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This year's "Women in Science" issue compares the position of female researchers in national cultures around the world—and finds many surprises. For example, women are proportionally better represented in science in Turkey than they are in the United States. The reasons for such startling disparities are discussed in a special news section beginning on page 1487. Policy Forums on women in science appear on pages 1389 and 1392 and a bibliographic update on page 1458.
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Women in Science

The notion that women should stay home and mind the children while men are the breadwinners is an idea whose time has gone—a passing helped on its way by part science and technology, which have liberated men as well as women from many formerly irksome tasks. Inertia, however, is as evident in societal change as in Newton’s laws of motion, and even today society frequently acts as if it can afford to underutilize the abilities of half of its citizens. Although many formal barriers to women’s participation in science have fallen, cultural attitudes and antagonisms remain. To add understanding to these matters, this special issue of Science, the third installment in our examination of the progress of women in science, focuses on the international perspective and looks at the way that women in different societies face different problems and have adopted different solutions. The data are anecdotal but provide a preliminary glimpse into the situations confronting women scientists in both developed and developing countries, as John Benditt, our Features Editor who orchestrated these reports, comments on page 1467.

Many things can be done, and are being done with varying degrees of success, to ease the difficulties faced by women as they juggle a career in science with the wish to raise children. Despite changes in attitudes, society still places on women the major role in home building, and that, combined with biology, often means that the greatest domestic stress on women occurs in conjunction with the greatest scientific stress—child-bearing years coincide with the assistant professor years. Many women have accomplished the Herculean task of bringing up children and building reputations as very successful scientists, but the obstacle course they face is unfair to them and disadvantageous to society. It is unlikely that these gender roles will change in the near future and, therefore, it is incumbent on men to help level the playing field. Helpful husbands, day-care arrangements, and appropriate scientific encouragement should be part of the apparatus that scientific departments and donor agencies can provide. Grants could provide for an extra technician during the child-bearing years, department funds might make an appropriate contribution to child care, and organizers of symposia could show greater understanding of the woman scientist who makes a brilliant discovery but then is hampered in her efforts to follow it up with the flood of papers expected from a big laboratory. Special arrangements of this type are really intended for the benefit of children and are meant to level the playing field regardless of gender. If men prefer to be the homemakers, then of course the same privileges should extend to them.

Such efforts could be augmented by overseeing the educational system to be sure girls are given the same access as their male counterparts to computers and microscopes and other essential tools of science. Cultural attitudes must change, too. Already it is expected that men will contribute more to homemaking responsibilities; symmetry suggests that women will be expected to participate more in breadwinner chores. This issue of Science illustrates the different roles in different societies and suggests that no single pattern is the “right” one or the only feasible one. There is little doubt that expectations presented to children by their elders amount to molding forces which may direct boys and girls into patterns that may or may not be the best uses of their abilities.

Whether ideas from one cultural background can be transported to another is not so easy to test. The extended family of the Italian culture may not be compatible with the mobile culture of the United States, with family members moving often and living far apart. Also, the Swedish experience is an important indicator that patience may be essential. The seeds of change planted years ago by a different political party in a different era may only now be producing the desired results. Patience is never a good idea when conditions demand urgent change, but it can sometimes be needed to assess whether outcomes are really being affected.

The good news is that women are not only succeeding in scientific careers but are finding more opportunities to do so as time goes on. There is a long way to go and therefore no reason for complacency, but admiration for creativity and determination is a good beginning on the road to justice.

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Women in Biomedicine:
Encouragement

"Women in biomedicine: Still slugging it out" (Random Samples, 29 Oct., p. 650) notes very real problems facing women who work in a predominantly male environment in research science. However, we disagree with the article's assertion that success-minded young women would "be well advised to forget about babies." This notion, which persists despite studies to the contrary (1), contributes unnecessarily to the anxiety that women experience throughout their scientific training. It is regrettable that many women do not have nearby senior colleagues whose examples would challenge this myth.

We write as women scientists who have children and who have also been successful in our research careers, as judged by criteria such as tenure, positions on review panels and editorial boards, teaching awards, and scientific honors. We are a diverse group in terms of the age at which we had children, the paths our careers have taken, and our marital and financial status. We can all testify that combining parenthood with a professional career is not easy; that it requires two major (and sometimes conflicting) commitments of mind, heart, and time; but it can be done, and the rewards of doing so are great.

Our intent in this letter is not to tell people what they should do on such a personal matter. But to women—and men—who decide that they wish to be both parents and scientists, we want to offer the encouragement that it is possible to do so.

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References

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Shamans and Patent Lawyers

The issue of 10 December contains an apparently inadvertent juxtaposition that illustrates a growing contradiction between the trajectory of certain genetic engineering activities and tenets of liberal culture. A short article in ScienceScope ("NIH biodiversity grants could benefit shamans," p. 1635) announces five bioprospecting research projects in the Third World that would "enrich" traditional healers. Another article in News & Comment by Constance Holden (p. 1641) discusses a growing split in the discipline of anthropology between the physical-biological wing and cultural anthropology, and it provides a point of reference for understanding the former article.

Shamans do not "own" indigenous pharmacological lore; they are simply custodians of the community's information storehouse. The ownership of knowledge and the trapings of patents are elements of North Atlantic cultures, not Third World ones. When I led workshops at the Rio de Janeiro EcoSummit in 1992, indigenous leaders warned about attempts to impose foreign legal and property regimes on their people, referring to "the abhorrent position of accepting that the living diversity of this planet can be reduced to patented private property" (1). In the words of a cultural anthropologist quoted by Holden, this is "a form of cultural colonialism."

Do we really believe we can protect and preserve indigenous tribes and their cultures yet still expect them to partake in a world of patent lawyers and infringement litigation? Will the white American in his "Banana Republic" outfit (pictured and identified in the ScienceScope article) help or harm the shaman, awkwardly pictured bare-chested and unnamed [and thus rendered "invisible"] (2)? Will we destroy his culture in order to save it, as we did with Vietnamese villages 20 years ago?

Using what value system does the official of the World Resources Institute conclude that giving shamans patent rights "would be a big step ahead" rather than a step back? Certain not the value system of the Guaymi of Panama, a portion of whose genome was the subject of a U.S. patent application [only recently withdrawn after strenuous objections by the tribe (3)], or of Chief Leon Shenandoah of the Onondaga Nation (in New York State) who recently urged the National Science Foundation not to fund the Human Genome Diversity Project (that would take and store genetic samples of several hundred isolated and "endangered" human communities), calling it "unethical" because "[i]t violates the group rights and human rights of our peoples and indigenous peoples around the world" (4).

In most indigenous cultures, medicinal knowledge is an example of a "group right," not the patentable property of shamans or a "resource" for First World corporations, scientists, biodiversity experts, or government officials to privatize.

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References and Notes

3. Patent claim WD 9208784 Al. Currently, there are at least two patent applications, submitted by U.S. agencies, that are pending on portions of genotypes of Third World peoples (Papua New Guinea and Solomon Islands peoples, respectively): WD 9207769 and WD 9215325 A759 and WD 9215325 A.
4. L. Shenandoah, letter to Jonathan Friedlaender, National Science Foundation, 8 November 1993.
The ScienceScope item “NIH biodiversity grants could benefit shamans” (10 Dec., p. 1635) should have mentioned that the International Cooperative Biodiversity Groups (ICBG) Program is a collaboration between the National Institutes of Health, the National Science Foundation, and the Agency for International Development.

Marcia Barinaga’s News & Comment article “New test catches drug-resistant TB in the spotlight” (7 May, p. 750) did not mention that the idea of using reporter phages as indicators of bacterial growth was first suggested in a 1987 publication by Shimon Ulitzur and Jonathan Kuhn of the Israel Institute of Technology. What was technically new in the publication discussed in Barinaga’s article was the engineering of mycobacteria phages as vectors to carry the firefly luciferase gene into mycobacteria, which include the bacteria that cause tuberculosis.

In the report “Lack of acidification in Mycobacterium phagosomes produced by exclusion of the vesicular proton-ATPase” by S. Sturgill-Koszycki et al. (4 Feb., p. 678), figure 3 (p. 679) was incorrectly printed. The correct figure appears below.
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3 Y Li, W James, P Traganos & Z Darzynkiewicz, (1993) manuscript submitted.

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Women of the Scientifc Professions (divided into six fields); Health and Biology (covering both women as health professionals and issues of women’s health); Home Economics/Domestic Science; Technology; and Books for Older Children and Young Adults (an innovation of this edition and containing 72 entries). There is also an author index. The work is available in hard copy free of charge “while supplies last” or electronically via e-mail.

Science has made no attempt to cover the children’s literature on women in science, which like the adult literature consists heavily of biographies, but Epstein’s History ... for Young People appeared in our offices just as this issue was going to press. Intended for readers (the author specifies girls) aged 9 through 14, it gives one-page accounts of the lives of 30 women arranged under the headings From Gatherers to the Nineteenth Century; Healers; Physicians; Researchers and Inventors; Environmental Changers; Understanding People; and Expanding Career Choices. Illustrations by the author, some in color, accompany the narratives, and the book includes a bibliography and a listing of notables not otherwise discussed.

— Katherine Livingston

Books Received


Cirrhosis, Hyperammonemia, and Hepatic En-


Experiments with Fission Yeast. A Laboratory Course Manual. Carraffa et al. Cold Spring Har-


Fundamentals of Photoinduced Electron Trans-


Geochemical Reference Material Composi-


Immunopharmacology of Mast Cells and Baso-

Life Processes of Plants. Anthony W. Galston. Scien-
tific American Library (HPHLP). New York, 1994 (distrib-
utor, Freeman, New York) x, 245 pp., illus. $32.95.


Neurobiology and Cell Physiology of Chemore-


A P.D. is Not Enough. A Guide to Survival in Science. Peter J. Feibelman. Addison-Wesley, Read-


Recent Developments in Quantum Optics. Ram-


Sharing in Quantum Field Theories. The Axion and Constructive Approaches. Daniel Iago-

Science for the Food Industry of the 21st Cen-
tury. Biotechnology, Supercritical Fluids. Membranes and Other Advanced Technologies for Low Calorie, Healthy Foods. Alternatives. Francesco Dallai, Ed. ATL, Mt. Prospect, IL, 1993. vi, 414 pp., illus. $187. Front-
tiers in Foods and Food Ingredients, vol. 1.

Scientific Philosophy. Origins and Develop-

The Scientist in the City. James Trefil. Judith Peat-

Science. Jesse Jones Industries, Dept. SCE 490 East Erie Avenue Philadelphia, PA 19134 Enclosed is $ for Cases; Binders. Add $1 per case/ binder for postage & handling. Outside USA $2.50 per case/binder (US funds only). PA residents add 7% sales tax. Print Name Address City State/Zip CHARGE ORDERS (Minimum $15): Am Ex, Visa, MC, DC accepted. Send card name, #, Exp. date. CALL TOLL FREE 7 days, 24 hours 1-800-825-6690 SATISFACTION GUARANTEED
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Herbert Shaumburg, Albert Einstein School of Medicine, N.Y.

**METABOLISM AND MECHANISM OF TOXICITY OF NUCLEOSIDE ANALOGUES: EXPERIENCE WITH IN VITRO STUDIES.**

Jean Pierre Somadossi, University of Alabama

**THERAPEUTIC OPTIONS IN HUMAN MITOCHONDRIAL DYSFUNCTIONS: MYOPATHIES, ENSULOPATHIES AND LACTIC ACIDEMIAS.**

Stefano Di Donato, Berta Neurological Institute

**CARNITINE DEFICIENCY IN HIV-INFECTED PATIENTS.**

Giuseppe Fumara, University of Laquila

**EFFECT OF L-CARNITINE IN PREVENTING AZT-INDUCED MITOCHONDRIAL TOXICITY IN VIVO AND IN VITRO.**

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**TREATMENT OF AIDS PATIENTS WITH CARNITINE.**

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--- Postdoctoral Positions ---

Genetic Polymorphisms of Cytochrome P450
Joyce Goldstein, PhD

Genetic polymorphisms in human cytochrome P450 enzymes are being identified and their relevance to human metabolism and health examined. Current studies utilize molecular biology techniques such as site-directed mutagenesis, construction and screening of gene libraries, sequencing, and PCR analysis. Applicants should have less than five years postdoctoral training. Molecular biology experience desirable. Laboratory of Biochemical Risk Analysis (OE-43), NIEHS, P.O. Box 12233, Mail Drop B3-04, Research Triangle Park, NC 27709.

Molecular and Cell Biology
Constance Tom Noguchi, PhD

The regulation of the developmental and tissue-specific expression of erythroid genes, including cell surface receptors, and the identification of elements important for differential expression and processing of gene products, are being studied. Experience in molecular biology and less than five years of postdoctoral experience are required. Laboratory of Chemical Biology (OE-43), NIDDK, Building 10, Room 9N37.

--- Additional Opportunities ---

Neuroscience and Molecular Biology
Maryann Ruda, PhD

The molecular and cellular responses to neuronal injury and persistent noxious stimuli are being investigated in the spinal cord and dorsal root ganglia. Using animal models, gene expression and transcriptional regulation are being investigated and novel genes identified using PCR and differential display hybridization. Applicants should be recent graduates with an interest in injury or pain pathways. Previous training in molecular biology is not essential. Neurobiology and Anesthesiology Branch (OE-43), NIDR, Building 49, Room 1A11.

Transcriptional Control Mechanisms
Keiko Ozato, PhD

The regulation of embryonic development by nuclear hormone receptors (including RXR) and the regulation of immune responses by interferon regulatory factors are being studied to better understand the mechanisms used to control transcription. In vivo footprinting and in vitro transcription are currently the main means of analysis. Applicants must be US citizens or permanent residents with less than five years postdoctoral experience. Laboratory of Molecular Growth Regulation (OE-43), NICHD, Building 6, Room 2A01.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference by Internet (tn3270.cut.nih.gov) or via modem (1,3014022221 or 1,8003582221). The settings for modem access are "7,Even,1". When connected to NIH, type in ",vt100" at the connect message, "F5E" at initial, and "AJL1" at account.

The Postdoctoral Research Fellowship Opportunities catalog, which describes additional opportunities at the NIH, 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" and port "70". Select Grants and Research 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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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. 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. 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. Yuhpyng 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. 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.

As a research-based, global health care company, Pfizer’s mission is to create innovative products that improve the quality of life around the world. If you are interested in joining our dynamic scientific team, please send your resume to Manager, Employee Resources, Pfizer Inc., Central Research Division, Groton, CT 06340. We are an equal opportunity employer.

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Imagine your discoveries becoming a part of everyday life, in every home, in every part of the world.

Unilever. The name may not be familiar. But the impact of our research is strongly felt around the world. Consider widely popular international products such as Wisk detergents and Dove soap, Vaseline and Pond’s, and Elizabeth Arden Ceramide Capsules, and you’ll begin to get an idea of who we are. But that’s only part of the picture.

Unilever is one of the world’s largest consumer products companies. Comprised of over 500 individual companies, including major U.S. names like Chesebrough-Pond’s, Lipton, Elizabeth Arden, Calvin Klein, and Lever Brothers, to name just a few, we claim hundreds of popular brand names that are responsible for thousands of products. These distinguished products are what we have to offer the world. What we have to offer scientific professionals is equally as impressive.

With the resources of this global giant behind us (including a $750 million research budget), our research centers are maintained at state-of-the-art levels of technology. These centers are linked by sophisticated telecommunications and computer networks, thereby creating a truly collaborative environment for our 3800+ dedicated scientific professionals. Bringing their talents from a variety of scientific areas - chemistry, biochemistry, biology, biophysics, colloid and surface science, clinical and consumer research, pharmacology, measurement science and more - these multidisciplinary teams share information, technologies and insights as they meet the challenges of exciting short and long term projects.

Naturally, Unilever offers the salaries, comprehensive benefits and advancement opportunities you’d expect from a global leader. If you can see yourself having an impact on the way the world lives, we’d like to see you. Send your resume to: James R. Conti, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. Equal Opportunity Employer.

Unilever
Unilever Research U.S.
Bristol-Myers Squibb Pharmaceutical Research Institute

Bristol-Myers Squibb Pharmaceutical Research Institute, the R&D division of Bristol-Myers Squibb, supports women in scientific management, research and development. Our organization is proud to introduce a representation of the many contributors behind our scientific endeavors.

Ingegerd Hellsrom, Ph.D., M.D.
Vice President, Immunological Diseases
Drug Discovery – Seattle, WA

Beth Schilling, Ph.D.
Director, Toxicology & Pathology
Pharm Development – Evansville, IN

Carol Maskin, M.D.
Executive Director, Cardiovascular
Clinical Research – Princeton, NJ

Lynn Keller, V.M.D.
Director, Veterinary Sciences
Pharm Development – Wallingford, CT

Audrey Armstrong, D.V.M.
Staff Veterinarian
Pharm Development – Wallingford, CT

Laurie Smaldone, M.D.
Executive Director, Infectious Diseases
Clinical Research – Wallingford, CT

Prabhavathi Fernandes, Ph.D.
Vice President, Biomolecular Screening
Drug Discovery – Princeton, NJ

Pamela A. Trail, Ph.D.
Group Leader, Oncology
Drug Discovery – Princeton, NJ

Background photo: Final intermediate in the semi-synthesis of TAXOL® (paclitaxel). TAXOL is a registered trademark of Bristol-Myers Squibb Company.

P.O. Box 4000, Princeton, NJ 08543-4000
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Alice Hsuan
PhD Statistics - Cornell University
Vice President, Biostatistics and Data Operations
JANSSEN RESEARCH FOUNDATION

On Work And Family"

"We're very sensitive to family responsibilities. The company is very good about providing services to meet special needs ranging from elder care to personal health."

Jade Chin
PhD Basic Health Sciences
SUNY Stony Brook
Group Leader, Hybridoma Technology
ORTHO DIAGNOSTIC SYSTEMS INC.

A group of distinguished women scientists discuss

...working at

Johnson & Johnson

“On Advancement”

"I honestly believe that I am judged on my capabilities when it comes time for promotional consideration. I am given the opportunity to participate to the fullest in all decisions and processes."

Ceile Hedberg
DVM - Tuskegee Institute
PhD Anatomy and Physiology
University of Pennsylvania
Director of Laboratory Animal Medicine
THE R.W. JOHNSON
PHARMACEUTICAL RESEARCH
INSTITUTE

“On Having It All”

"J&J recognizes the need for flexibility in the 1990's. The company recognizes the importance of ensuring that women can contribute as fully as they can. The company makes room for the idea of 'I can have it all' and enables me to truly balance my work and my family."

Barbara Schwartz
PhD Chemical Engineering
Princeton University
Vice President, Research & Development
ETHICON

On The Future:

Our goal is to maintain our position as the world's most innovative and competitive health care products company. To do this, we seek talented scientific professionals to join us in leading the industry through product innovation, superior science and technology, cost effectiveness, and better value. In return, we will provide an environment where your contributions are acknowledged and your goals are supported. We seek individuals with health care industry or academic experience and a degree (BS, MS, PhD) in Biology, Biochemistry, Biochemical Engineering, Chemistry, Immunology, Medicine, Microbiology, Molecular Biology, Pathology, Pharmacology, Statistics, Toxicology, or equivalent.

If you are interested in current and/or future opportunities with Johnson & Johnson, become part of our new state-of-the-art employment management system by forwarding a copy of your resume suitable for scanning and storage. Your resume will be filed in our RESTRAC Enterprise System® from MicroTrac Systems, Inc., where it can readily be accessed for available positions. Send to: Dept. DB, Johnson & Johnson Recruiting, 501 George Street, New Brunswick, NJ 08901.

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RECRUITING
At Amgen, scientific excellence in a progressive, collaborative research environment is a valued part of our corporate culture. As a global leader in biotechnology, our substantial investment in Research and Development provides outstanding resources for innovative, self-motivated scientists. Amgen's commitment to significantly expand efforts in developing novel, breakthrough therapeutics has created numerous career opportunities.

MOLECULAR BIOLOGY (INFLAMMATION RESEARCH GROUP): Experience in PCR, cDNA cloning, hybridization, library construction and BS/PhD is required. Knowledge of expression in mammalian cells or E.coli and subsequent gene product characterization is desired.

(Job code OA-SC-MZ-001)

CELL BIOLOGY (INFLAMMATION RESEARCH GROUP): Requires experience in cell culturing, hybridoma generation, characterization of monoclonal antibodies or adhesion and lymphocyte proliferation assays; and BS/PhD.

(Job code OA-SC-MZ-002)

BIOCHEMISTRY (INFLAMMATION RESEARCH GROUP): Requires BS/PhD, and experience in purification, characterization and identification in one or more of the following areas: protein chemistry, carbohydrate chemistry or lipid chemistry.

(Job code OA-SC-MZ-003)

CARBOHYDRATE CHEMISTRY LABORATORY (INFLAMMATION RESEARCH GROUP): Requires synthetic organic chemist experienced in carbohydrate synthesis or relevant analytical experience. Experience in molecular modeling, knowledge of interaction between biomolecules and BS/PhD required.

(Job code OA-SC-AV-005)

MOLECULAR BIOLOGY OF NEUROPEPTIDE RECEPTORS: Experience using molecular biology techniques to clone and study the biological role of new neuropeptide receptors. PhD and postdoc experience required.

(Job code OA-SC-FC-001)

COMPUTATIONAL BIOLOGY: PhD in Molecular Biology, general knowledge of diverse gene families, familiarity with relational databases and programming experience required. Focus on sequence analysis, with some design and assistance in implementation of computational tools.

(Job code OA-SC-SC-001)

SCIENTIFIC PROGRAMMER: To work on detection of structural motifs in protein sequences, applying existing software, and developing new applications. Requires BS/MS in Biological Science and at least 3 years' programming experience in C or Fortran.

(Job code OA-SC-SC-001)

PROCESS DEVELOPMENT SCIENTIST: Requires MS/PhD (or equivalent) in life-sciences or a related scientific discipline; or a ChemE with 5+ years' relevant experience.

(Job code OA-SC-LD-003)

PROCESS DEVELOPMENT ENGINEER: Fermentation, cell culture, recovery and purification in process development. BS/MS in ChemE and 2 years' related experience required.

(Job code OA-SC-LD-004)

VALIDATION ASSOCIATE (VALIDATION DEPARTMENT): Implement/evaluate validation cycle for manufacturing control and information systems. AS in a related area and/or 2 years, pharmaceutical/process industry validation, and PLC experience required.

(Job code OA-SC-DC-001)

At Amgen you'll find that our approach to scientific research and process development is as rewarding as it is effective. We offer a highly competitive compensation and benefits package that includes: retirement and savings plan, three weeks' vacation, medical/dental/life insurance plans and on-site child care and fitness centers. Please fax/mail resume/c.v. to FAX: (805) 447-1985. Amgen Inc., Staffing, Job Code (see above), Amgen Center, Thousand Oaks, CA 91320-1789. Information line: (805) 447-4150. Principals only, please. EEO- Affirmative Action Employer M/F/D/V.
SCIENCE DRIVES OUR SUCCESS.

And opportunity abounds. Our primary focus at Genentech is to provide an environment where science thrives. We believe this commitment to scientific excellence is one of the most important elements of our company and is responsible for our remarkable success.

Our commitment to science begins with finding and challenging top scientific talent, and continues with an R&D expenditure of more than 50% of our annual revenue. The results of these efforts speak for themselves. Our scientists publish over 220 papers per year on average, and have a peer citation record that compares favorably with the top scientific institutions in the world. And, we have one of the richest product pipelines in the industry which has led to the following key openings.

**MRI/Bio-Imaging Scientist**

An opening exists for a scientist to establish an imaging technology facility within the Research Division of Genentech Inc. This person will recommend, acquire and apply magnetic resonance and other imaging technology to support and collaborate with scientists in several areas of research including neurosciences, endocrinology, cardiovascular and cancer biology. In addition, original research to develop and publish new imaging techniques is expected.

Requirements include a PhD and/or MD and 3+ years of postdoctoral experience with MRI and other imaging technologies, preferably in an area of preclinical research. An excellent scientific background is required as evidenced by strong scientific training and an outstanding publication record. Job Code: WR-RT.

**Scientist/Senior Scientist Pharmacokinetics**

Design, monitor and analyze data from pharmacokinetic studies and provide appropriate input to Regulatory Affairs, Clinical Research and Product Development departments. You'll be expected to communicate your findings in scientific meetings, seminars and publications.

A Ph.D. or MD with strong clinical pharmacokinetics experience is required. A minimum of 2 years' industry postdoctoral experience is ideal. Job Code: TH-SB.

Genentech offers an excellent salary and benefits package which includes child care facilities, free health club membership and fully paid medical/dental/vision coverage, as well as a sabbatical program. If you are interested in joining an organization where individuals are valued and rewarded for their contributions, forward your resume indicating Job Code, to: Genentech, Human Resources, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal opportunity employment. Women and minorities are encouraged to apply.
When we first made the *Working Mother* "100 Best," Aimee was just a gleam in her mother’s eye.

* For eight years running, Syntex Corporation has made *Working Mother*’s list of the 100 Best Companies for Working Mothers. No company has been on the list longer. We’re proud of that record—proud of what we’ve done for working mothers, and for all women working in the sciences.

As we take it upon ourselves to reengineer Syntex for the 1990’s, accelerating our pipeline and filling it up with a variety of pioneering new products, we’ll continue to remember that true progress goes beyond technology. Finally, it comes down to building a future, and the future comes down to children like Aimee.

We’re currently seeking the following professionals to help us improve the state of medical science for the benefit of Aimee, and all the Aimees to come:

- Biologists
- Biostatisticians
- Chemists
- Nurse Practitioners
- Clinical Research Associates
- Research Scientists
- Compliance Specialists
- Clinical Information Coordinators

Syntex offers competitive salaries and generous benefits including relocation assistance, an incentive bonus plan, on-site health club, and daycare facilities. Please send your resume to Syntex Corporation, Professional Staffing Dept. SM0311MM, 5401 Hillview Avenue, Suite A2-150, Palo Alto, CA 94304. Syntex is an equal opportunity employer committed to the values of a diversified workforce.

* *Working Mother,* October 1993
Wyeth-Ayerst is a global leader in women's health-care products and research, helping to improve the lives of women every day. We are now the number one provider worldwide of hormone replacement therapy and hormonal contraceptive products and at the forefront of international efforts to improve women's health through research and education.

Currently, we have the following several opportunities available for Research Scientists (Ph.D. and 3-5 years experience) and Senior Scientists (Ph.D. and 0 - 3 years experience). Strong emphasis in all areas will be on the discovery of molecules which may provide therapeutic strategies for the treatment of disorders affecting women's health. Relevant areas include mechanisms of hormone action (steroids, peptides, growth factors), vascular effects of steroids, steroid interactions with neuroendocrine systems, bone biology, and reproductive disorders such as endometriosis.

**Molecular Biologists**
Requires a strong background in molecular biology of peptides, receptors and/or growth factors as applied to neuroendocrine and implementation of relevant techniques (gene cloning, sequencing, vector construction, site-directed mutagenesis, transfections, cell line generation by targeted tumorigenesis, SI nucleus mapping, nuclear binding, and other molecular techniques).

**Endocrinologists**
Requires a strong background in cellular and molecular biology of endocrine systems, particularly those controlling neuroendocrine, reproductive, bone metabolism and vascular systems. Experience in the area of hormone action, with emphasis on effects of steroids, neurosteroids, peptides and growth factors and the development of in vivo and in vivo model systems, including relevant cell lines to test effects of endogenous ligands or potential new drugs is essential. Familiarity with molecular biology, cell biology, biochemistry and pharmacology/physiology is necessary.

**Peptide Chemist**
Requires a strong background in peptide chemistry, particularly in the area of brain and/or gonadal peptides and their receptors. Expertise in the isolation, purification and synthesis of endogenous peptides as well as in the design and synthesis of novel peptides and growth factors are important. Additional experience in the use of molecular modeling for structure-activity studies and drug design and delivery are of value.

**Cell Biologist**
Requires a strong background in studying the biology of cellular systems that participate in the regulation of reproductive, endocrine and metabolic functions. Demonstrated experience in the development or implementation of technical approaches to establish model systems that allow the evaluation of mechanism of action of drugs or endogenous compounds that may affect organ function in the disciplines of endocrinology and/or gynecology.

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please respond by sending your resume with salary requirements to: Wyeth-Ayerst Research, Human Resources, Position WHI-S94, P.O. Box 8299, Philadelphia, PA 19101. An equal opportunity employer, M/F/D/V responses encouraged.
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For more than a century, we've understood that the key to innovative research is an innovative research environment. Over the years, we have developed some of the world's most important health care products and services by developing new voices and new viewpoints, by investing in new ideas, and by encouraging a new level of collaboration between men and women from different backgrounds and different disciplines. So when we say that drive, determination and ambition are the most important elements to succeed—we're speaking from experience. Just ask our scientists.

I've never been treated differently than my male colleagues. My husband is also a scientist and inventor at Abbott. So we like to think of this as our family business! I've been here 12 years—and I haven't lost any of my enthusiasm. I have always been supported by upper management and worked with outstanding colleagues. In my current project I am involved in some of the most exciting basic research going on anywhere in the world.

FATIMA BASHA, PhD
Senior Group Leader, Associate Research Fellow Volwiler Society* Pharmaceutical Products Division

From the beginning of my career at Abbott, I've been encouraged to take on as much responsibility as possible. I've had my choice of career paths—from basic and applied research to manufacturing support. And at every stage, I've found an environment that is both challenging and technically stimulating.

CAROL COX, PhD
Director, New Technology Development Diagnostics Division

This is the most open, unbiased environment I have ever worked in. Abbott has made a commitment to diversity that is evident throughout the company. Of course, opportunities for personal growth and development are available to all scientists—and these opportunities exist in both the scientific and management areas.

H. ANN STELMACH, MBA, PHD
Department Manager, Solutions Technology Hospital Products Division

Being a woman has just never been an issue at Abbott. Take a look at the path I've followed—from Research Associate into management with more of a traditional business discipline. I truly believe that opportunities exist for continuous learning. You have the chance to broaden your interests, and take your career in virtually any direction you want.

DAMAN KOWALSKI, MS
Business Team Leader Diagnostics Division

Marriage and parenthood have not presented obstacles to growth or career advancement at Abbott. This is not to say that women are able to rise through corporate America effortlessly. It takes a lot of desire. The key, once you have gained the skills to perform your job, is to go above and beyond what's expected—and take advantage of every opportunity that is presented.

BELINDA HIGHTOWER, RN
Clinical Project Manager Pharmaceutical Products Division

If you'd like to learn more about career opportunities at Abbott, tell us a little more about yourself.

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Please write to: D.393, J30, Dept. WIS, Abbott Laboratories, One Abbott Park Road, Abbott Park, IL 60064.

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*The Volwiler Society was created by Abbott to recognize consistent and exceptional scientific achievement.
Alzheimer's disease, AIDS, diabetes, osteoporosis, depression, schizophrenia. Just some of our contemporary plagues.

In the continuing battle to eradicate devastating diseases, your doctor doesn't stand alone. And neither do you.

The men and women of Eli Lilly and Company's research and development areas are standing with the medical professionals and with those afflicted with these diseases. They — and all the people at Lilly — are committed to finding creative solutions to the medical scourges that prey on humanity. And all are committed to finding those solutions at a cost that is affordable to you and to society. That's our commitment to you and to future generations.

These women are among some of the outstanding Lilly scientists who were recently promoted because of their numerous scientific and technical contributions. We honor them for devoting their lives to saving and improving the lives of others.

Please check our Employment Information Line at (317) 276-7472 for possible career opportunities. We are an equal opportunity employer committed to diversity in the workplace.