# #FermiNews

June 21, 1991 Vol. 14, No. 11

Fermi National Accelerator Laboratory

# **URA announces 1991 scholarship winners**

The Universities Research Association (URA) has awarded its annual scholarships to seventeen sons and daughters of URA employees. The scholarships are designated for graduating seniors beginning a four-year degree program the following fall. Winners were selected on the basis of Scholastic Aptitude Test (SAT) scores.

#### Congratulations to the 1991 scholarship recipients

**Purusharth Agrawal** is a graduate of the Illinois Math and Science Academy. He is an Illinois State Scholar, and placed in the state and national Science Olympiad. Purusharth will major in biomedical engineering and pre-medicine, in preparation for a career as a cardiac surgeon. His father is **Shree Agrawal** (TS/Mag. Dev. & Testing).

Swati Agrawal, a graduate of the Illinois Math and Science Academy, is an Illinois State Scholar and a National Merit Finalist. At IMSA, Swati was a Spanish Club officer, president of her dance club and a member of Mu Alpha Theta, a math honor society. Swati is planning a career in medicine, possibly in obstetrics. Her father is Shree Agrawal (TS/Mag. Dev. & Testing).

Christopher Lee Beutler is a graduate of Lyons Township High School. He is an Illinois State Scholar, was named Student of the Month in science and received the Countryside Rotary Academic Achievement Award. Christopher, the son of Al Beutler (AD/Mech. Support), will major in chemistry at Northern Illinois University.

Christopher L. Binkley, a 1991 graduate of Batavia High School, was a member of the school's chess, problem solvers and games clubs. He plans to study chemical engineering at Michigan Technological Institute in Houghton, Michigan. He is the son of **Morris** Binkley (RD/CDF).

Kevin O. Engram is a graduate of Waubonsie Valley High School. He was a member of Student Council and the National Honor Society, and was a two-year letterman in football. A winner of an Aurora Optimist Club award and a National Competitive Merit Scholarship, Kevin will study electrical engineering at Howard University, Washington, D.C. His mother is **Dianne Engram** (LS/EEO).

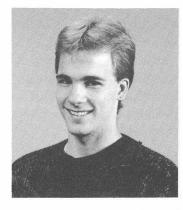
Robert Joseph Finley, the son of David Finley (AD/ Main Injector), is a 1991 graduate of Aurora Central Continued on page 2.



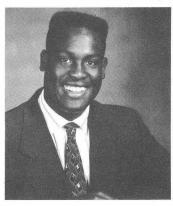
Purusharth Agrawal



Swati Agrawal







Kevin O. Engram



Christopher L. Binkley



Robert Joseph Finley FermiNews page 1

#### Scholarship winners continued from page 1

Catholic High School. Robert has won a grant and an honor scholarship at Marquette University in Milwaukee, Wisconsin, where he will study communications. He hopes to become a sports broadcaster.

Lisa Jean Flora, the daughter of Robert Flora (AD/EE Support), is a graduate of Batavia High School. She will attend Judson College in Elgin. Lisa works at an alterations and tailoring shop, and enjoys horseback riding, skiing and dancing in her spare time. Her current plans are to major in theater.

**Timothy Allen Hauser** is a graduate of Marmion Military Academy in Aurora. An Illinois State Scholar, he was assistant editor of his school newspaper and a teen correspondent for the *Beacon-News*. Timothy will attend the University of Illinois at Urbana-Champaign, where he will prepare for a career in medicine or journalism. His father is **Richard Hauser** (AD/Mech. Support).

Steven Glenn Johnson, the son of Glenn Johnson (AD/ EE Support), is a National Merit Scholar and an Illinois State Scholar. A graduate of the Illinois Math and Science Academy, he has won awards for his achievements in Latin, computer science and physics. Steven will study physics and computer science at Massachusetts Institute of Technology.

Aleksandra A. Kuzminska is a graduate of Wheaton Central High School and Ecole Secondaire Jean XXIII in Montreal, Canada. She is a member of the French National Honor Society, and her paintings have won awards. Aleksandra, the daughter of Jozef Kuzminski (SSCLAB/ Magnet System Div. Staff), will major in molecular biology at Illinois Benedictine College in Lisle.

Natalie Leja, a graduate of Benet Academy in Lisle, was active on her school yearbook staff and in her church youth group. She has received a scholarship to study international business at Illinois Benedictine College, and hopes to have a career that enables her to travel. A winner of a Presidential Academic Fitness Award, she is the daughter of Norman Leja (AD/Cryo).

Hether A. Misek is an Illinois State Scholar and a member of the West Suburban Conference Senior Athletic Continued on page 3.

# In the Library...

The Library is missing a number of bound issues of journals. If some of these have found their way to your office, please return.

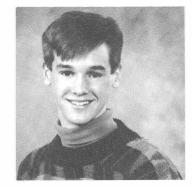


Lisa Jean Flora



Steven Glenn Johnson





**Timothy Allen Hauser** 



Aleksandra Kuzminska



Natalie Leja

Hether A. Misek

# **Congratulations to...**



#### FermiNews page 2

#### Scholarship winners continued from page 2

Academic Team. A graduate of Downers Grove South High School, she will attend Ball State University in Muncie, Indiana. Hether plans to major in accounting. Her father is Joel R. Misek (AD/Mech. Support).

Mayu Mishina is a graduate of Geneva High School. She was valedictorian of her class, an Illinois State Scholar and vice-president of National Honor Society. A teen feature writer for a local newspaper, Mayu plans to attend the University of Illinois at Urbana-Champaign. Her father is Masanori Mishina (RD/CDF).

**Daryn Evan Oxe**, the son of **Rodney Oxe** (BS/ES/Fire Dept.), is a graduate of Batavia High School. A two-year letterman in football and baseball, Daryn attended the Saturday Morning Physics Program at Fermilab. He plans to study mechanical engineering at Michigan Technological Institute in Houghton, Michigan.

Jonathan Ticku graduated from Ames High School in Ames, Iowa. He was a member of the Ames High soccer team, played intramural basketball and volleyball, and is certified as a scuba diver. Jonathan plans to prepare for his medical career at Iowa State University in Ames, where he will major in chemistry and biochemistry. His father is Jawahar L. Ticku (AD/Controls).

Melinda Dawn Verseput is a graduate of Waubonsie Valley High School, where she was a member of the swim team, basketball team, swing and varsity choirs and the anti-drug group Star Raiders. She plans to major in deaf education at Northern Illinois University in DeKalb. Melinda's father is **Gary Verseput** (BS/Security).

**Derek John Hom Wagner**, the son of **Al Wagner**, **Jr**. (AD/Switchyard), is a graduate of Kaneland High School. A member of National Honor Society, Derek was a state qualifier in the shot put and the 400-meter relay. He was also named to the *Chicago Sun-Times* All-Star Team. Derek will major in physics at Illinois Wesleyan University in Bloomington.

**Employees volunteer to help children** 

**Bill Couch** (BS/Purchasing) and **Millvenia Stiff** (BS/ Support Coord.) have recently been accepted as volunteers in Big Brothers/Big Sisters of Southern Kane and Kendall Counties. Millvenia and Bill join over seventy-five adult volunteers in this area who have formed a one-on-one relationship with a child living in a single-parent home.

Volunteers commit to spending three to four hours each week with their Little Brother or Little Sister doing a variety of activities—playing ball, cooking, taking walks or



Mayu Mishina



Jonathan Ticku



Derek John Hom Wagner



Daryn Evan Oxe



Melinda Dawn Verseput

# Harper's index

Chances that a cup of coffee drunk in the United States in 1963 was decaffeinated: 1 in 33.

Chances today: 1 in 4.

just talking. The children benefit greatly in school, at home and with peers from the extra adult contact, guidance and attention they receive.

To learn more about participating in Big Brothers/Big Sisters, talk to Millvenia and Bill or call 844-9090. Big Brothers/Big Sisters is a program of Family Counseling Service, a United Way agency.

## **Research Division appoints new leaders**

The Research Division announces the following management appointments.

Bob Trendler was named Associate Head of the Research Division on March 1. 1991. As Associate Head. Bob works closely with the **RD** Support Departments and other Divisions of the Laboratory to develop and optimize the engineering and other technical support needed to install and run experiments. He also is responsible for Engineering QA and R & D, and the operational implementation of ES & H requirements.

Bob comes to his new position from the RD's Electronics/Electrical Department, where he was Department Head. He joined Fermilab in 1971, and worked as an engineer with the Accelerator Division. Bob has also worked in the Meson, Neutrino and Experimental Areas Departments.

John Cooper has been appointed Assistant Head of the Research Division for Strategic Planning. In this capacity, John will assist the Research Division and the Directorate in developing the strongest physics program possible. Since his appointment in December 1990, John has chaired review committees and helped develop budget proposals. John remains the Deputy Head of the CDF Department, and he divides his time between CDF and Strategic Planning duties.



**Bob Trendler** 



Paul Czarapata

John began working with Fermilab experiments in 1972 as a graduate student. He joined the CDF collaboration in 1982 while at the University of Pennsylvania, and worked on the Central Calorimetry cesium source calibration system. He coordinated the CDF NW testbeam effort in 1984 and 1985. John joined the Fermilab staff in 1985.

In March 1990, Jim Kilmer became Department Head of the RD Mechanical Department, replacing the retiring Jack Lindberg. Jim heads the department which designs and builds most of the Fermilab-supplied mechanical equipment associated with fixed-target beamlines and experiments.



John Cooper



Dan Green

Before moving to the mechanical department, Jim worked in the Research Division Cryogenics Department. He started in 1972 as an operations chief and became an assistant group leader with the fifteen-foot Bubble Chamber, where he stayed until the chamber closed in 1988. During 1989, Jim helped with the design and construction of the hydrogen targets used for the last fixed-target run.

Paul Czarapata now serves as the Department Head for the Electronics/ Electrical Department. Paul began his Fermilab career as a Tech. 1 in 1972. While working in the Meson area, he earned a B.S. in Physics and an M.S.E.E. He was



**Jim Kilmer** 



Vicki Davis

named Head of Electrical Operations in the Meson area, then joined the Electrical Group when the Experimental Areas Department was formed. Paul has also worked as Group Leader for the Controls Group and Assistant Group Leader for the Beamline Systems Group. Just before being named to his new position, Paul was Associate Department Head.

"I consider myself fortunate to have the opportunity to work at Fermilab," Paul says. "I have been able to grow in my career as the Lab grew. The diversity of the work and the 'can do' spirit of the many outstanding people who work with me is refreshing."

Continued on page 5.

# Scientific appointments

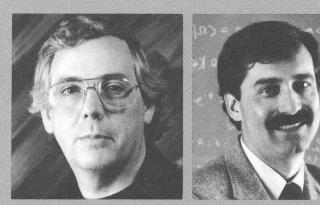
Fermilab Director John Peoples, on the advice of the Fermilab Committee on Scientific Appointments, has announced the promotions of **Dan Green** (RD/SDC) and **Edward W.** (Rocky) Kolb (RD/Astrophysics) to Scientist III.

Dan Green, currently Head of the Solenoid Detector Collaboration Department, earned his B.S. and Ph.D from the University of Rochester. As a postdoctoral research fellow at the State University of New York, Stony Brook, he worked on an ISR experiment on the rising of the total cross section.

From Stony Brook, Dan traveled to Carnegie Mellon University, where he was an Assistant Professor and spokesperson of a Brookhaven National Laboratory MPS baryonium experiment. He has been a Staff Scientist at Fermilab since 1979. At Fermilab, Dan has worked on FNAL MPS Spectroscopy, E580, E623 and DØ, and he became Muon Group Leader in 1982. Recently, he has been involved in SSC physics and was named SDC Deputy spokesperson.

Dan was the RD Facilities Support Group Head from 1982-1984, Physics Department Deputy Head from 1984-1986 and Head from 1986-1990. He has served on the Fermilab Users' Executive Committee, the Organizing Committee for the DPF 90 (Rice) and as Co-Chairman for the 1989 Fermilab Breckenridge Workshop.

Rocky Kolb is Head of the Theoretical Astrophysics Group at Fermilab and a Professor of Astronomy and Astrophysics in the Enrico Fermi Institute and the College at the



Dan Green

**Rocky Kolb** 

University of Chicago. He earned a B.S. from the University of New Orleans, and a Ph.D in physics at The University of Texas, Austin.

Before coming to Fermilab and the University of Chicago, Rocky was a postdoctoral research fellow at the California Institute of Technology, a J. Robert Oppenheimer Research Fellow at Los Alamos National Laboratory in New Mexico and Deputy Group Leader of the Theoretical Astrophysics Group at Los Alamos.

Rocky's primary area of research interest is the application of particle physics to cosmology and astrophysics. He is also concerned with science education, especially of the general public. An American Physical Society Fellow, Rocky has lectured in Europe, Australia, Japan, South Korea and Mexico. He has served as a Visiting Professor at the University of Michigan, the University of Rome and Osservatorio di Roma and the University of Sussex.

#### **Research Division continued from page 4**

Dan Green is Head of the new Solenoid Detector Collaboration (SDC) Department in the Research Division. The SDC was formed in 1989, and is working toward construction of an experiment at the SSC Laboratory. Fermilab physicists have formed a group within SDC which focuses primarily on calorimetry and associated front-end electronics. Other physicists at Fermilab are studying fiber tracking and simulation.

The SDC's Fermilab headquarters are located at WH7W, with lab space at 30 and 32 Neuqua.

Dan joined Fermilab's Meson Laboratory in 1978. At the Meson Lab, he worked with the MPS spectrometer in the M6 beam line. He then worked with the Facilities Support Group, and later was named Deputy Head of the Physics Department. Dan comes to the SDC Department from his previous position as Department Head of the Physics Section, which he held until last October.

Vicki Davis joined Fermilab as an Executive Assistant in May 1990. Before coming to the Laboratory, she spent ten years at the DOE-funded Lawrence Berkeley Laboratory in Berkeley, California. In California, Vicki's responsibilities included the risk management program, the archives and records program and contract administration.

Vicki currently serves as a budget officer for the Research Division. As the "funnel through which everything passes," she is involved with the requisition, allocation and monitoring of funds. NEPA compliance and DOE regulations are other areas of Vicki's concern. "I make sure we're using the right flavor of money for the right purchase," she says.

## **Recreation, clubs and activities**

#### Chess club places second

The Fermilab chess team recently took second place in the playoff competition of the 1990-91 Chicago Industrial Chess League (C.I.C.L.) season.

The C.I.C.L. consists of twenty-seven teams from the Chicago metropolitan area. The teams are organized into four regional divisions. Fermilab made it to the playoff rounds by finishing first in the Far West division (other teams in the Far West include Amoco, AT & T, Bell Labs and Wheaton College.)

Active members of the 1990-91 Fermilab team include: Greg Cisko (RD/DØ Constr. Dept.), Cary Dowat (CD/ Distr. Comp.), Irwin Gaines (CD/Div. Ofc.), Jean-Francois Glicenstein (DØ), Robert Harris (Physics), Mark Kozlovsky (RD/EE Dept.), Adam Para (RD/Col. Det. Dept.) and Lenny Spiegel (RD/Facil. Dept.). The team notes with sadness the recent loss of one of its members, Chip Kaliher (CD/Cent. Comp.). The trophy received for the second-place finish is dedicated to Chip.

Generally the Fermilab chess club meets during the C.I.C.L. regular season—from September through May both for "skittles" games and inter-company match play. Participation in match play is open to employees, contractors and visitors. Interested parties should contact either Irwin Gaines at X4022 or Lenny Spiegel at X2809.

#### Dart club succeeds

The Fermilab Fermions placed second in the "A" Division of the Fox Valley Dart Association's (FVDA's) spring season. The team members are Captain **Wayne Johnson** (RD/EE), **kelly Dixon** (RD/DØ), **Jim Loskott** (RD/Cryo), **Buzz Rodewalt** (RD/Cryo), **John Urbin** (RD/Cryo) and Dave Grant. Jim represented FVDA as an All-Star in a match against the West Suburban Dart Association.

If you are interested in joining the Fermilab Dart Club, contact Wayne Johnson, X3190, e-mail FNAL::WJOHNSON or Buzz Rodewalt and Jim Loskott, X3355. Teams of three or more will be organized and singles are most welcome.

The Fermilab Fermions are (L-R): Kelly Dixon, John Urbin, Wayne Johnson (seated) and Buzz Rodewalt. Not pictured: Jim Loskott, Dave Grant.

#### Nalrec sponsors Cubs vs. Cardinals weekend

Watch Ryne Sandberg, Shawon Dunston, George Bell, Mark Grace and the other Cubs take on the Cardinals in St. Louis July 5-7. The trip fee includes deluxe motor coach and two nights' lodging at the Midway Motor Lodge—with an indoor pool and a poolside pizza party on Saturday. Saturday breakfast and Sunday brunch are included, as are a trip to the famous St. Louis Arch and reserved terrace seats for the Friday and Saturday night games. Smoking will only be permitted in the back of the bus.

The price of the weekend, including the 10% Nalrec member discount, is \$148.50 per person, double occupancy. A \$50 per person deposit is required. For more information or to reserve your seat, call Jesse Guerra at X4305.

#### Explore the ocean floor

Learn scuba at Fermilab! A few slots are still open. The course begins on July 10th and will meet every Wednesday for five weeks from 7:00 to 10:00 p.m. The cost is \$110 and is due before the first session. Students will need to provide their own masks, fins and snorkels by the second session. If you would like to register or need more information, please call Sheri at X4544 or Jean at X3126. Participants must be at least twelve years old.



# Health & fitness tip

#### Low-fat cooking techniques

Most of us eat far more fat than we need—between six and eight tablespoons each day. But, for sound nutrition, we only need to eat about one tablespoon of vegetable oil a day. Considering the link between high-fat diets and heart disease, obesity and cancer, it makes sense to limit our intake of fat. The following tips may help you trim excess fat from your daily menu.

#### Buy low-fat food

You can start trimming fat by buying foods that are naturally low in fat—fresh fruits and vegetables, fish, whole-grain bread and cereal products and poultry without skin. You can also buy low-fat versions of your favorite dairy products. In addition, try using margarine instead of butter, plain yogurt instead of sour cream and vegetable oil instead of shortening or lard.

#### Bake, broil, poach or steam

You can further de-fat your menus by using cooking techniques that require no added fat. Instead of frying or sauteing your food, bake, broil or poach it. You can also steam or microwave almost any meat or vegetable.

#### Season with herbs

Herbs and spices add interesting flavors to foods and help make high-fat sauces and gravies unnecessary. The seasonings can be purchased fresh, freeze-dried, minced or powdered. Herbs and spices can also help you cut down on added salt.

#### Experiment

Try experimenting with your own family favorites. Substitute skim-milk mozzarella and farmer's cheese for the whole-milk mozzarella and ricotta in your lasagna recipe, or top baked potatoes with chopped tomato and plain yogurt instead of sour cream and salt. — Source: 1987 Parlay International

# **Golf outing planned**

Reservations are being taken for the July golf outing to be held July 19 at 12:30 p.m. at Fox Bend Golf Course located on Rt. 34 in Oswego, Illinois. The costs for the outing are: greens fees \$21, gas cart \$22 and contest fee \$3.

For reservations call Rosemary at X4446. Reservations are needed by July 3. One-half day of approved vacation time is required to play. The outing is sponsored by Fermi's Tuesday Night Fox Valley Golf League.

### In memoriam

**Rafil Rzaev**, a member of the E704 collaboration, died April 9 at age fifty-three. He was involved in high-energy physics for many years, and played an important role in the E581/E704 polarized proton beam development. He was the leader of the team that produced a polarized GeV proton beam in IHEP, Protvino, USSR, in fall 1990.

Rafil graduated from Moscow University, where he contributed to the discovery of the Solokov-Ternov phenomenon of the spontaneous polarization of electrons circulating in an accelerator ring. Afterwards, Rafil worked in the Beam Division of IHEP, Protvino for more than twenty years. He contributed considerably to the creation and development of the IHEP neutrino facility, to the practical use of crystals for bending of external proton beams and to the layout of beam channels for IHEP's 70 GeV accelerator. He also played an essential part in the conceptual design of the UNK particle beam facilities.

Rafil was much appreciated by his colleagues for his dynamic personality and his outstanding ability to propose and develop new approaches to experimental problems.

Noby Tanaka, a senior member of the E704 collaboration at Fermilab, died February 23 after a short illness. He was involved in spin physics and nuclear physics for many years, and proved invaluable in the preparation and data collection for E581/E704. Recently, he was actively engaged in forming a collaboration for spin physics experiments at the UNK accelerator now under construction in the Soviet Union.

Noby started his career in physics at Los Alamos (LAMPF) after receiving his doctorate from Tufts University and his undergraduate degree from Harvard. He was a key member of the team that designed and built the beam line and spectrometer for the LAMPF High Resolution Spectrometer and was involved in numerous magnet-design projects and experiments at LAMPF.

Noby's positive attitude, practical approach and technical skills made him highly respected by his colleagues.

Both Rafil and Noby will be missed by all members of the E704 collaboration.

# Cla\$\$ified Ad\$

#### **Motorized vehicles**

**1982 4-door Buick Century**. A/C, stereo, fair body, good tires. \$150 or best offer. Call (708) 892-4676 or X3771.

#### Miscellaneous

**Commodore 64 Computer System.** Keyboard, console, disk drive, video monitor, assorted software including Swift Calc and Electronic Check Book, assorted reference books, programming manuals and users' guides. All in excellent condition. \$350 for everything. Call Mimi at X4143.

**Oscilloscope**, Tektronix 2215 two channel 60 Mhz with probe pouch, excellent condition. \$875. Call Dan at X3157 or e-mail FNAL ::SCHOO

Maytag washer, \$50; Maytag dryer, \$75. 1970s issues of *Equus* magazine, 1970s issues of *Horseman* magazine. Call Jim at X4382 or (815) 786-7000.

House in Batavia, 3 miles from Lab. Split level, 3 bed-

rooms, 1 3/4 bathrooms, living room, family room, kitchen, utility room, air conditioning, fireplace, 2-car garage w/ electric garage door opener. Great neighborhood for kids. Please call (708) 879-1489 between 6 and 9:30 p.m.

House in Batavia, 2 1/5 miles from Wilson Hall. Raised ranch, 4 bedroom. Move-in condition. 2 1/2 baths, living room, dining room, kitchen, workshop, family room overlooks beautiful back yard. Near park, bike path and I88.\$165,000. Call (708) 879-7208.

Satellite dish, 9 ft. dia. pole mounted, remote positioning with down station and 50 ft. of cable. Has bad preamp (\$110). As is, \$250. Automatic garage door opener. Sears 1/3 hp chain drive with 1 remote control. Works fine, \$50. Call Jerry, X4571 or (708) 801-9408.

12-foot row boat w/oars. Excellent condition, \$150 or best offer. Electric trolling motor, excellent condi-

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tion, \$75 or best offer. Special price possible for pair. Call (708) 552-7256.

**Piano**, Currier-Parlor style upright. 6 years old, likenew condition, \$1,000. Call X3103 or (708) 553-7644.

#### Wanted

Lawn mower. The Fermilab Garden Club would like you to donate your old lawn mower(s) to us. If you have an old mower that looks like it should work, but you just don't have the time, energy or expertise to fix it, we'd be happy to come and take it off your hands. Call Jim at X2881 or Elliot at X4808.

# June movie schedule announced

The Fermilab International Film Society invites you to view movies with cosmopolitan appeal. The films are shown in Ramsey Auditorium, Wilson Hall, and all foreign language films have English subtitles. Admission is \$2.00.

The Film Society's schedule for June is:

Friday, June 21, at 8 p.m.: A Taxing Woman

From the director of *Tampopo* (Juzo Itami) comes the comic story of an ordinary, middle-class wife turned tax inspector. Japan, 1987. (127 minutes)

Friday, June 28 at 8 p.m.: Under the Volcano

Albert Finney stars as a former British Consul in Mexico, who drifts between despair, drunkenness and lucidity in the days leading to his death. Directed by John Huston. U.S., 1984. (112 minutes)

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