

10-5-1990

NEWS AND NOTES 1990, OCTOBER 12

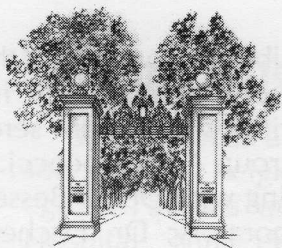
The Rockefeller University

Follow this and additional works at: http://digitalcommons.rockefeller.edu/news_and_notes_1990

Recommended Citation

The Rockefeller University, "NEWS AND NOTES 1990, OCTOBER 12" (1990). *News and Notes 1990*. Book 11.
http://digitalcommons.rockefeller.edu/news_and_notes_1990/11

This Book is brought to you for free and open access by the The Rockefeller University News and Notes at Digital Commons @ RU. It has been accepted for inclusion in News and Notes 1990 by an authorized administrator of Digital Commons @ RU. For more information, please contact mcsweej@mail.rockefeller.edu.



News & Notes

Rockefeller softball team makes playoffs

Although first-year jitters helped give the "New York Scientists" a flawless record early in the season (0-8), a late summer rally led to a three-game winning streak and a chance in the playoffs of the "Yorkville Sports League's American Conference East." On September 10, the team, composed completely of Rockefeller or former Rockefeller personnel, lost to the league's best team, the "Knights," 14-9 in the first game of the playoffs. However, "Scientists" Captain Daniel W. Rosenberg, Assistant Professor in the Laboratory of Metabolism-Pharmacology, said that even making the playoffs was an accomplishment.

"We had never fielded a team before, and we learned early in the season that some of our guys didn't even know the language of baseball. Some had never run bases before in their lives," he said.

However, the team advanced despite such cross-cultural challenges and the adventure of playing most of their games in an abandoned lot on E.113th Street. As newcomers, they had lots to learn, including the fact that *modified pitch soft-*



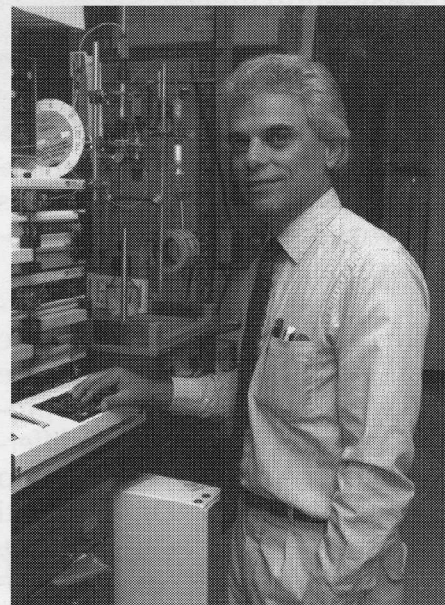
Copyright © 1990, American Institute of Physics

Fischetti takes steps against strep

Strep throat season is upon us, and any parent knows what *that* means. For kids, it's a raw, wretched pain in the throat. For parents, it's a pain in the neck—and the wallet. Each new bout with the strep bacterium means days missed from work to care for the child, and dollars spent on doctor visits and antibiotics.

The human and economic costs run even higher when strep throat develops into rheumatic fever, a disease that permanently damages the heart. The availability of effective antibiotic treatment has made this complication rare, but not unheard of;

☛ see Fischetti on next page



Vincent A. Fischetti

Shari Diamond

ball actually means, according to Rosenberg, "pitching the ball underhanded at 60 miles an hour."

Still, persistence paid off, and by the end of the season improvement was evident. Of six teams in their division, most fielded by small businesses, the "Scientists" placed fourth. The team even attracted a limited following, most notably Esther Harris of the Desplan Laboratory and former university professor John Froude. The "New York Scientists"

will hold formal tryouts in April for next season. Rockefeller employees on this year's team were Biomedical Fellow Ethan Benardete, Associate Professor Brian T. Chait, Assistant Professor Jeffrey Friedman, Graduate Fellow Fred S. Jones, Laboratory Helper Frank Matthew, Assistant Professor Daniel W. Rosenberg, Biomedical Fellow James Rubenstein and Maintenance Electrician James Schaefer; team members formerly associated with the university included Eric Falk-Peterson, James Farmar, David Foster and Robert Jacks. →→

Fischetti (continued from page 1)

about three percent of children who get ineffective or no treatment for strep throat develop rheumatic fever.

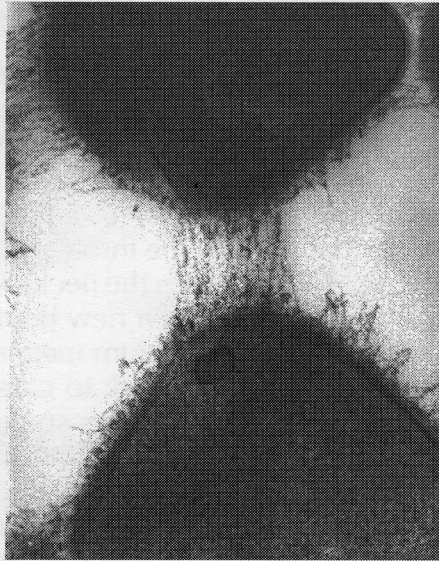
In the best of all worlds, there would be a vaccine that could prevent such miseries. We're not there yet, but Rockefeller's Vincent Fischetti and his colleagues in the Laboratory of Bacteriology and Immunology are helping speed the day when a vaccine is at hand. In the space of just over a year, they have published two papers describing how experimental vaccines have protected mice from streptococcal infection.

"These experimental vaccines are different from those attempted in the past because they have the potential to protect against a number of different kinds, or *serotypes*, of group A streptococci," Dr. Fischetti said.

Each different serotype produces a slightly different form of a surface protein called the "M protein," he explained. This protein causes illness by allowing the strep "bug" to evade the body's first line of defense, the phagocytic white blood cells that can "gobble up" invading organisms. Eventually, the body makes antibodies to the M protein, which overcome the protein's evasive action and allow the invading streptococcus to be destroyed. The antibodies also make a person immune to future infections from that particular serotype.

But there are more than 80 different serotypes of group A streptococci, each one with an M protein that is slightly different in structure, and antibodies to one version of the protein

won't protect against the others. Because of this variability, the prospects seemed dim for developing a vaccine that could protect against the many types of group A streptococci that can cause rheumatic fever.



Vincent A. Fischetti

Prospects for a strep vaccine grow brighter as the mysteries of the M protein unfold.

The outlook brightened when Dr. Fischetti and his colleagues discovered that one part of the M protein was the same (*conserved*) in at least 31 serotypes. "Then the question became, 'Could we take advantage of this conserved region to develop a vaccine?'" Dr. Fischetti said.

The answer appears to be "yes."

He used two different techniques to pursue the same basic strategy. Working with Dennis Hruby of Oregon State University, Fischetti "snipped" the gene for the conserved M protein region and inserted it into *vaccinia virus*, the virus used for decades as the vaccine against smallpox. Virus-infected cells made the M protein segment, mice who received the vaccine made antibodies against the segment, and

these antibodies protected the animals from experimental infection with two different serotypes of group A streptococci.

Working with Debra Besser in his laboratory, Dr. Fischetti synthesized small fragments of the conserved region of the M protein, then linked this small synthetic protein segment to a larger molecule for delivery as a vaccine. Once again, the immunized mice were protected from infection when given two different serotypes of streptococci.

The results so far are promising, but much work remains to be done before a protective vaccine is ready for use in humans. Still, Dr. Fischetti is pleased with the progress that's been made. "When we started, I didn't think we'd get this far, this fast," he said.

—by Susan Blum

Next Week is Fire Prevention Week

On Wednesday, an informal demonstration of fire extinguishers, smoke detectors and on-campus fire alarm boxes will be held in the Tower Building lobby as part of Fire Prevention Week. The casual presentations, held between 10:00 and 2:00, will be hosted by Jack Joyce and Tom McDonough, retired New York City firemen whose company, Joy-Mac Fire Safety Consultants, has worked for the university since 1981. Although Mr. Joyce said Rockefeller is a "very fire-safety conscious campus," he hopes people will pause a moment as they pass through the Tower lobby Wednesday to refresh their memories about fire prevention. →

Falcons find New York's a tough place for growing up

This has been a difficult season for our neighboring Peregrine Falcons at New York Hospital. Three eggs were laid about March 25, and two females and one male hatched a month later.

When the nestlings became fledglings at the end of May, they encountered some of the hazards of city life. The male dove into a window on a nearby skyscraper and sustained a concussion. He is recovering at a bird rehabilitation center in Westchester County, still unable to fly. A short time later, one female died after colliding with a window in the same building. The other female successfully fledged.



Adult male falcon from New York Hospital

The adult peregrines can be seen throughout the winter in our neighborhood. Next spring, they will most likely nest on the same airy perch for the fourth consecutive year.

just inside the medical school entrance on York Avenue at 69th Street.

—by Carol L. Moberg

Lawrence R. Moberg

Everyone is invited to take a closer look at these birds by visiting the photo exhibit "Look to the Skies" at Cornell Medical School. This exhibit, assembled by Cornell Architect Adele Lerner, is located

The Lady Eve begins 1990 fall film series

The 1990 Fall Film Series starts Sunday night with Director Preston Sturges' classic film, *The Lady Eve*, starring Henry Fonda and Barbara Stanwyck. This 1941 comedy centers on a wealthy and naive young scientist who, while returning from the Amazon on an ocean liner, becomes the target of an unscrupulous card shark and his daughter.

The films are free for members of the Rockefeller, MSKCC and Cornell communities and begin at 7:30 in Caspary Auditorium. Other screenings through the end of the year are listed below.

- Oct. 21 *Mean Streets*
- Nov. 4 *Ali: Fear Eats the Soul*
- Nov. 18 *Blue Collar*
- Dec. 2 *THX 1138*
- Dec. 16 *Chimes at Midnight*

Princess of Thailand visits Rockefeller

Adjunct Professor Toby Rodman's work identifying natural defense mechanisms against the AIDS virus, HIV, attracted Princess Chulabhorn of Thailand to the university on September 27.

The princess is director of the Chulabhorn Research Institute in Bangkok, where Dr. Rodman plans

to present her recent work at the "International Congress on AIDS" in December. Rodman works in the Laboratory of Cell Biology, headed by Professor Vincent G.



Above (l to r) are Dr. Allfrey, Dr. Rodman, and Princess Chulabhorn of Thailand.

Allfrey, where she researches an antibody that combines with the protein *tat*, which is vital to the replication of HIV. →

Shari Diamond

Getting to know each other



Shari Diamond

On Tuesday new students had lunch with the new president. Among the topics for discussion were the state of graduate education and what students should expect during their first year at Rockefeller. Dr. Baltimore reminisced about his first year here 30 years ago, and he emphasized to those in attendance the importance of keeping informed on all fields of scientific investigation. Seated (l to r) are Daniel Weinstein, David Baltimore and Carole Landisman.

Announcements

MacUsers' Group offers anti-virus software

Several free anti-virus programs will be available to people attending the October meeting of The Rockefeller University Macintosh Users' Group (RockMUG) on Wednesday in Caspary 1B. Although the meeting formally runs from noon to 1:00, interested persons who bring along a blank 3.5" floppy disk will be able to get the programs beginning at 11:30.

This month's meeting will focus on protection from viruses, disk organization and file backup. Everyone is encouraged to attend and bring a lunch to the meeting; soft drinks will be provided.

RockMUG has been meeting monthly since March 1990, and has about 30 members. Contact Rachael Kolb, x8933, or send e-mail to *rachael* to be put on the RockMUG mailing list.

Next week's Computing Services workshops

Below is the schedule for next week's computer workshops. All are held in Caspary 1A and require prior registration. Call x8925 for details.

Tuesday

- 9:00 Intro to Sequencing-Part I
- 1:00 BMDP-Part I

Wednesday

- 9:00 Intro to Sequencing-Part II
- 1:00 BMDP-Part II

Thursday

- 9:00 Intro to UNIX and E-mail
- 1:00 Intro to Sequencing-Part I

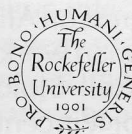
Friday

- 9:00 Intro to Vi Editor
- 1:00 Intro to Sequencing-Part II

Tri-Institutional Noon Recitals open fifth season

Today is Dia de la Hispanidad, or Hispanic Day, and what better way to celebrate the event than by opening the fifth season of the Tri-Institutional Noon Recitals with the five-piece ensemble "Hinantillan"? This quintet performs on more than 40 traditional instruments and merges traditional and contemporary elements to create an "Andean New Age" music.

The free concert will be held in Caspary Auditorium from noon to 1:00, and is open to members of the Rockefeller, New York Hospital, Cornell, and MSKCC communities and their guests.



NewsNotes is published on Fridays throughout the academic year by the Public Affairs Office of Rockefeller University. Suggestions for articles are welcome and may be sent to Box 68, or call 570-8967. Articles may also be submitted via electronic mail to *newsnotes*. The deadline for each Friday's issue is the preceding Monday at 5:00 p.m. The Rockefeller University is an equal opportunity employer and has an affirmative action program to increase the employment of women and members of protected groups at all job levels. Editor: Robert Brown. Designer: Patricia Sadiq.