An English baroque chamber ensemble renowned for its "sheer beauty of sound," The Parley of Instruments makes its first United States tour in 1988. Joined by "new superstar" of the lute, Paul O'Dette, Fermilab audiences will be treated to music ranging from 16th-century dances to 18th-century concerti, using the scorings of the original composers as well as period instruments.

Soviet Emigre Orchestra, Saturday, March 12, 1988, at 8:00 p.m.: "The Soviet Emigre Orchestra is an orchestra of inspiration." Led from the concertmaster's chair by Lazar Gosman, the orchestra's success has spanned three continents where they have received special praise for their "luxurious, passionate, and golden" sound.

Series subscriptions are now available for these concerts for just \$27.00, a \$5.00 savings on the individual ticket price. Subscription orders *cannot* be taken by phone. To subscribe, stop by the Atrium reception desk and request a subscription form. Orders may be placed at that time, or returned to the desk at a later date. Subscription orders will be filled in the order they are received. No single tickets are available at this time.

Series subscriptions will not be available after September 12, 1987, but may sell out sooner than that date. The Auditorium Committee recommends that you place your order immediately.

For further information, phone ext. 3353 weekdays from 10:00 a.m.-11:00a.m. or 12:30 p.m.-4:00 p.m.

Guided Tours of Lab Offered

Guided tours of Fermilab will be available on July 12, August 2, and September 13, 1987. The 1-hour tours will begin on the above dates promptly at 3:00 p.m. in the lobby of Wilson Hall and will include a short, general orientation and an escorted walk through the exhibit and observation area of Wilson Hall. The August 2 tour will include a visit to the Collider Detector Facility; the September 13 tour will visit the prairie restoration project.

There is no charge for the tours and reservations are not needed. For more information, call the Public Information Office, ext. 3351.

Number of the five hottest years in this century that have occurred since 1977: **5**

Percentage increase, since 1980, in the number of Americans who regularly surf: **25**

Number of croquet clubs in 1977: **5**

Today: **250**

- from *Harper's Index*

African Art Graces Lab Gallery

"Traditional Arts of Africa" is the latest exhibit in the Wilson Hall Gallery, 2nd-floor crossover. The exhibit, which includes a wide array of statuary, utensils, and ceremonial implements, is on loan from the May Weber Cultural Arts Foundation and will be on display through July 31, 1987.

Quoting from the exhibit catalogue text by May Weber: "The African artisan expresses a different reality from the world he sees around him. These artifacts embody forms, ideas, beliefs, relationships, feelings, and other human experiences rather than natural beings.

"These objects represent broad areas of use during the entire human life cycle . . . Birth, puberty, marriage, death, motherhood, leadership, family . . . these are the events, transitions, and positions that command the religious/magical rituals and the artifacts in the exhibition.

"For the most part, spiritual concepts dominate

Continued on page 4

Blood Drive Needs Donors!

The Aurora Blood Bank Drive returns to Fermlab on July 15, 1987. Donors are asked to stop by Wilson Hall 1 West from 9:00 a.m. to 2:00 p.m. Fermlab always responds well to this program, and the Medical Office hopes this time is no exception. All blood types are needed, with a special urgency for O+ and B+ at this time. For more information, please contact the Medical Office at Ext. 3232.

Wellness Works News



"Career Moves" - A 5-Mile Run

HMO Illinois of Blue Cross/Blue Shield is sponsoring their second annual 5-mile foot race, "Career Moves." The race will be held in downtown Chicago on August 30, 1987, at 8:30 a.m. Awards will be given in 17 career categories and 3 age groups. If you are interested, information and entry blanks are available from the Employee Benefits Office, WH 15E. (You *do not* have to be an HMO member to participate.)

Wellness Programs Reminder

The next two Wellness programs to be presented during the summer months are: "Maintaining a Healthy Back" on Tuesday, July 14, 1987, from noon to 1:00 p.m. in 1 West, offering techniques for preventive back care to avoid injury and disability, and "Healthy Heart" on Thursday, August 20, 1987, from noon to 1:00 p.m. in 1 West, a good look at everything individuals can do to strengthen and optimize their heart's function and reduce cardiovascular risk. Both of these programs require pre-registration. To sign up, call Dotti at ext. 4367

- Paula Cashin

NALREC Adds Second Switzerland Jaunt

NALREC is coordinating another tour of Switzerland (the first offering, October 4-12, sold out). Dates for the new tour are October 11-19, 1987. For information, contact Trans Global Tours, 1-800-328-6264.

Items added to the Smithsonian Institution's collection in 1986: **942,000** - from *Harper's Index*

Benefits Notes

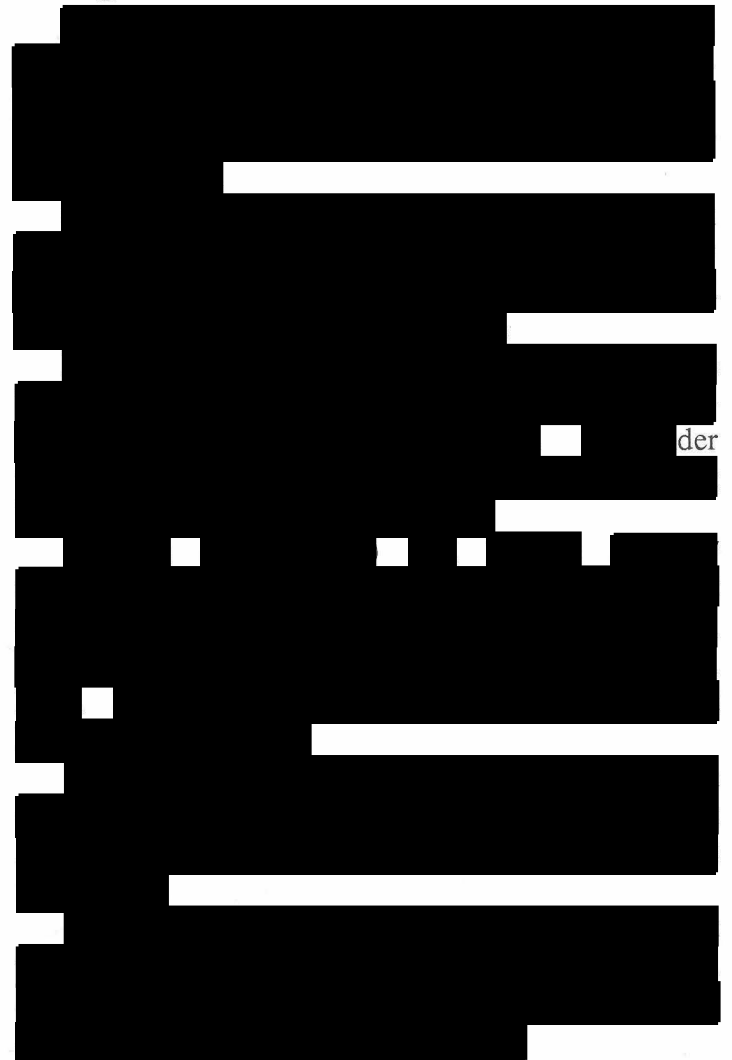
Lab Pension Contributions

Continue at Age 65

At the June URA Board of Trustees' meeting, the Board approved an amendment to the retirement plan effective June 1, 1987, which provides for the continuation of the Laboratory's pension contributions at age 65. As long as you are an active employee and participate in the retirement plan, the Lab will continue its retirement contribution. Age will not be a factor in the continuation of the Lab's retirement contribution.

- Paula Cashin

Congratulations to...



Amount consumers paid for food packaging in 1986: **\$28,000,000,000**

Portion of household trash in industrialized countries that consists of packaging: **1/2** - *Harper's Index*

Users Center Gets a Face Lift

Renovations to the Users Center are right on schedule, with contractors making major changes to the interior of the building. Some of these changes include a new roof, and new plumbing, heating and air conditioning. The east house, including the game room, is now closed and will remain closed until the end of construction.

Marilyn Paul, Head of the Activities Office, explained, "The lounge itself is not changing in character, but you can look forward to a revamped interior. We plan to make the Users Center a more comfortable and versatile place for users and employees alike. Until construction is completed, though, 'please pardon our dust'."

Construction Engineering Services, headed by Wayne Nestander, did the design work, troubleshooting, and problem solving on the project. Vic Kuchler, currently assigned to Business Services, is Task Manager on the project and was instrumental in the design. Universities Research Association, Inc., is the primary benefactor for this remodelling.

Currently, entrance to the Users Center has been routed to the south door located on Che-Che Pinqua. After construction is finished, the new entrance to the Users Center will be located on the west wall of the game room. Other changes include a new garden room adjacent to the new entrance, and a new t.v. room. The existing restrooms will also be remodelled.

Chez Leon will remain open for Thursday dinners throughout construction, but when the roof over the east house is replaced, Chez Leon may have to revise its Wednesday lunch schedule.

On the west end of the Users Center, a new restroom will be added for handicapped persons. Also on this end will be the music and library rooms, which are designated as "No Smoking" areas.

During the entire construction phase the lounge will remain open as usual from 5:00 p.m. to midnight, Monday through Friday, and from 7:00 p.m. to midnight on Saturday.

Percentage of annual income the average homeowner spent on mortgage payments in 1970: 17
Percentage spent today: 24

Percentage of Americans buying stocks for the first time in 1985 who were women: 57

- from *Harper's* Index

'50's Music and Dance Party Coming Up

NALREC presents an eclectic evening of enjoyment on Tuesday, July 14, 1987, at the Village Barn from 5:15 p.m. to 9:30 p.m. Live music from Croozin' the Loop, dance competitions, a model airplane show, and a steak/baked potato/corn-on-the-cob dinner are all on the agenda.

"FFLA" continued from page 1

Glenbard West High School, who will explain the geological development and evolution of the dunes. The evening will be spent learning "Astrochemistry and How to Think About Extraterrestrials" from Dr. Jim Sweitzer, Associate Director of the Adler Planetarium, and "Exploring the Night Sky: the Backyard Astronomer" from Mr. Jim Sievers, Director of Adler's Doane Observatory. Participants will be viewing planets and constellations through telescopes with the guidance of Dr. Sweitzer and Mr. Sievers.

The FFLA Summer Institute for Science and Mathematics Teachers is providing a wide range of opportunities to enrich, broaden, and revitalize the teachers' knowledge in a compact 4-week program. These teachers will go on to share what they have learned with their students for years to come. The SIST is funded by a grant from the National Science Foundation, and by Abbott Laboratories, Furnas Foundation, Inc., the Forest Fund, The Grainger Foundation, and the DuPage/Kane Educational Service Region. (*Betty Fox is a biology teacher at Naperville Central High School and a participant in the 1987 SIST.*)

"Arts" continued from page 2

African social organization; it therefore follows easily that most of the pieces have a religious and magical application."

"Mexican Traditional and Ceremonial Art" and "Traditional Arts of Africa," along with many other pieces of art and artifacts, will be on display in the May Weber Museum of Cultural Arts, 208 East Ohio St., Chicago, scheduled to open in September 1987.

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FermiNews Classified Ads

July 3, 1987

FOR SALE:

Automobiles

1940 BUICK SPECIAL. 4-dr. sedan, straight-8. Good condition and very low mileage. For further info call Jim at ext. 4471.

1976 DELTA 88 OLDSMOBILE. 4-dr., 8-cyl., good "reliable" work car. 77,000 miles. Call Roni on ext. 4264 days or 897-6637 after 5:00 p.m.

1976 CHEVY IMPALA. Brought up from Florida, no rust, V-8 engine, 69,000 miles, runs well. Asking \$1650.00. Call Deb, ext. 4976 or 553-6039.

1982 FORD ESCORT L WAGON. Automatic, front-wheel drive, power brakes, power steering, AM/FM stereo cassette, . Good condition, \$1200.00 or best offer. Call Gene, ext. 3624.

1985 TOYOTA TERCEL. 3-dr., AM/FM-cassete stereo, rear defroster, 4-spd. Comes with a 2-yr., 9-mnth. extended warranty. 22,000 miles. \$5000.000. Call Susan at ext. 4187 or 355-3937 after 8:30 p.m.

Miscellaneous

For the following items call Ernie Ernsting, ext. 3626, 11:30 a.m.-12:30 p.m. or 3:55 p.m.:
THREE PUSH LAWN POWER MOWERS. Briggs and Stratton, motors not functioning. \$10.00 ea. or best offer. . . MAGICHEAT HEAT EXCHANGER. For wood- or coal-burning stove or fireplace. Good condition; needs fan motor. \$50.00 or best offer. . . BAY WINDOW FOR VAN. 29" x 30", dark tint glass with screen. New in box. \$60.00.

For the following items call Ken, ext. 4050: BEER SIGNS AND MIRRORS. Some signs lighted, some neon. Old Style, Coors, Budweiser, Miller, and others available. Most are new and still boxed. \$10.00 to \$70.00 depending on type. UNITARY AIR CONDITIONER. Approx. 2-ton. 230V, 1-phase. \$50.00 or best offer.

For the following items call Deb, ext. 4976 or 553-6039: ELECTRIC CLOTHES DRYER. 1-1/2 yrs. old, good condition. Asking \$110.00 OLYMPUS OM-10 35MM CAMERA. Includes flash. Works fine. Asking \$115.00.

For the folowing items call Edie Loskot, ext. 3621: ASSORTED AQUARIUMS, one 10-gal., two 15-gal., two 20-gal., one 30-gal. Also: aquarium stands, hoods, gravel, heaters, pump, etc. Make an offer.

SIX TICKETS TO "SUNDAY IN THE PARK WITH GEORGE" AT THE GOODMAN THEATER. Three tickets for Sunday, July 26, 1987, at 2:30 p.m. Three tickets for Sunday, August 2, 1987, at 2:30 p.m. \$20.00 each (originally \$22.00 ea.) Call Frank Cole at ext. 3801.

RCA 19" COLOR TV. Solid state, works well. \$75.00. Call Tony Anello, exts. 3254, 2384.

(OVER FOR MORE)

SCHWINN PARAMOUNT BICYCLE. All 531 DB, 22-in. frame, All Campy Nuovo Record, UltraSix Freewheel, w/sew-ups. \$500.00. Call Susan at ext. 4187 or 355-3937 after 8:30 p.m.

HAMILTON BEACH 7-SPD. BLENDER. Model #644. Almond color. Never used, still in sealed box. \$10.00. Call Barbara, ext. 3865.

FOR RENT:

UNFURNISHED SINGLE-FAMILY HOUSE. Three bedrooms, living room, dining room, family room, 2-car garage. On a 1/4-acre lot in Summerlakes, Warrenville, north of Batavia Rd., less than 1/2-mile from Fermilab. Equipped with solar panels for winter months. Rent for 1 to 2 years. Available from November 1, 1987. \$700.00 per month + utilities. Contact Wilox at ext. 4951, page 438, or 393-1936.