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<td>205108</td>
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Members of the Auburndale Girls’ Science Club with a robot they built for a robotics competition at the Massachusetts Institute of Technology. The suburban Boston club was started by the mother of one of the girls, who was afraid her daughter would lose interest in science as many girls do beginning around the eighth grade. Many of the programs that are successful in reversing this trend rely on an all-girl environment, a finding discussed in this year’s special section on women in science beginning on page 383. [Photo: Sam Ogden]
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In this issue of Science we take up chapter two of our report on the challenging subject of women in science. It is not the last chapter, but it does explore some new facets that could not be covered in our first issue on the subject (13 March 1992) and it still leaves some areas to be filled for our next installment. As John Bennitt, our features editor and the coordinator of this issue, has commented, the new subjects in this issue are in part the result of the large reader response to our first issue, and we again invite your suggestions for the next installment.

This coverage makes no pretense at being a statistically accurate survey, but rather brings out many of the comments, anecdotal experiences, and personal reactions of women in science. It is a subject of great importance to men as well as to women because society, which has historically underplayed the role of women in science, must change. As society searches for solutions to the horrendous global problems in need of scientific input, we cannot afford to lose the potential of women’s brainpower. And in simple fairness, the playing field must be leveled so that women are not inhibited by a less than helpful environment.

In spite of many obstacles, some (but too few) women have achieved tenured positions on faculties, in membership in the highest honorary societies, received patents, and won Nobel Prizes—belated recognition for the talent and dedication which in the past was not easily acknowledged: think of the women novelists who had to publish under male pseudonyms. It is also clear that to achieve their success in science these women had to overcome a discouraging environment and archaic attitudes, which makes their achievements even more impressive. The added burden on a career path that requires extraordinary effort and ability under the best of circumstances led many able women to give up science, a major loss to science and society. The climate has changed for the better, but there is a considerable way to go. This issue of Science presents some of the ideas and successful experiments that could lead to a fairer and more productive future.

There is no unanimity on a course of action and some bewilderment as to what data such as pool sizes and drop-out rates really mean, but there is a great need for all scientists to listen to ideas that may at first offend or to suggestions that may seem impractical. There is still a debate over the existence of a gender difference in approaches and attitudes to science, but there is little doubt that many women succeeded by being even more imaginative than their male colleagues, by being willing to work longer hours or by giving up responsibilities to home and family. These are all disparities that could have been avoided in a different atmosphere. A biological clock that requires women to make decisions about a family in the same years that their commitment to research must be strongest makes pursuit of an academic career difficult and a good start in business perilous. Businesses, professional societies, and academia have a responsibility to ease the burden on women during this critical period. Ideas for policy changes could include better child care, different computations for tenure (for example, multiply publications by two for a half-time worker), extending years to tenure, and greater flexibility in moving from nontenure to tenure tracks. Better educational opportunities in early years are needed, and the role of encouraging spouses and of colleagues willing to share workloads should not be discounted. Most important of all is a removal of the stereotyping which can lead to vocational training options or social atmospheres with in-built gender bias. The greatest loss is of those who may never try their talents because of discouragement or discrimination. The anecdotal comments in this issue show that the goal of equal opportunity has not always been achieved, or even sought, but there are enough happy examples to show that it can be and should be reached. Our reporting indicates some of the attitudes that are generated and some of the possible solutions that may help solve these problems in the future.

Fortunately, there is a willingness to change old procedures, and innovative experiments are waiting to be tried. In the past women were commonly expected to stay in the home and participate only indirectly in business and science. Then it was often said, "Behind every successful man there is a surprised woman." In the future, the increasing numbers of women who wish to make a career in science will be stepping to the forefront as their talent deserves, and men should not be surprised but very delighted.

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Japan’s SAT?

Although I have no reason to doubt that the mathematical ability of U.S. students is significantly lower than that of Japanese students, the article “An awesome look at Japan’s math SAT” by Barry Cipra (News & Comment, 1 Jan., p. 22) may be somewhat misleading.

First, the University Entrance Center Examination (UECE) is hardly “Japan’s equivalent of the American SAT [Scholastic Aptitude Test].” The SAT is supposedly a measure of one’s “scholastic aptitude,” not of one’s already acquired knowledge, the theory being that colleges can use SAT scores to select those applicants most likely to succeed in college. (Whether the SAT is useful for this purpose is another matter.)

The UECE, on the other hand, like all university entrance exams in Japan, is intended to eliminate applicants; anyone who passes the entrance exam is, in effect, guaranteed success in college by virtue of having passed. It is therefore to be expected that questions in math or in any other subject will be of extreme difficulty, the more prestigious universities asking the more difficult questions.

Thus to assess the extent to which the UECE reflects the actual mathematical ability of Japanese high school students in general, one needs to know not only what percentage of the relevant population takes the exams (14% for Japan and 31% for the United States, says Cipra) but also what percentage of the examinees get what percentage of the answers right and what sort of score counts as a pass.

It is also necessary, if we are to compare U.S. high schools with Japanese high schools, to know how much of what is covered by the entrance exams is actually taught in the high school.

One major difference between U.S. and Japanese college-bound high school students is that a large proportion of the latter spend a large amount of their extracurricular time in cram schools (juku, yobiko) specifically in order to get the kind of knowledge needed to pass entrance exams. (Similarly, the most prestigious private high schools—which is to say the high schools with the best record in getting graduates into prestigous universities—squeez the 3-year syllabus into 2 years and devote the senior year exclusively to teaching test-taking.) To the extent that Japanese high school children get into universities because of knowledge gained in juku’s, it seems somewhat inappropriate to credit the Japanese high school with doing a superior job of education.

Kevin R. Gregg
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Judging from the quite difficult applications of the theories of polynomials and of solid geometry given as sample problems in Cipra’s article, the Japanese UECE could be more properly compared to the U.S. Math Achievement Test, which is intended to assess mastery of the high school curriculum. It has two forms (levels I and II) in order to accommodate students whose mathematical training has been more extensive than that of others. Scores on the Math Achievement Test are not generally considered to be as important a determinant of college acceptance in the United States as SAT scores are because the SAT is valued as a measure of the likelihood of college success that is largely independent of curriculum (I).

I do not doubt that young men and women graduating from secondary school in Japan are by American standards extraordinarily well trained in mathematics, nor do I doubt that many of them would achieve high scores if they did take a test like the SAT. However, I think that the comparison of prominent tests in the two countries is wrongly informed.

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References

To get full credit for the Japanese math test problem, it seems, one would have to do the problem the tester’s way, not by some other, equally valid method. I suspect this says something about the Japanese attitude toward teaching math. An American teacher might be delighted by a student discovering his or her own way to solve a problem, even if it were a clumsy way. I’m not sure the Japanese teacher would share that delight.

American kids may learn less, but many still have the confidence to try things their own way, rather than “by the numbers.” This is a clear American math advantage.

John J. Carroll
3121 North First Road, Arlington, VA 22201
Implicit in the findings of the studies of Japanese and U.S. high school students is the conclusion that U.S. students need to improve their study habits and scholastic achievements. While improvement would be welcome, it need not be extended to the graduate system. One of the greatest strengths of the American educational system is its post-secondary years. If students are asked to stretch their effort to the extreme during high school, their later efforts might decrease. Many Chinese, Korean, and Japanese students are so exhausted by the time they enter college that they want a period of respite. Their American counterparts, on the other hand, are just beginning to tighten their belts and dig in. I believe the vigor and intensity of U.S. researchers are partly due to the fact that they were not crippled during the high school years.

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Nuclear Structure Research

Michelle Hoffman's Research News article "The cell's nucleus shapes up" (26 Feb., p. 1257) was an interesting and readable overview of some developments in mammalian nuclear structure over the past 20 years, and we commend Science for its attention to this subject. On a few points, however, the article appears to attribute to my laboratory contributions from other investigators whose work is clearly referenced in our reports (1, 2) in the same issue. First, the fact that the splicing assembly factor SC-35 concentrates in regions enriched in small nuclear ribonucleoproteins was previously demonstrated by X-D. Fu and T. Maniatis (3). Hence, the observations we reported concerning the relative distributions of SC-35 and polyadenylate RNA or small nuclear ribonucleoproteins within individual domains were an extension of this primary observation.

Second, the statement referring to the report by Carter et al. (2) as having shown for the "first" time that messenger RNA transcripts were associated with these regions is misleading. S. Huang and D. Spector (4) had previously shown that unspliced c-fos transcripts accumulate very close to these regions soon after induction of this gene, and we had previously reported evidence that polymerase II transcripts in general, as detected by polyadenylate RNA, are most highly concentrated in these regions (5).

Finally, we do not agree that our work is the "first" three-dimensional model, as the Research News article states, because several investigators have provided evidence and suggested models for the topological organization of genes and RNA metabolism within the mammalian nucleus, several of whom are referenced in our two Science reports (1, 2).

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References
2. K. C. Carter et al., ibid., p. 1330.

Determining Paleoclimates

The article "Is the geological past a key to the (near) future?" by Elizabeth Culotta in the Special Section on the Evolution of Atmospheres (12 Feb., p. 906) focuses on fossil pollen and marine plankton as sources of paleontological data on paleoclimate and raises questions about whether proxy data are adequate for the task of testing simulations of general circulation models (GCMs). The composition of fossil macrofloras, the shapes and sizes of fossil leaves, and the anatomy of fossil wood have all been used extensively as indicators of continental climate during the Tertiary and Late Cretaceous (1). Vertebrate fossils, of both ectotherms (2) and endotherms (3), provide other independent sources of paleontological data on paleoclimate. In the last 15 years, interpretations of these fossil data have become increasingly quantitative, and the precision and reliability of the estimates have improved greatly (4).

It has already been demonstrated that GCM simulations of paleoclimate tend to produce results for continental interiors that are far more seasonal than the multiple lines of fossil evidence indicate (5). At least for the Cenozoic, the paleontologists' temperature estimates have standard errors of only a few degrees centigrade for mean annual temperature and cold month mean. This is substantially better than the GCM simulations do even in reproducing present conditions for continental interiors. No doubt GCM simulations will improve considerably over the next few years as they get a boost from advances in computer technology, but the current situation is that if you want to know the climate for any time
during the last 100 million years, you are better off asking a paleontologist than a modeler.

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**References**


**Fish Otolith Chemistry**

I was pleased to see an aspect of fish otolith chemistry reported in Random Samples (13 Nov., p. 1087). The article was particularly timely given the increasing importance of otoliths to both fisheries and environmental research, as evidenced by the interest in the recent symposium “Fish otolith research and application” held in late January at Hilton Head, South Carolina. However, I must point out that the estimation of water temperatures by the analysis of oxygen isotopes in otoliths is not new. In fact, the application of these data to the estimation of both modern and prehistoric water temperatures was discussed in a report published in *Science* in 1967 (1). Other significant contributions to the study of oxygen isotopes in fish otoliths (2) should also not be overlooked.

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**References**

Plasma Wave Accelerators

The long-term future of high-energy physics surely depends on innovation in charged-particle acceleration like the use of relativistic plasma waves reported recently (Ivan Amato, "Catching the wave of a new accelerator," Research News, 5 Feb., p. 765). Still, it is a bit early to dream "of doing the SSC's [Superconducting Super Collider's] job in a setup only a few city blocks long." Chris Clayton et al. reported in Physical Review Letters (1) that up to 7 million electron volts of energy were added to electrons by the plasma waves in a distance of about 1 centimeter. To reach the 20-trillion-electron-volt level of the SSC would still require about $3 \times 10^6$ centimeters, even if one assumed this gradient could be maintained for such a distance. The two hypothesized colliding linear accelerators would evidently stretch some 60 kilometers. This is rather more than a few city blocks, even in Texas.

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References


Correction: Omitted Author

Through an inadvertent error on my part, I neglected to include the name of one author—Giovina Ruberti—of the report "Requirement for CD8+ cells in T cell receptor peptide-induced clonal unresponsiveness" (1 Jan., p. 91). The correct order of the authors is as follows: Amitabh Gaur, Giovina Ruberti, Richard Haspel, John P. Mayer, and myself.

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Corrections and Clarifications

The illustrations on page 763 accompanying Marcia Barinaga’s Research News article “Death gives birth to the nervous system. But how?” (5 Feb., p. 762) should have been credited to Michael Hengartner and Robert Horvitz.

In the article "Light emission from silicon" by S. S. Iyer and Y.-H. Xie (2 Apr., p. 40), the title in reference 33 on page 46 should have read, “Extended Abstracts of the 1992 Solid-State Devices and Materials Conference.”
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Oropharyngeal Physiology and Imaging
Barbara C. Sonies, PhD
The development of normal and abnormal speech and swallowing are being tracked using 3D modeling of the oral musculature and multimodality imaging systems. Applicants must have PhD, MD or DMD and less than five years postdoctoral experience. Department of Rehabilitation Medicine, Clinical Center and NICHD (OE-31), Building 10, Room 6S235.

Papillomavirus Replication and Gene Regulation
Alison A. McBride, PhD
In order to better understand virus-associated transformation and carcinogenesis, the mechanisms by which the papillomavirus E1 and E2 proteins regulate viral transcription and DNA replication are being studied. Candidates should have experience in molecular biology, biochemistry or cell biology and less than five years of postdoctoral experience. Laboratory of Tumor Virus Biology (OE-31), NCI, Building 41, Room D704.

Platinum Drug-DNA Interactions
Miriam C. Poirier, PhD
The mechanisms underlying the correlation of tumor remission with covalent binding of high levels of platinum chemotherapeutic drugs to cancer patient blood cell DNA are being investigated. Applicants must be US citizens or permanent residents with either an MD or a PhD received within the past three years. Laboratory of Cellular Carcinogenesis and Tumor Promotion (OE-31), NCI, Building 37, Room 3B25.

Retinoids, Cancer and Differentiation
Carol J. Thiele, PhD
The molecular mechanisms mediating retinoic acid induced neuronal differentiation in neuroblastoma cell lines, including regulation of trk receptor and neurotrophin gene expression, are being investigated as a basis for studying neuronal development, tumor biology, and the developmental mechanisms mediating HIV-1 neuropathogenesis. Applicants should have less than five years postdoctoral experience. Pediatric Branch (OE-31), NCI, Building 10, Room 13N240.

Additional Postdoctoral Fellowship Opportunities
For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference via modem (1,3014922221 or 1,8003582221). The settings for modem access are "?Even, 1.", or "s100" at the connect message, "A5E" at initial, and "AJL1" at account.

The Postdoctoral Research Fellowship Opportunities catalog may be requested from the address below. An electronic version of the catalog may be accessed via the network-based (Internet) Gopher Information System. To access the NIH Gopher server, Gopher client software (available via anonymous ftp "boombox.micro.umn.edu") must be running on your computer and configured to point to "gopher.nih.gov", port "70". Select NIH Information to reveal the NIH Office of Education directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

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**DR. JEAN BEEBE, RESEARCH SCIENTIST**

My lab studies differentiation of tumor cells and seeks to develop novel anti-cancer agents. I was particularly attracted by Pfizer's target-based approach to drug discovery. I find that Pfizer supports women not only in philosophy but in practice.

**DR. DEBRA WILLIAMS, SR. ASSOCIATE DIRECTOR/GROUP LEADER**

I have a background in teaching, research and clinical medicine; and fortunately, I have had many choices. As part of clinical research at Pfizer, I am responsible for drug trials for opportunistic infections in AIDS and for clinical studies on a major new antibiotic drug. My work enables me to continue a limited clinical practice as well, and I'm convinced that I made the right decision for me and for my family.

DR. ANABELLA VILLALOBOS, SR. RESEARCH SCIENTIST

I always planned to go into drug discovery, and Pfizer was on the top of my list. In my area, Alzheimer's disease, there is an immediate need for innovative new drugs, and I want to be a part of that drug discovery process. My fascination with science began in high school when a single teacher who truly loved chemistry inspired me.

**DR. YUHYNCH CHEN, PRINCIPAL RESEARCH INVESTIGATOR**

As a medicinal chemist, I am currently involved in the synthesis of compounds to treat Alzheimer's, anxiety and depression. Developing research proposals that ultimately become projects is exciting—and working with great biologists is doubly rewarding. When I came to Pfizer ten years ago, there were few women chemists. Today, the number is steadily increasing, and that's the way it should be.

**DR. LINDA CHATMAN, SR. PATHOLOGIST**

I always wanted to be a veterinarian, and as I became more specialized, I chose toxicological pathology. Here at Pfizer, I look for adverse effects of compounds and study the mechanism of drug action. I find that the quality of your work is what counts. My experience has been extremely positive. Pfizer provides the career path—then it's up to you.

**DR. MELISSA TASSINARI, MANAGER**

My teratology work is an essential part of new drug discovery. Our primary concern is to ensure that drug candidates have no adverse effects on the reproductive system. At Pfizer, I've had many terrific opportunities; and setting up a lab to conduct a full range of reproductive studies, including neurobehavioral research, is definitely one of them. I find the team approach here to be consistent with my way of operating. That's what I like about my group—we all work toward a common goal.

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“One really nice feature at Abbott is the ability to advance either on the scientific ladder or the management ladder. If scientists want to continue doing basic research, they have the ability to advance by being nominated into The Volwiler Society.* Alternatively, scientists who have chosen to go into more of a management track have the opportunity to learn leadership and program management skills…and advance their careers that way.”

Dr. Fitzgerald earned her Ph.D. in Microbiology/Immunology at Northwestern University Medical School. After joining Abbott in 1984 as an entry level scientist in our Cancer Technical Product Development Group, she was part of the team that developed the IMx instrument and the assays used on this system. This immunocassay instrument system has a menu of assays which includes 46 tests in areas such as fertility, hepatitis, cancer, and pregnancy. Dr. Fitzgerald was also program manager for the IMx Select product before being promoted into quality assurance in 1992.

“The greatest challenge at Abbott has been balancing my career and personal life. Developing products for Abbott is very demanding…and very satisfying. The excitement of completing a project and meeting goals drives the commitment of time (and overtime) and the energy needed to complete the tasks. This must be balanced with my personal life and raising a family. I have had to learn to better manage my time and personnel to accomplish this.”

After obtaining her Ph.D. at New York Medical College, Dr. Shih worked in the fields of enzymology and assay development for 5 years before joining Abbott in 1985. She was lead scientist in the development of the first recombinant HIV blood screening assay and has played a key role in the development of several other products for the detection of HIV and HTLV viruses.

*The Volwiler Society was created by Abbott to recognize consistent and exceptional scientific achievement.
"The 'Venture' system, established in our Pharmaceutical Products Division R&D is a very unique and creative system for the development of new drugs. It has offered me a rare opportunity to broaden my skills...not only as a manager but in many different fields of science including chemistry, toxicology, and formulation."

After earning her Ph.D. in Pharmacokinetics at Purdue University, Dr. Dube joined Abbott as a Sr. Research Scientist in Drug Metabolism. One year later, she was promoted to Operations Manager, Immunoscience Venture. In this capacity, Dr. Dube was responsible for coordinating all research activities related to the global development of a new class of compounds (5-Lipoxygenase inhibitors)—from the pre-clinical phase to Phase IV.

"The career environment for women scientists at Abbott has improved tremendously in the last twelve years. When I joined Abbott in 1976, I was the first woman organic chemist Ph.D. in the department of medicinal chemistry. It was awkward. Today, we have many women scientists among our scientific staff...and I believe all of them are treated equally and fairly."

After obtaining her Ph.D. at the Weizmann Institute (Rehovot) and Indiana University, Dr. Haviv completed her postdoctorate work at the Woodward Research Institute. Dr. Haviv's seventeen-year career at Abbott includes the discovery of new anti-inflammatory and antibiotic drugs. She presently directs medicinal chemistry research in the luteinizing hormone-release hormone (LHRH) area. This work led to the discovery of A-75998, an LHRH antagonist, which is currently in phase II clinical studies. This drug will be used for the treatment of hormone dependent diseases such as prostate cancer, endometriosis, uterine fibroids, and breast cancer.

"Many of the projects I have participated in utilize technologies new to the industry—for example, DNA amplification. In addition, scientists at Abbott are encouraged to develop technical collaborations with and actively seek the opinions of highly respected scientists around the world. As a result, there are ample opportunities to develop products which are relevant, novel, and which will truly add value to health care."

Since joining Abbott in 1987, Dr. Tomazic-Allen has contributed to the development of the enzyme DNA ligase which is critical to Abbott's DNA amplification technology, Ligase Chain Reaction. Currently, she manages the DNA Probe Reagent Development group responsible for the development and manufacture of all DNA amplification reagents. Dr. Tomazic-Allen obtained her Ph.D. from M.I.T.

"Career advancement at Abbott is based, as it should be, on the quality of scientific work. The contributions of each individual towards a specific project goal are evaluated on the basis of scientific merit. In this environment, the gender of the contributor is far less important than the quality of their scientific contribution."

After earning her Ph.D. at the University of Kansas, Dr. Marsh joined Abbott as a member of our Preformulations Group. In 1986, she transferred to our Drug Metabolism Department, where she formed a group to provide bioanalytical support to discovery project teams. In this capacity, Dr. Marsh provides an early pharmacokinetic evaluation of new discovery compounds in a variety of animal species and applies analytical methodologies to other questions surrounding the evaluation of new discovery compounds in vivo.

If you are interested in pursuing opportunities with Abbott Laboratories, please write to: Corporate Staffing, Dept. WS, Abbott Laboratories, One Abbott Park Road, Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke Free Environment.
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Regeneron is located in Westchester County, 25 miles north of New York City. The highly collaborative and supportive Regeneron community offers considerable scientific and professional growth potential and a competitive compensation package. Interested candidates, send resumes to: Human Resources Department, Regeneron Pharmaceuticals, Inc., 717 Old Saw Mill River Road, Tarrytown, N.Y. 10591 - BIN ES.

Onogene Sciences, Inc.
To capitalize on the latest developments in oncogenes, antioncogenes and gene transcription, Oncogene Science is expanding its research into the discovery and development of novel human therapeutics. Opportunities are now available for professionals experienced in the areas of molecular and cellular biology, assay development, laboratory automation, screening and natural products chemistry.

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Interested candidates may send resumes and references to: Human Resources, Oncogene Sciences, Inc., 106 Charles Lindbergh Blvd., Uniondale, N.Y. 11553. Attention: STNY.

ImClone Systems, Inc.
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• Intracellular Trafficking and Secretion
Individual will study mechanisms of intracellular trafficking, processing, and secretion of cytokines important in the regulation of the inflammatory response. Strong background in intracellular protein trafficking, processing, or secretion is required. An interest in immunoregulation and inflammation is desirable. Please refer to Job # ASC911702 on all resumes.

• Signal Transduction Pathways
Individual will join a multi-disciplinary team studying the role of SH2, SH3, and catalytic domains of src-tyrosine kinase in oncogenesis. Protein chemistry and biophysical techniques will be used to define the nature and interactions of the catalytic and ligand binding properties of src-tyrosine kinase. Experience in enzymology, protein chemistry, and biophysical techniques is required. Experience in signal transduction is beneficial. Please refer to Job # ASC911703 on all resumes.

• Structural Studies of DNA-Binding Proteins
Individual will investigate the regulation of gene expression through studies aimed at solving the tertiary structure of transcription factor--DNA complexes. Experience in protein purification and protein crystallography is required. Please refer to Job # ASC911704 on all resumes.

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At Genentech, we realize that contributing to great science is the primary motivator for great scientists. Everything we do is designed to create an outstanding scientific environment.

Science is why we built our new 275,000 square-foot research center; why we spend over 50% of our annual revenues on R&D; and why we continually seek the top talent in many fields of biological science. This, combined with our liberal publication policy, results in publication and citation rates which are unrivaled in our industry.

There's More
As part of our commitment to creating an outstanding environment, we offer state-of-the-art child care facilities, a 6-week sabbatical and free health club membership. For consideration, please contact Genentech, Inc., Human Resources, Dept. SAA, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal employment opportunity.

Genentech, Inc.
What do you have to do to get a position in science that provides challenge, variety, depth, freedom of research, supportive colleagues and mentors, interesting fields of investigation and respect?

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You already know our products. Perhaps it's time you knew our company better too. As one of the world's largest consumer products companies, Unilever is comprised of more than 500 individual concerns that produce household, personal care and food products in hundreds of countries around the globe - including major U.S. organizations such as Lever Brothers, Chesebrough-Pond's, Elizabeth Arden, Calvin Klein, Lipton and Van den Bergh Foods. And, although these products are very different in nature, behind each and every one of them stands the solid research, technology and innovative thinking of Unilever Research.

Since 1902, our scientists have been working hard to make life easier — and better — for the people who use our products. Today, our worldwide research network is backed by an R&D budget of $750 million, and staffed by over 3,800 dedicated scientific professionals at state-of-the-art laboratories in the United States, England and the Netherlands.

Working in small, multi-disciplinary teams, and linked by sophisticated telecommunications systems that promote close collaboration between laboratories, our scientists build strong relationships with peers and mentors, and maintain strong ties to academic, medical and research facilities around the world.

Here at our U.S. laboratories in Edgewater, NJ, scientists with degrees in Analytical, Organic, Inorganic and Physical Chemistry; Biochemistry and Biological Sciences, and Chemical Engineering will find an environment where the challenge is to think across the conventional boundaries of science. Also in Edgewater is our recently established Skin Care Research Center where we are bringing together talented and creative individuals from a variety of areas - cell biology, colloid and surface science, pharmacology, behavioral science, material science, immunology, histology, enzymology, cellular differentiation and others - to explore and investigate the science of skin in a whole new way.

Challenge, freedom, variety. For the very reasons you chose science as a career in the past, it's time to choose Unilever as your future. For consideration, send your resume to: James R. Conti, Manager, Employee Relations, Dept. WIS93, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. An equal opportunity employer.