

Young Minds Enriched by Summer at Fermilab



Target Science and Engineering Students are (seated, from left) Binh Nguyen, Parthania Dawson, Alice Lee, Michelle Regulus, Sonja Davis, Angela Carthen, Randolph Williams, Stephanie Ingram, and Martha Arroyo. Standing, from left, are Wesley Thompson, Raymond Jones, Veronica Confer, Abhinav Singla, Henry Carag, Carmel Carillo, Edward Sices, Stanley Hardeman, Vanessa Griffin, and Alvin Gayles.

Fermilab, no stranger to the concept of acceleration, has since 1980 helped accelerate the education and career goals of some of the brightest high school students in the Chicago area. The Fermilab Summer Internship for High School Students, conducted this year with support from the Friends of Fermilab Association, takes promising high school sophomores and juniors and plunges them into the world of research for a summer, giving them hands-on experience and a clear look at what a life in science might be like.

This year, out of 90 applications, 20 students were chosen. In the words of Lauta Joyner who, together with Dianne Engram, administers the program, "These are all exceptional students. Some of them are already doing college-level work." Science teachers and counselors at area high schools are asked in January to submit the names of their three best science students. By March, the list has been reduced to 20

names; those students prepare for a summer of work, fun, and education.

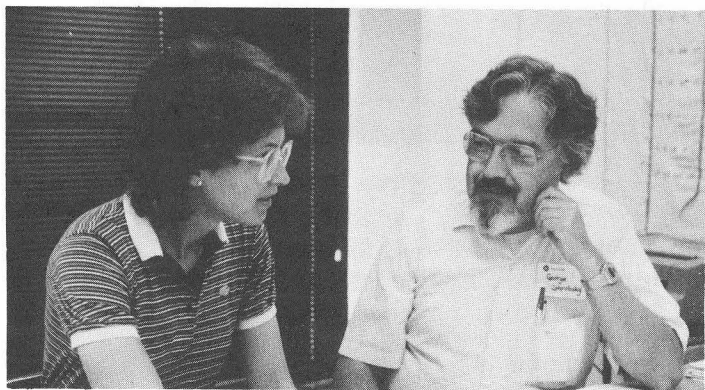
Mornings were spent with a supervisor doing technical jobs that involved students in the Lab's research program. Martha Arroyo helped Dave Austin of Safety, "gather info and pull our Document Index System together." Carmel Carillo, working with Safety's Sam Baker, wrote a display program for the IBM personal computer in the Nuclear Counting Lab, and wrote instructions on using the IBM PC. Binh Nguyen, working for Kris Sliwa in the Physics Department, helped write a FORTRAN program, and assisted in the evaluation of drift chamber performance. Alice Lee, who treated the Lab to a piano recital one afternoon, worked with Charlie Bonham in Accelerator Safety on the Milliken Oil Drop Experiment, as well as word processing and arrangement of display boards.

F.F.L.A. Sponsors Science Resource Book for Classroom

When your child comes home from school and says he/she spent a tiring day exploring cosmic mysteries in River Grove, you'd better believe him/her.

Or they may say they helped a Libertyville veterinarian hold a kitten for examination; or walked through a Chicago cemetery in search of leaves for a science project; or stalked a heron through a marsh in Batavia.

Field trips for students aren't new. Nor is the idea of using field trips or demonstrations to spice up classroom units on science. What is new is a booklet, "Resources for the Science Classroom" that makes it easier for teachers to find the resources they need to make science a living, breathing subject. The booklet was sponsored and published by the Friends of Fermilab Association and over 800 copies have been distributed to public and private schools in DuPage and Kane counties.



Kristin Ciesemier, RSC committee chairman, and George Zahrobsky, teacher at Glenbard West High School.

The booklet is a listing of science resources in northern Illinois, resources that provide speakers, tours, films, teaching materials, and exhibits in the earth, environmental, life, physical, and technical sciences.

The resource booklet was compiled last summer by Kristin Ciesemier, a biology teacher from Naperville North High School. The booklet will be evaluated by a program committee which also will recommend future revisions. The committee consists of Ciesemier; Robert Burtch, an elementary teacher in Batavia; Douglas Craig, a Glen Ellyn Principal; Paul Koutnik, Wheaton-Warrenville Science Department Chairman;

and Cynthia Crego, Fermilab's Public Information Office.

The "Resources for the Science Classroom" may serve as a model resource databank for the Science Resource Centers being established throughout the state by the Illinois Science Literacy Task Force.

Friends of Fermilab works to extend the Laboratory's capabilities, particularly in support of science education. Other programs of the FFLA include a summer institute for high school teachers, a videotape library of Saturday Morning Physics lectures and a math problem-solving workshop for middle school teachers. ❀

DeWolf Here for Special Lecture

Nicholas DeWolf, founder of Teradyne, Inc., and inventor of the first test process for silicone chips, will present a special lecture entitled "Making Dreams Really Happen While Having Yet Another Dream" at 4 p.m. on Thursday, September 12 in the Ramsey Auditorium.

DeWolf, who lives in Aspen, Colo. with his wife Maggie and their six children, founded Teradyne in 1960, and sold the company in 1975. In the intervening years, DeWolf has lent his talents to the founding of such organizations as the Computer Museum, the Aspen Computer Society, the Aspen Center for Visual Arts, and the Aspen Institute Interaction Community. He is a trustee of the Aspen Center for Physics, and a member of the Museum of Science in Boston.

Aspen magazine, in a recent article on "Influence in Aspen," described DeWolf this way: "When I first saw Nick DeWolf hold forth at a City Council meeting, I said to myself, 'Who *is* this person?' And then I watched as Nick, with his shoulder-length hair flying and his hands waving in the air for emphasis, mesmerized the Council, the press, and the public, pushing for his now-famous, one-of-a-kind computerized fountain...making us all believe in its wonderfulness."

During the past year, DeWolf has been working on the development of a personal computer that, in his words, "is the first computer that won't eat data." ❀

A Brand New Activities Office Makes Great Plans for You

"Winter, summer, spring, or fall, the Activities Office has it all."

The Fermilab **Activities Office**, headed by Marilyn Paul, is a new group within the Laboratory Services Section. **Activities** encompasses Recreation, the Guest Office, the Users Center, Chez Leon, and the Atrium Reception Desk.

"Whether you are a visitor here for a few days or for a couple of years, or if you are an employee," Marilyn explained, "the goal of the Activities Office is to serve you by enhancing the quality of life at Fermilab and promoting a congenial and friendly atmosphere consistent with the basic goals of the Laboratory."

In a series of articles beginning in this issue, FermiNews will explore each group and the total range of services offered by the **Activities Office**.



The Fermilab Activities Office Staff from left is Helen McCulloch, Recreation; Etta "E.T." Hill, Users Center; Avril Quarrie, Guest Office; Marilyn Paul, Activities Office Coordinator; Rose Broomfield, Atrium Reception. (Not pictured is Tita Jensen, Chez Leon.)

"Recreation" is the Name, Fun and Fitness are the Game

Recreation, overseen by Helen McCulloch, is the group under the Activities Office which provides the places to burn calories, the opportunities to meet new friends, and support for various special-interest clubs at the Laboratory.

Pumping iron, shooting buckets, spiking, kicking, jumping around, and generally working up a sweat all happen at the Recreation Facility, located at 16 Potawatomi in the Village. Accessible whatever shift you happen to work, the Recreation Facility boasts a full-size gym which is perfect for basketball, volleyball, tennis, badminton, and soccer, either pick-up or league. A Recreation Facility membership is needed for participation in leagues using the gym.

The Recreation Facility weight room contains a Universal multi-station unit, a Marcy multi-station unit, free weights, dumbbells, exercise bikes, a rowing machine, a Roman chair, a speed bag, and a heavy bag. In the same building is a free-exercise room with mats for floor exercises; this room is also used for karate classes, and it is anticipated that aerobic and calisthenic classes will begin soon, so polish up your Reeboks. While the entire Recreation Facility is always open to mem-



Helen McCulloch, head of Recreation. Helen can be reached in her new office in the Recreation Facility at ext. 3126.

bers, peak use hours are between 11:30 a.m. and 12:30 p.m., and 3:30 p.m. and 6 p.m. League play in the gym usually begins at 6 p.m.

Membership for the Recreation Facility is \$30 per year, \$15 for students. The membership year runs from October 1 through September 30. Temporary memberships (three months or less) are \$8 per month plus a \$20 deposit to be refunded when your card is returned. As a special incentive for new members, the Recreation Facility is offering the month of September free!

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... "Recreation" cont'd

Recreation also helps organize and schedule basketball, softball, golf, tennis, and bowling leagues.

Special-interest clubs at Fermilab, such as the Barnstormers Model Airplane Club, the Chess Club, the Garden Club, the Riding Club, the Music Club, and the Amateur Radio Club can look to Recreation for organizational support and assistance.

Recreation wouldn't truly mean recreation if NALREC weren't mentioned. One of the hardest-working volunteer groups at the Lab, NALREC, which labors mightily to produce social activities such as Hard Times Parties, Monte Carlo Night, the Christmas Dance, and the Family Picnic, is also a Recreation responsibility.

Recreation sees to the filling, skimming, and staffing of the swimming pool, one of the more popular summer amenities at the Lab. Season pool memberships for families, couples, and singles are available at the beginning of the swimming season, as are temporary passes for short-term visitors.

Membership for both the gym and the pool provide funding for operations and repairs, and for the purchase and replacement of missing or broken equipment; your dollars support your leisure-time activities.

Recreation Facility memberships are available at the Atrium Reception Desk year-round. Further information is yours by dialing ext. 3353.

—S. Winchester

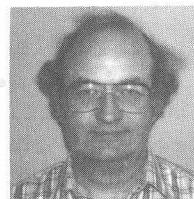
Next: A "new" Users Center.

Next Film Fest to Feature Truffaut

On Friday, September 13 and Saturday, September 14, the Fermilab International Film Society will present a Francois Truffaut Film Festival in Ramsey Auditorium. **Small Change** will be shown at 8 p.m. on Friday, September 13, followed at 10 p.m. by Oscar-winning **Day for Night**. On Saturday, September 14, **Confidentially Yours** will be shown at 8 p.m. Capping off the festival at 10 p.m. will be **The Green Room**. Tickets are \$2 for adults, 50¢ for children, and are available at the door.

Firesign's Law of Motion. Wherever you go, there you are.

*In Memoriam
Melvin Rebuehr
1936-1985*



Melvin Rebuehr began working at Fermilab in January of 1982 as a Senior Technician in the Antiproton Source Project. In April of 1982, he transferred to the Tevatron I section as a Senior Technician, and was assigned to work on the Accumulator rf system.

Last winter, as the installation phase of the TeV I project went into full swing, Mel was transferred to the Antiproton Source site to work on the electrical installation. "In both capacities, as a technician and a coordinator, Mel did an excellent job," said Robert "Obie" Oberholtzer, "His sense of humor and dedication to his work will be missed by all of us who knew him."

Melvin is survived by his wife, Karen, and two children, Monice and Sage.

*In Memoriam
Doyle Burchfield
1927-1985*

Doyle Burchfield was hired as a Maintenance Electrician in Maintenance and Operations in 1971. He went on Long Term Disability in May 1977.

Doyle is survived by his wife, Rita.

Take Note of New Credit Union Hours

Beginning Tuesday, September 3, 1985, the Credit Union will be closed every day from 1:00 p.m. to 1:45 p.m. for lunch.


The Credit Union asks members to plan their credit transactions accordingly, so that they will not be inconvenienced. Share withdrawal checks and loan checks will be ready for pickup at 1:45 p.m. For further information, contact Linda Irving at ext. 3293.



... "Students" cont'd from pg. 1

Afternoons were spent learning in a classroom environment, and working on projects of the students' own choice. These projects were student-selected from a list of abstracts prepared by program teachers Robert Tisdale (Julian High School) and William Cooper (Geneva High School). Each student must complete his or her project by the end of the internship and present a paper to parents and fellow students on the last day of the program. In addition, all the students spent time developing the computer skills which are vital to their future careers.

The goal of the program, says Joyner, is to encourage minority high school students to consider careers in engineering and physics. "We've noticed that a lot of students haven't really committed to a career path; an early program like this one helps to track students into fields in which the Lab has an ongoing interest. It's one more way of seeing to it that this country's pool of science talent is never depleted."

The measure of the program's success will truly be evident a few years down the road when these students build on the impetus they've gained from their Fermilab experience. For now, the comments of the students themselves testify to the program's worth. Martha Arroyo felt that she "was given complete information and cooperation; my supervisor provided me with all the attention I needed." Abhinav Singla found the work assignments "challenging. Actually, my supervisor was the entire Advanced Computer Group. They helped me whenever I needed it, and left me alone when I didn't." Randolph Williams found "a lot of experience in my Fermilab work. I believe this program influenced me to further my studies in science." Mission accomplished. 

Buckle Up: Because It's the Law

The Laboratory believes it is appropriate to remind drivers of government vehicles that the use of seat belts not only is required by federal regulations, but also by the State of Illinois.

In order to prevent unnecessary incidents of a legal nature, please use seat belts. Violations of state law could be costly to you in terms of fines, and could effect your duties at the Laboratory. Also remember, the law covers personal vehicles.

Inoperable seat belts in government vehicles should be brought to the attention of Vehicle Maintenance for necessary repairs.

As the saying goes: "Buckle Up for Safety," and "Drive Carefully."

—Bill Butler

Congratulations To . . .

Jacquelyn and Norman (*AD/Accelerator Controls*) Brown on the birth of their first child, André Christopher on March 22, 1985, at Copley Memorial Hospital. André weighed 5 lbs., 7 oz., and was 19 in. long.

Marijane and Stanley (*AD/Mechanical Support*) Reeves on the birth of Aimee Margie on July 23, 1985, at Good Samaritan Hospital. Aimee weighed 6 lbs., 12 oz., and was 20 in. long. Aimee was welcomed home by big sister Jackie.

Jamie (*Housing*) Bilotto-Popp and Mike Popp on the birth of their first child, Michelle Marie Elena on August 19, 1985, at Delnor Hospital. Michelle weighed 5 lbs., 13 oz., and was 18-1/2 in. long.

Kate (*Credit Union*) and Brian (*NTF*) Pientak on the birth of their first child, Alexander Brian on August 26, 1985, at Mercy Hospital. Alexander weighed 6 lbs., 1 oz., and was 19-1/2 in. long.

Thurber's Conclusion. There is no safety in numbers, or in anything else.

Caen's Law. All American cars are basically Chevrolets. (From *The Official Rules.*)

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"We're fifty-three miles from Fermilab; we've got a half a tank of gas, a quarter of a pack of cigarettes, it's still dark, and we're still wearing sunglasses."

THE BRUISE BROTHERS ARE ALMOST HERE.

Fermilab Family Picnic '85

