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SCiENCE COVERS THE WORLD
scientists are using a strange language these days: international, multinational, multicultural, global, borderless, seamless, divergent, heterogeneous, cross-cultural, cross-disciplinary, and cross-functional. This patois is an effort to capture the nature of European science and the European scientist. The Continent has become a Switzerland of disciplines in which everyone is multilingual. Traditional disciplines are being combined in new ways, and with nontraditional disciplines, to bring European science into the present. In the life sciences, this is, as one eloquent scientist puts it, "Florence in the fifteenth century." Below, scientists from Unilever, SmithKline Beecham, Pharmacia, Biopharm, and the Max Planck Institute of Cell Biology discuss careers in European science. We hear a range of advice concerning attractive fields and skills, what advantages to pursue, how to choose a postdoctoral position, even what attitudes to adopt about the nature of industrial science. And all is couched in this new language, spoken by scientists in a Europe of collaboration, crossover, and change.

THE BORDERLESS LABORATORY: GLOBAL SCIENCE AT UNILEVER

Unilever is a leading international company serving worldwide markets in foods, detergents, personal products, and specialty chemicals. David Learmond, divisional personnel officer, research and engineering division, says, "We're looking for PhD scientists who can demonstrate that they can use their first-class scientific training to work with others in delivering outstanding innovation in our products." Theo Verrips, responsible for Unilever's exploratory bioscience program, says that "our major scientific interests are in plant, microbial, and human cell and molecular biology; enzymology; nutrition; preservation; and biorecognition."

Unilever has started an international recruitment campaign to integrate and internationalize Unilever's laboratories in England, the Netherlands, the United States, and India. "Our aim," says Jane Goodwin, divisional human resources consultant and project leader for the international recruitment effort, "is to attain a seamless, borderless laboratory. We want to create project teams that cross national and disciplinary boundaries."
AT THE LEADING EDGE OF MOLECULAR NEUROLOGY RESEARCH

Harlow, Essex

At SmithKline Beecham the importance we place in the talent and creativity of our people is only matched by the substantial investment we make in new technology and resources. At our superb research centre in Harlow, the Neurology department is broadening its base to exploit novel targets in the neurosciences arising out of the company's collaboration in the area of molecular medicine. To help us succeed in this area we now have the following challenging opportunities:

Senior Molecular Biologist

This position requires a talented manager to lead the team in the application of molecular biology techniques to neuroscience research. This will involve efficiently exploiting the function of orphan receptors and deriving new targets from models already in place, establishing methods for probing the function of novel genes, and liaising with in vitro and in vivo groups to ensure techniques for manipulating expression are appropriately applied.

Together with a good biology/neurosciences degree and a PhD in molecular biology, you will have at least 5 years' relevant experience, preferably including manipulating gene expression in vivo and in vitro eg. antisense. You will have a good understanding of cell biology and cell culture techniques and previous experience of directing a team. Ref: TH/LE/951.

Graduate Molecular Biologist

You will have graduated in molecular biology or biochemistry and have some experience of general molecular biology techniques. Experience of in situ hybridization techniques would be an advantage, but enthusiasm and willingness to work as an active team member are also important. You will be involved in the exploitation of novel targets originating from SmithKline Beecham's genomic initiatives. Ref: PL4.

Graduate Scientist

You will provide biochemical support for projects within Neurology Research and across the matrix. Working in a multidisciplinary team, this will involve conducting in vitro experiments to initiate and assist the investigation of novel therapeutic agents. A degree in biochemistry or related biological/pharmacological sciences should be accompanied by at least one year's experience in biochemical research. Ref: PL5.

All roles offer a highly competitive salary as well as an extensive benefits programme which includes a company car (senior position only), bonus, pension and medical plans, profit-related pay, share-matching scheme, flexible working hours, generous holidays, and excellent sports and social facilities.

To apply, please send your full career details, quoting the appropriate reference, to the Human Resources Associate, SmithKline Beecham Pharmaceuticals, New Frontiers Science Park (North), Third Avenue, Harlow, Essex CM19 5AW. Closing date for applications: 6th October 1995.
The Research and Leading through World

Delivering consumer focused technology

Do you have the will to lead in a world of change?

Physical Sciences

Unilever is seeking to recruit a number of physical scientists for its world leading programme in colloid and surface science, material and measurement science. The major areas of interest involve the physics and chemistry of solid and liquid phases; particularly materials in contact with or containing water.

Unilever has an on-going commitment to studying inorganic materials and reaction mechanisms in materials utilised across all their areas of technological interest. The growth areas of interest are in particle science, the physical chemistry of enzymes and biopolymers, structuring of soft phases and the rheology of films and concentrated dispersions.

Additionally, there are a number of openings for specialists who are experienced in the measurement techniques that underpin the above areas, such as confocal microscopy and surface scattering techniques. Ref: SC/1092/JVM

Consumer Sciences

Providing exciting new products for consumers throughout the world is a challenge. We need people who can use their scientific skills to understand what consumers want, now and in the future, then translate this into a technical brief and finally make sure the emerging technology works in real life and is appreciated by consumers.

To do this we are looking for creative scientists with a curiosity about how people go about their feeding, grooming and cleaning, the tenacity to tease out consumers' needs and ideals, plus the ability to work with multi-disciplinary teams to determine and evaluate appropriate technical and marketing solutions.

Experience in consumer research is an advantage.

Ref: SC/A093/JS

Excellent communication skills and the ability to work in an integrated team of scientists and business managers are essential. You will be a high calibre scientist, qualified to PhD level with a proven track record in your specialist field. The drive to join an innovative company and contribute to their future scientific direction as a member of a dynamic project team is key. The desire to achieve excellence in your field, a flexible attitude and the ability to work in any location is essential as opportunities exist in the USA, UK and The Netherlands.
"Unilever is one of the world's largest and most successful consumer goods companies. It markets thousands of famous brands worldwide and is a market leader in foods, detergents, personal products and specialty chemicals. Innovation and speed to market are vital for continued success and future growth opportunities. The mission of the Research and Engineering Division is to provide Unilever Businesses with competitive advantages from science and technology to achieve their growth targets. The Research and Engineering Division operates as a global team, based in locations around the world with major laboratories in the UK, USA and The Netherlands." Achieving global pre-eminence can only be achieved if the business is led by highly competitive and exceptionally bright people; world class scientists who can harness the talents of other people to produce a winning team.

Biosciences

Bioscience is a key area of Unilever's exploratory research programme. Projects range from improvement of the functionality of various components in plants via classical breeding and modern recombinant DNA techniques, to extension of the shelf life of products by applying advanced preservation systems derived from defence systems used by various biological systems. To support this work, Unilever requires scientists to work in Plant Science, Enzymology, Human Nutrition, Human Cell, Molecular Biology, and Microbial Biotechnology, including the rapidly expanding area of microbial fermentation. There is also an emphasis in the area of immunology resulting in consumer products based on antibody technology. Another key area is the understanding of consumer perception of flavour and odours, important criteria in the development of novel food, personal hygiene and cosmetic products. Ref: SC/109/LSCJ
Unilever, which heretofore had recruited locally, is now expanding its talent search to include the whole world. The focus is on biochemists and molecular biologists who can use their skills—including materials and colloid science, tissue culture, biochemistry, genetics, and transgenic techniques, focusing on signal transduction and controls on growth and differentiation—in creative ways to solve biochemical problems.

Hands-on experience is, as always, a prime requisite. Carol Bosko, group leader in epidermal biology at Unilever's Edgewater, New Jersey, lab, stresses cross-disciplinary background and cross-functional thinking. "Biologists can't be just biologists anymore," she says. "We're looking for people who also know chemistry and physical chemistry, how to apply techniques available in these disciplines in new ways to solve biochemical problems." If university training hasn't provided the cross-discipline, the job-seeker might look for a "divergent post-doc," deliberately chosen to give the scientist a heterogeneous background. "Scientists must be able to pick up the best ideas at the right moment and transfer those ideas to practical advances," Verrips says, "and they should be able to communicate their ideas in an understandable way."

Dr. Anthony Lee, head of exploratory research, Unilever, is discussing novel collaborations between industry and academia in Europe and the United States. "We're actively experimenting with new job structures, in which heads of departments at distinguished European universities take over some of our projects and run them from within their labs," he says. "The idea is to offer a parallel academic and industrial career. Why make this an either/or decision?"

Why is Unilever spreading the net worldwide? "We simply need the best people we can find," Lee says. Specialists in biology are in great demand, especially in human cell biology, microbiology, biochemistry, and plant cell biology. But Unilever also is looking for people with divergent yet complementary backgrounds, such as the biologist with expertise in the physical sciences, or the colloid scientist with a background in enzymology. Applications of engineering and computer technology in manufacturing are "simply exploding," and interest is high in applied psychology as it pertains to consumer science. "In ten to fifteen years," Verrips says, "the combination of information technology and bioscience will be very important. It will help us discover and design new products more specifically for segments of the market—and it will make consumers far more knowledgeable about the content and manufacture of their products."

Advances in technology and bioscience are causing international excitement in this quintessentially international company. "Now, using biological and enzymatic techniques," Verrips says, "we can tailor-make raw materials for food products. An enormously important example is polysaccharides, which we can now design in ways that were unavailable or expensive a decade ago." Lee says, "This is Florence in the fifteenth century. Someday our grandchildren will ask us, 'What was it like to be doing science in the 1990s?' It will be a pleasure to tell them."

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RECRUITMENT IN BIOTECHNOLOGY AT SMITHKLINE BEECHAM

Janet Dewdney is director and vice president for biotechnology (Europe) at SmithKline Beecham (SB) in Harlow, England. The goal of her department is, in her words, "to contribute to drug discovery through the identification of novel molecular targets—in large measure now derived from genome sequencing—and to identify novel protein compounds as therapeutic agents." In terms of recruitment, graduate and postdoctoral scientists with demonstrated excellence in molecular biology, protein chemistry, and structural biology are of great interest.

But there are other needs as well, including fermentation skills, cell culture, and data management and bioinformatics. Dewdney notes that fermentation science has become "something of a Cinderella in the biotech framework," a critical factor, from discovery through manufacturing, in the effort to exploit the advances in biotechnology. There are not enough fermentation scientists—not enough data management and bioinformatics experts. Because of the breadth and diversity of new molecular targets and the enormous number of chemical entities now made available via combinatoratorial chemistry, many companies, SB included, have put high-throughput screening at the center of drug discovery. "The question now is, How do we manage the data?" Dewdney says. "Data handling and information management will be crucial in years to come."

There is great excitement in SB's biotechnology labs. Recombinant DNA technology is creating new opportunities in vaccine discovery and production; SB's own hepatitis B vaccine is a case in point. Recombinant protein products are finally assuming an important role in the marketplace. "True, many of these are relatively niche markets," Dewdney says, "but collectively, they now amount to a significant presence." In discovery science, molecular targets derived from human genome research are beginning to revolutionize screening and discovery. "We already have a cornucopia of novel molecular targets," Dewdney says, "and one very real and exciting challenge is to define function for many of these orphan black box genes."

SB's recruitment efforts have gone global along with science itself. "Young scientists are far more mobile across continental Europe than they were even five years ago," Dewdney says. "That has led us to focus on Europe as a whole rather than just on universities in the United Kingdom." SB has started to target European universities such as Louvain-La Neuve, Leiden, Milan, and Tübingen for recruitment. Dewdney's department rarely considers candidates with lower than a first-class degree. Past that, the intangibles—commitment, breadth of interest but with a specialist focus, good communications skills, a sense of the pharmaceutical market—become important. As Dewdney puts it, "We'd like our recruits to understand the business they are in and the pressures on it."
OPPORTUNITIES IN EUROPE

Procter & Gamble is a research and development-based international corporation with more than $33 billion/year in world-wide sales in household consumer products and an annual R&D budget of $1.25 billion. In Europe, the Middle East, and North Africa, Procter & Gamble is engaged in the research, development, manufacture, and sale of a wide range of household consumer products including detergents, fabric-care products, toilet soaps, beauty- and health-care products, disposable personal-hygiene products, household-care products, and beverages.

We currently have several entry-level openings in Europe for Ph.D. scientists. Successful candidates will have strong technical and communication skills, a high level of initiative and commitment, and a good command of English. In addition, fluency in at least one other European language is desirable. Candidates must be eligible to work in the European Union.

- **Ph.D. in PHARMACY (Ref. 95/6)**
  
  A doctoral-level scientist is needed for analytical method development and problem solving in support of the development of respiratory medicines, oral care, denture hygiene, and gastrointestinal technology. Experience with GMP or GLP in the pharmaceutical industry is an asset. This position is located at our Egham Technical Center outside of London.

- **BIOCHEMIST/ENZYME CHEMIST (Ref. 95/7)**
  
  A scientist with a Ph.D. and/or postdoctoral training in biochemistry or enzyme chemistry is needed for the development of analytical methods and test techniques for industrial enzymes. The opening also involves modeling the interaction of enzymes with laundry substrates. This position is located at our European Technical Center in Brussels.

- **COLLOID CHEMIST (Ref. 95/8)**
  
  A scientist with a Ph.D. in physical chemistry is needed to develop innovative laundry technology through technical understanding of physical chemistry at solid-liquid interfaces. This position is located at our Newcastle (England) Technical Center.

- **ENVIRONMENTAL TOXICOLOGISTS (Ref. 95/9)**
  
  Openings exist in the area of environmental research, with responsibility for the development and execution of environmental management programs, including safety assessments. Successful candidates will have a Ph.D. or postdoctoral training in biochemistry, microbiology, ecotoxicology, biology, applied ecology, or a similar discipline. One of the positions will be filled with a citizen of a Scandinavian, Central or Eastern European country, or from the Mediterranean area. Location is in Brussels or Frankfurt.

For all these functions, we offer starting positions for a research & development career in a successful, strong and growing company and in an environment which will stimulate personal and professional growth. We have a policy of promotion from within, based on contribution and potential. Salaries are highly competitive and are coupled with an excellent benefits package and paid relocation.

To apply, please send your c.v., publication list, and cover letter (including Ref. number of the position for which you are applying) to:

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An Equal Opportunity Employer
GERMAN EUROSCIENCE AT BIOPHARM

The state of German bioscience is changing in some encouraging ways. While there are still some Länder in which it is easier to do biobusiness than others, for the most part, Einheit has brought some détente in relations between biotech and politics. As Rolf Bechtold, head of analytical services at Biopharm in Heidelberg, puts it, "The two most exciting recent political developments have been the opening of the East and the slowly changing public opinion towards genetic engineering in Germany." A host of entities, both commercial biotechs and private or government-sponsored research centers, are making important contributions. One can find contract research organizations such as Biomeva of Heidelberg; companies specializing in gene therapy and diagnostics, such as MediGene of Munich; and innovators in protein and peptide discovery technology, such as MorphoSys of Frankfurt.

Biopharm, nine years old and growing quickly, is already able to count several major European pharms as clients. Recently, Biopharm licensed one of its patented developments, a recombinant cytokine, to Hoechst AG. Bechtold and scientific director Jens Pohl report that "our most exciting recent scientific development was the isolation of two new members of the TGF-β family; otherwise, there is exciting progress in neurobiology, especially the identification of several neurotrophic factors."

What sorts of scientists are in demand? While Pohl and Bechtold believe that "there are too many molecular biologists at the moment," they add that "there will always be demand for people having expertise in protein engineering and skills for protein purification." And those people should be international in outlook: "Postdoctoral time spent abroad is an advantage because it increases foreign language skills and adds a multicultural touch."

As biotech heats up in Germany, Biopharm is looking for scientists committed to joining forces to produce innovation. It's a mindset different from the traditional academic viewpoint, but then, those two realms, like East and West, are in the process of becoming one. For Jens Pohl and Rolf Bechtold of Biopharm, the new eurobiologist should "of course be hard-working and team-oriented; remember it's the result that counts, not a first authorship."

DISCOVERY, INFORMATION, REVOLUTION: GÖRAN ANDO OF PHARMACIA

Göran Ando is executive VP and deputy CEO for Pharmacia of Stockholm, Sweden, an R&D-driven pharmaceutical company with an unusual history. Research has led Pharmacia into a diverse range of specialties, including ophthalmology, production of human growth hormone, oncology, and advanced lab equipment. What makes Pharmacia unusual for a major pharma is that molecular biology is its R&D base—and has been for more than 15 years.

When asked for the hot fields of the moment, Ando replies, "Molecular biology is our science; there are too few good molecular biologists in the world." But he also sees a need for "whole-body biologists," specialists with a physiological background, who can see the body from a perspective of more than one cell at a time. "We will always be on the lookout for structural biology," he says, "as well as for computational chemistry." And Ando speaks enthusiastically about the global trend toward marrying the classical disciplines with information technology (IT): "People who have merged one of the chemistries or biologies with an IT competence are critically important."

Like industrial science employers all over the globe, Ando looks for entrepreneurship and flexibility in job-seekers. "They should first understand that Pharmacia, indeed any science company, is different in an essential and positive way from university. This is a business, and because our business is so exciting, so competitive, we expect them to give their absolute best." And then there is the necessary balance between goal orientation and flexibility. If priorities or directions change, the scientist must be prepared. "This too can be a positive challenge, a way to extend your competence," he says.

Ando sees the European biopharmaceutical market as still fundamentally sound. There is still a huge, unmet medical need, and European health care systems are still willing to pay for innovations—but only for true innovations. "That means that there will be a further consolidation of the pharmaceutical industry," he says, "but as a business concept, pharmaceuticals is very viable, especially in research and development."

Viable indeed in these times of heady discovery, "Genomics is, of course, fascinating, offering us completely new horizons," Ando says. "If you link that with bioinformatics, in which IT is combined with genomics, you have a revolution that will make continued innovations possible." Ando's enthusiasm is a reminder of why European science today is so exciting. "I recently met with our colleagues at Human Genome Sciences," he says, "and just listening to them makes me happy."

BEYOND THE KIT MENTALITY: THE MAX PLANCK INSTITUTE FOR CELL BIOTECHNOLOGY

The Max Planck Institute for Cell Biology in Ladenburg, Germany, is one of about 60 institutes run by the Max Planck Society (MPS). While basic research is the primary concern, the MPS has encouraged scientists to explore industrial spinoffs. Two recent examples are Sugen, Inc., of Redwood City, Calif., firmed with an American partner by German scientist Axel Ullrich, and Evotec of Hamburg, started by Nobel laureate Manfred Eigen.

At Ladenburg, about 50 people perform basic research in cell biology. Peter Traub, director of the Institute, says, "Our goals include a molecular understanding of the involvement of the cyto-and karyoskeleton, particularly intermediate filaments [IFs] in differentiation processes in vertebrate systems, and microfilaments, microtubules, and IFs in the green alga Acetabularia." Techniques at the Institute mirror the latest in world biological science: confocal laser scanning microscopy, transmission electron microscopy, oligonucleotide synthesis and automatic DNA sequencing, manual and automated microinjection of cells, biologic and electrotopography transformation techniques, fluorescence polarization spectroscopy, FACs analysis, and in vitro tissue cell line culture. That activity has paid some recent dividends, including cloning and characterization of the genes for myosins in Acetabularia.

Traub advises new scientists to avoid developing what he calls a "kit" mentality. "Much of biochemistry and almost all of molecular biology is available in kit form," he says, "which has resulted in a new generation of postdocs who have a difficult time in the lab when the kit doesn't work. What is still needed in cell biology is a rigorous biochemical training, an ability to do math, and an understanding of physics."

Scientists need to be computer-literate and good communicators too, both verbally and in written publications and grant applications. "Since the language of most fields of biology (including cell biology) is English," Traub says, "acquire fluency in speaking or writing English, perhaps by doing a research or postdoctoral fellowship in the United Kingdom or the U.S." His advice for job-seekers is to diversify their experience. "Participate in more than the required number of courses for a degree," he says. "Spend time in several laboratories to see whether science remains exciting."

Traub sees both challenge and uncertainty ahead for global science. "Deciphering the genome is only a first step," he points out. "After all the sequencing is done, it will take literally armies of cell biologists and geneticists to do the basic science and produce the proteins or drugs that will address or solve a particular problem." In such a dynamic scenario, the diverse, polyglot, articulate, computer-literate, perseverant, and above all anti-kit scientist holds the greatest promise.

John Timpane, PhD, writes frequently about the pharmaceutical and biotechnology industries.
Royal Netherlands Academy of Arts and Sciences calls for nominations for the UNILEVER SCIENCE AWARD.

Unilever Research has established a new prize to promote science, the UNILEVER SCIENCE AWARD.

In 1996 two UNILEVER SCIENCE AWARDS, each of NLG 250,000 (approximately USD 160,000) will be awarded to scientists in the field of Biorecognition.

One prize will be for outstanding research on cell cycle regulation, the other prize for outstanding research on odour and taste perception.

Nominations must include a description of the discoveries and publications on which the nomination is based, a curriculum vitae, bibliography, and one or two key publications. The deadline for nominations is February 1, 1996.

More information is available from the Secretariat of the Unilever Science Award, Royal Netherlands Academy of Arts and Sciences, PO Box 19121, 1000 GC Amsterdam, The Netherlands, Fax: 31 (0) 20 620 49 41.
The Infectious Diseases Unit of our Preclinical Pharmaceutical Research Department in Basel is looking for

**Two Postdoctoral Research Fellows for Projects in Biochemistry and Molecular Genetics**

Both fellowships are available immediately and are tenable for two years. The successful applicants will join an established antibacterial research group.

Applicants for the biochemistry fellowship should have a strong background in the biochemistry and enzymology of bacterial systems. Experience in setting up enzyme assays, the isolation of membrane proteins and the use of analytical and preparative HPLC techniques is desired.

The molecular genetics project will focus on gene expression/regulation in gram-positive bacteria. Applicants should have a good background in molecular genetics and experience in working with gram-positive systems.

If you are interested in either of these challenging positions, please send your curriculum vitae, a statement of scientific interests and two letters of recommendation to Mrs. M.-L. Atay in our Personnel Department, quoting Science. reference 5/95/at. For further information contact Prof. W. Keck on +41 61 888 3345 (tel.) or +41 61 888 2729 (fax).

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**UNIVERSITY COLLEGE LONDON**

Department of Genetics and Biometry

**Chair in Molecular, Developmental or Human Genetics**

As part of a long term strategic commitment to strengthening the discipline of Genetics within the Faculty of Life Sciences, the College intends to make a professorial appointment in this area. We seek an individual who has already made an important contribution to molecular, developmental or human genetics and who will strengthen and/or broaden the research and teaching of the Department of Genetics and Biometry. The present research interests of the Department range from evolutionary and ecological genetics to human and mouse molecular and developmental genetics, while two BSc degrees, Genetics and Human Genetics, are taught. The MRC Human Biochemical Genetics Unit (Director, Professor D Hopkinson) is also part of the Department.

Further enquiries to the Head of Department, Dr Jonathan Wolfe, (tel. +44 (0) 171 380 7417; fax +44 (0) 171 383 2048; email jwolfe@genetics.ucl.ac.uk) or to the Dean, Professor A R Lieberman (tel. +44 (0) 171 380 7769). Further information about the position and the Department may be obtained from Dr Wolfe or from the Director of Academic Services, UCL, Gower Street, London WC1E 6BT UK. (tel. +44 (0) 171 380 7766; fax +44 (0)171 380 7780).

Applications, including a full cv (ten copies for UK candidates, one copy for overseas candidates) and details of three referees (including at least one from overseas) should be addressed to the Provost, UCL, Gower Street, London WC1E 6BT, UK. The closing date for receipt of applications is 27 October 1995.

Salary negotiable within the professorial range.

**Pursuing Excellence in Education and Research**

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**Karolinska Institutet**

Department of Bioscience at Novum

Center for Structural Biochemistry

Protein Crystallographer/Postdoctoral Fellow

Applications are invited for a postdoctoral fellowship in the X-ray diffraction laboratory of the Karolinska Institutet with placement at the Center for Structural Biochemistry (CSB) within the Department of Bioscience at Novum. CSB is situated at the South Campus of the Karolinska Institutet encompassing the Novum Research Center and the Huddinge University Hospital. CSB has a staff of some 40 persons, with units for Electron Microscopy, Molecular Modeling, NMR-spectroscopy, Protein Engineering and X-ray Crystallography.

The candidate should be a biochemist or chemist/physical chemist (post-doctoral level) with experience in protein crystallography and a pronounced interest in the determination of the structures of biological macromolecules and their relations to function. A solid background in applied crystallographic computing, model building, protein biochemistry and crystallization is expected. The candidate should be to join a current research project on the structure determination of steroid dehydrogenases. The fellowship is available for an initial period of 1 year with a possibility for prolongation. The appointment is tenable as soon as possible.

For further information please contact Professor Rudolf Ladenstein, phone +46-8-608 92 22.

Applications should be sent to Karolinska Institutet, Department of Bioscience at Novum, NOVUM, S-141 57 HUDDINGE, SWEDEN together with CV, relevant publications, a short description of research interests and two recommendation letters.

Closing date: October 31, 1995
PRINCIPAL AND VICE-CHANCELLOR

Granted its Royal Charter in 1966, Heriot-Watt University has 4,500 full-time students based within its Faculties of Science, Engineering, and Economic and Social Studies. A fifth of these are engaged in postgraduate study and research. In addition, there are about 9,000 students world-wide registered for the Heriot-Watt University MBA and other Distance Learning degrees and some 4,500 students are enrolled on courses leading to Heriot-Watt University degrees from Associated Scottish Colleges. The University has one of the highest levels of industrial support for research in the UK and was the first British University to establish a Research Park.

Due to the retiral of the present Principal the University is seeking to appoint someone of outstanding calibre with the ability to provide strategic academic leadership and with a record of successful management to continue its development for the challenges of the 21st Century.

Individuals who wish to apply or would like to suggest the names of others are invited to write to the Chairman of Court, Mr J Miller CBE, c/o University Secretary, Heriot-Watt University, Edinburgh EH14 4AS (Tel: 0131-451 3365 Fax: 013-451 3599). Further particulars will be supplied on request. The closing date for completed applications is 31st October 1995.

Heriot-Watt University
Edinburgh

HERIOT-WATT UNIVERSITY AIMS FOR HIGH QUALITY BASED ON INNOVATIVE TEACHING AND RESEARCH EXCELLENCE.

Centre for Mechanisms of Human Toxicity Medical Research Council

RESEARCH FELLOWSHIPS

Electrophysiology and Cancer Cell Biology

The Centre for Mechanisms of Human Toxicity is an Interdisciplinary Research Centre whose mission includes both the study of specific toxicological problems and investigations of fundamental biological mechanisms of toxicity, and research in basic biology and chemistry that has the potential to contribute to studies of human toxicity.

Applications are invited for two five-year Research Fellowships in the following areas. These are intended to allow outstanding young scientists to develop independent research programmes in close collaboration with existing groups in the Centre.

Electrophysiology (Ref: RF95/1)

The Centre has a strong ion channel and gene expression group and strong interests in neurotoxicology. Applicants for this position should have skills in modern electrophysiology and a strong interest in applying these to toxicological problems.

Cancer Cell Biology (Ref: RF95/2)

The Centre has wide-ranging programmes in carcinogenesis and cancer biology. Applications are invited from individuals with interests in any area of cancer cell biology; strong preference will be given to applicants with experience in the application of transgenic methods in this field.

The positions are available immediately for a fixed term of five years at a starting salary on the Research and Analogous Grade IA (£14,317 to £21,519 pa) or Grade II (£19,848 to £26,430 pa) according to experience. Further information can be obtained from the Resources Manager, Dr S H Dyer (Tel: 0116 252 5566. Fax: 0116 252 5616. E-mail: sbd2@le.ac.uk). Applications including a curriculum vitae, list of publications and a short (2 page) research proposal, should be sent to Dr S H Dyer, Resources Manager, Centre for Mechanisms of Human Toxicity, Hodgkin Building, University of Leicester, P O Box 138, Lancaster Road, Leicester LE1 9HN, UK, to arrive by 20 October 1995.

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Promoting excellence in University teaching and research

THE QUEEN’S ANNIVERSARY PRIZES

1994
Applications are invited for the following position

MAÎTRE D’ENSEIGNEMENT ET DE RECHERCHE (SENIOR LECTURER) IN BIOMEDICAL ENGINEERING at the Department of Physics

The field of research covers the physics of the cardiovascular system and the characterization of the biomechanical properties of living tissues. The candidate is expected to participate in teaching biomedical courses at the undergraduate and graduate level.

Women candidates are especially encouraged to apply.

Deadline for applications: January 15, 1996
Starting date: to be discussed

Interested candidates should ask for the application form to: Presidente de l’Ecole polytechnique fédérale de Lausanne, CE-Ecublens, CH-1015 LAUSANNE, Switzerland.

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**POSITIONS OPEN**

**STRUCTURAL BIOLGIST**

UNIVERSITY OF CALIFORNIA, DAVIS

The Division of Biological Sciences, University of California, Davis, invites applications for an ASSISTANT PROFESSOR of Molecular and Cellular Biology (pending budgetary approval) with a tenure-track position. The position is tenable in the Section of Molecular and Cellular Biology within the Division, which could include an appointment in the Agricultural Experiment Station. Candidates must have a Ph.D. (or equivalent) and an outstanding record of achievement in research. The successful candidate will be expected to develop a vigorous research program in structural biology. The Section particularly wishes to recruit an individual who is doing fundamental biological problems in biolo-
gy using high-resolution structural techniques. The suc-
cessful candidate must have a Ph.D. (or equivalent) and an outstanding record of achievement in research. The successful candidate will be expected to develop a vigorous research program in structural biology.

**ECOLOGIST**

Fordham University seeks applicants for a tenure-track position (ASSISTANT/ASSOCIATE PROFESSOR) beginning as early as January 1996. We seek individuals who will contribute to the efforts of the Division of Biological Sciences, which is based around the Woods Environmental Station. We are particularly interested in individuals who have Ph.D.s in the area of insects, well-equipped laboratories, classrooms, library, and research orientation. In that spirit, we are particularly interested in receiving applications from individuals who would enhance the diversity of our workforce.

**CELL/DEVELOPMENTAL BIOLGIST**

A tenure-track faculty position is available at the ASSISTANT PROFESSOR level in the Biology Department at Wesleyan University. Candidates should have an earned doctorate and postdoctoral experience and be expected to contribute to the Department's undergraduate and graduate research programs in cell or developmental biology. Experience in molecular biology is a plus but not essential. The teaching load is 4 courses per year. Wesleyan University is an Equal Opportunity/Affirmative Action Employer.

**POSITIONS OPEN**

**ASSISTANT PROFESSORS**

BIOLGIE DEPARTMENT WILLIAMS COLLEGE

The Biology Department invites applications for three anticipated tenure-track positions to begin July 1996 as follows:

1. Developmental biologist able to teach courses at the introductory level in cellular or organismal biology and at the upper level in developmental biology. In particular, the candidate should propose a research program that involves teaching and research in development at both the cellular and organismal level. The candidate should have a Ph.D. (or equivalent) and an outstanding record of achievement in research. The successful candidate will be expected to develop a vigorous research program in developmental biology. The Department particularly wishes to recruit an individual who is doing fundamental biological problems in development using high-resolution structural techniques. The successful candidate must have a Ph.D. (or equivalent) and an outstanding record of achievement in research. The successful candidate will be expected to develop a vigorous research program in developmental biology.

2. Plant molecular biologist able to teach courses at the introductory level in cellular and molecular biology and at the upper level in plant development and/or biochemistry.

3. Physiologist able to teach courses at the introductory level in organismal biology and at the upper level in animal physiology. The successful candidate will be expected to develop a vigorous research program in physiological ecology. The Department particularly wishes to recruit an individual who is doing fundamental biological problems in physiological ecology using high-resolution structural techniques. The successful candidate must have a Ph.D. (or equivalent) and an outstanding record of achievement in research. The successful candidate will be expected to develop a vigorous research program in physiological ecology.
Visiting Professor Programme-Swedish Research Council for Engineering Sciences (TFR) - Sweden

TFR is the main Swedish governmental funding agency for basic research within the Engineering Sciences. TFR works systematically to strengthen scientific competence within areas vital to Swedish industry. One important part of these efforts is to establish effective collaborations between renowned international scientists and the Swedish research community. The objective of the "visiting professor programme" is to bring leading scientists to Sweden to collaborate with Swedish colleagues on subjects important to the future of Swedish industry.

Seven visiting professorships will be open for distinguished scientists. TFR hereby invites persons of highest international reputation, within the different areas, to submit letters of interest including an outline of a research programme and a curriculum vitae. The selected scientists are expected to mainly do research and to a limited extent teach at a Swedish university during one academic year. TFR will pay a competitive salary and cover other costs connected with the professorship, e.g. travel and housing while working in Sweden and a small research budget. Candidates are expected to have established contacts with a Swedish university department concerning activities to be undertaken.

The areas under consideration are:
- Mechanical Engineering - fatigue of engineering structures and materials
- Microelectronics - high speed analogue and digital components and circuits
- Biotechnology - enzyme based process technology
- Engineering Physics - nanometer science and technology
- Materials Science - advanced functional materials
- Chemical Engineering - surface and colloid chemistry
- Information Technology - mobile communication.

TFR encourages women scientist when the Engineering Science to apply. Final selection is made by a committee appointed by TFR. TFR reserves the right to invite candidate within the different areas. Discretion is guaranteed.

For general information concerning the visiting professor programme, please contact:

Professor Jan-Eric Sundgren    Dr. Anne-Marie Pilotti
Secretary General    Director of Secretariat

Box 7136, S-103 87 Stockholm, Sweden,
Visiting address: Regeringsgatan 56.
Phone: +46 8 454 41 70 (voice), +46 8 454 41 80 (fax)
Email:tfr@tfr.se.WWW:http://www.tfr.se/

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NEUROBIOLOGIST
BOWMAN GRAY SCHOOL OF MEDICINE
WAKE FOREST UNIVERSITY

The Department of Neurobiology and Anatomy invites applications for two tenure-track positions. Successful candidates will have postdoctoral experience, an excellent record of scholarship, and the potential to develop and maintain a active research program. The department is seeking an Associate Professor (ASSOCIATE PROFESSOR) who uses modern systems, cellular, and/or molecular approaches in areas that complement current research. Preference will be given to those individuals interested in mechanisms by which the nervous system integrates information from different sensory modalities. The department is also seeking an Assistant Professor (RANK OPEN) working in a CNS system with an emphasis on sensory processing, development, and/or plasticity. Departmental interests include sensory organization, development, and plasticity; retinal cell biology; neuron-glial interactions; programmed cell death; and trophic factors. Bowman Gray offers a unique opportunity to interact with a broad range of neurobiologists that comprise a strong, multidisciplinary neuroscience community. For additional information about the department, see http://janet.is.wfu.edu/bgan/ntba/ntba.html and curriculum vitae, research description, and three letters of recommendation to either: Integrative Neurobiologist or Sensory Neurobiologist. Search: Drs. of Neurobiology and Anatomy, Bowman Gray School of Medicine, Wake Forest University, Medical Center Boulevard, Winston-Salem, NC 27157-1010. Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR: The Biology/Microbiology Department at South Dakota State University invites applications for a tenure-track position, which could be either as an Assistant Professor (equivalent) and an outstanding record of achievement in research. The successful candidate will be expected to develop a strong research program in molecular genetics with an emphasis on the transcriptional control of gene expression in eukaryotic cells. He or she will also be expected to teach genetics at the undergraduate and graduate levels. Applicants should submit 1) a curriculum vitae, 2) a statement of current and proposed research, and 3) a statement of teaching experience and/or interests, and arrange to have three letters of recommendation sent to: Dr. Kenneth Burtis, Department of Biology/Microbiology, South Dakota State University, PO Box 9180, Brookings, SD 57007. By September 15, 1995, the position will be filled. Applicants are encouraged to send a one-year postdoctoral research application to: Dr. Peter St John, Department of Biology/Microbiology, South Dakota State University, Box 2207B, Brookings, SD 57017; Electronic: 605-688-6141; Telephone: 605-688-6677; Email: petersofg@ng.sdstate.edu. You must submit your application by October 16, 1995, and the position will remain open until filled.

Gettysburg College invites applications for a tenure-track ASSOCIATE PROFESSOR position in Environmental Studies, beginning August 1996. Candidates must hold a Ph.D. in environmental studies or a related field, with a focus on resource management and environmental policy, and ability to teach introductory and upper-level environmental studies courses. Commitment to interdisciplinary teaching in the liberal arts tradition and to research involving students is essential. Gettysburg College is a highly selective liberal arts college located in beautiful and historic southern Pennsylvania, close to policy-making agencies in Harrisburg, Philadelphia, Baltimore, and Washington. Submit application vitae, statement of teaching philosophy, and names and addresses of three references (at least one of whom can speak to the candidate's teaching effectiveness) to: Dr. John A. Confer, Chair, Department of Environmental Studies, Gettysburg College, Gettysburg, PA 17325. Review of applications will begin on December 8, 1995, and continue until position is filled. The College is an Equal Opportunity/Affirmative Action Employer with a Partner Assistance Program. Women and minorities are encouraged to apply.

The Department of Biochemistry, Duke University Medical Center invites applications for a full professor position at the level of ASSISTANT PROFESSOR. We are especially interested in biochemists with experience in structurally rich systems. Send summary of research interests and three letters of reference to: Dr. Christian H. R. Raetz, Department of Biochemistry, Duke University Medical Center, Durham, NC 27710. Consideration of applications will begin in November 1995. Duke University is an Equal Opportunity/Affirmative Action Employer.
ROYAL FREE HOSPITAL
SCHOOL OF MEDICINE
(UNIVERSITY OF LONDON)

FOUNDATION PROFESSOR IN RETROViroLOGY
(Clinical or Non-Clinical)

A new post has been established for a Foundation Professor in Retrovirology to develop an active research programme and to develop a new Unit. We are looking for a person with an extensive record of achievement in retrovirus research, whose work has been recognised by continued research grant support and publication in peer-reviewed journals over a number of years, with particular emphasis on HIV. The research should be relevant to active academic programmes within the Departments of Public Health (including Clinical Epidemiology), Virology and Clinical Immunology and close links are anticipated with the clinical teams headed by Dr Margaret Johnson and Dr Christine Lee. A clinical appointment will include an Honorary Consultant contract with the Royal Free Hampstead NHS Trust.

Further details are available from the School Office, RFHSM, Rowland Hill Street, London NW1 2PF (tel: 0171-794 0500 x 4282). Applicants should send TEN copies of their CV (please include ten copies of any covering letter), together with full details of two referees to the above address by 23 October 1995.

Overseas applicants should forward their papers by Air Mail or by a Courier Service. Please quote reference no: VIE/PROF/146.

Informal visits are encouraged (The Dean, Professor Arle Zuckerman, extension 4268; Dr Margaret Johnson, extension 3062; Dr Christine Lee, extension 3808; Professor Paul Griffiths, extension 3210).

Royal Free Hospital School Of Medicine Is An Exempt Charity Pursuing Excellence In Medical Research And Education.

NATIONAL UNIVERSITY OF SINGAPORE
DEPARTMENT OF PHARMACY

Applicants with the appropriate qualifications and experience are invited to apply for teaching appointments in the following areas:

<table>
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<th>Areas</th>
<th>Qualifications</th>
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<tr>
<td>Pharmaceutical Chemistry</td>
<td>PhD with a basic degree in Pharmacy</td>
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<tr>
<td>Pharmacy Practice</td>
<td>Pharm D with postdoctoral research experience in Clinical Pharmacy</td>
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Gross annual emoluments range as follows:

- Lecturer: $56,920 - 72,590
- Senior Lecturer: $66,320 - 129,600
- Associate Professor: $140,830 - 189,920

(M$1.00 = M$1.42 approximately)

The commencing salary will depend on the candidate’s qualifications, experience and the level of appointment offered. In addition, a 13th month Annual Allowance (of one month’s salary) and an Annual Variable Component (of normally 2 months’ salary) may be payable at year end, under the flexible wage system, to staff on normal contracts.

Leave and medical benefits will be provided. Other benefits may include: an end-of-contract gratuity, a settling-in allowance, subsidised housing or a housing allowance, education allowance for up to three children subject to a maximum of $16,425 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore. Staff members may undertake consultation work, subject to the approval of the University, and retain consultation fees up to a maximum of 60% of their gross annual emoluments in a calendar year.

All academic staff will be given a networked personal computer (Pentium or Macintosh PowerPC) with access to a Cray supercomputer, UNIX hosts, departmental laser printers, a wide spectrum of software, on-line library catalogue, CD-ROM databases, Teleview, INtv and Internet.

Application forms and further information on terms and conditions of service may be obtained from:

The Director
The North America Office
National University of Singapore
10 Kent Ridge Crescent
Singapore 119250

Enquiries may also be sent through INTERNET to: PERCNC@NUS.SG, or through Telefax: (65)7783948
SEATTLE BIOMEDICAL RESEARCH INSTITUTE (SBRI) AND DEPARTMENT OF PATHOBIOLGY, UNIVERSITY OF WASHINGTON (UW)

Applications are invited for STAFF or SENIOR SCIENCE-ENTIST positions (SBRI) with parallel Regular or Research ASSISTANT or ASSOCIATE PROFESSOR appointments (UW). The applicant’s research should examine mechanisms of pathogenesis or study basic processes in pathogens or host cells that may be exploited to control disease. This research will complement the major research focus at SBRI on protozoan and prionary pathogens. Applicants must have an independently funded research program and an interest in graduate student training. Classroom teaching is required for faculty in the Regular and Curricular-Visiting capacities. Closing date: 6 November 1995. The UW is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. SBRI and UW are Equal Opportunity/Affirmative Action Employers.

We have an opening immediately in the Division of Toxicology in the Department of Pharmacology and Toxicology at Indiana University School of Medicine in Indianapolis, which is seeking a toxicologist at the non-tenure-track ASSISTANT PROFESSOR level. The position is a state-funded permanent position and is subject to the State Department of Toxicology in the Division of Toxicology. The successful applicant will be responsible to the Director of Toxicology in the Division of Toxicology. The applicant will assist in directing the laboratory and study design in the Alcohol/ Breath Test Program for the State of Indiana. The remaining 50% of this individual’s duties will center on directing the laboratory and study design in the Alcohol/Breath Test Program for the State of Indiana. The position will be a competitive package of salary, benefits, laboratory space, and startup funds. The position is a non-tenure track position that will begin on July 1, 1996. Applications should be submitted to: Dr. Richard D. Sorenson, Chair, Department of Toxicology, Indiana University School of Medicine, 1001 Walnut Street, MF 003, Indianapolis, IN 46202. Telephone: 317-274-9224. An Equal Opportunity/Affirmative Action Employer.

STANFORD UNIVERSITY DEPARTMENT OF PATHOLOGY

The Department of Pathology seeks outstanding scientists for tenure-track ASSISTANT or ASSOCIATE PROFESSOR positions. Successful candidates are expected to develop a high quality, independent research program that can generate extramural support and contribute to the clinical and cellular mechanisms of disease. Of particular interest are candidates focusing on cancer biology or cardiovascular disease processes. Applicants with M.D., M.D., or combined M.D.-Ph.D. degrees and who have at least two years of postdoctoral experience in the laboratory of research in cell biology and molecular biology are encouraged. Applications should be submitted by December 1, 1995. An Equal Opportunity/Affirmative Action Employer.

Assistant Professor, Chairman, Department of Pathology, Stanford University School of Medicine, Stanford, CA 94305. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

Developmental biologist at the University of North Carolina at Greensboro (UNCG) has a tenure-track position offering a competitive package of salary, benefits, and collegial support. Applicants should have a Ph.D. in molecular biology or a closely related discipline. The position is available to begin September 1996. Applications should be submitted with a letter of interest, a curriculum vitae, and three letters of reference to: Dr. J. Stull, PhD, Department of Biology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75330. An Equal Opportunity/Affirmative Action Employer.

Assistant professor, Biochemistry, University of North Carolina at Chapel Hill, seeks a molecular biologist or biochemist with a strong research background in expression, purification, and characterization of recombinant proteins. The successful candidate will be expected to develop a self-sustaining research program. We particularly encourage applications from women and minority groups. The position is available to begin Fall 1996. Applications should be submitted to: Dr. W. Bard, Chair, Department of Biochemistry, University of North Carolina, Chapel Hill, NC 27514. An Equal Opportunity/Affirmative Action Employer.

Assistant professor positions are available in the Department of Pharmacology and Toxicology at Indiana University School of Medicine in Indianapolis. The successful candidate is expected to develop a strong independent research program. Applications should be submitted by December 1, 1995. An Equal Opportunity/Affirmative Action Employer.

Assistant professor positions in the Department of Pharmacology at Ohio State University are available immediately. The successful candidate is expected to develop a strong independent research program. Applications should be submitted by December 1, 1995. An Equal Opportunity/Affirmative Action Employer.

Assistant Professor, Field School, Department of Biomedical Sciences, Texas A&M University College of Veterinary Medicine and Biomedical Sciences, College Station, TX 77843-1114, seeks an independent investigator for a tenure-track position with research interests in pharmacology or toxicology. Applications should be submitted by December 1, 1995. An Equal Opportunity/Affirmative Action Employer.

Assistant professor positions are available in the Department of Pharmacology and Toxicology at the University of North Carolina at Chapel Hill. The successful candidate is expected to develop a strong independent research program. Applications should be submitted by December 1, 1995. An Equal Opportunity/Affirmative Action Employer.

Assistant professor position in the Department of Pharmacology and Toxicology at the University of North Carolina at Chapel Hill. The successful candidate is expected to develop a strong independent research program. Applications should be submitted by December 1, 1995. An Equal Opportunity/Affirmative Action Employer.
Postdoctoral Opportunities In The Biomedical Sciences.

The following research training opportunities are currently available at the National Institutes of Health.

**Cellular Responses to Stress and Aging**
Nikki J. Holbrook, PhD

The signal transduction pathways mediating cellular responses to heat shock and genotoxic stress are being investigated in normal cells and in aging models. The connection between these processes and the roles of cyclins, cyclin dependent kinases (cdk), and cdk inhibitors in controlling growth and/or inducing apoptosis in damaged cells is being studied. Applicants should have less than five years of postdoctoral experience. Laboratory of Cellular and Molecular Biology (OE-99), NIA, GRC Building, Room 2E09, 4940 Eastern Avenue, Baltimore, MD 21224.

**Developmental Neurobiology**
Phillip G. Nelson, MD, PhD

A position is available to focus on problems of synapse formation, synapse elimination and neural network formation. Studies of cellular and molecular mechanisms will require experience in molecular biological techniques including quantitative polymerase chain reactions, Western blot and ELISA analyses. Applicants must have less than five years of postdoctoral experience. Laboratory of Developmental Neurobiology (OE-99), NICHD, Building 49, Room 5A38, 49 CONVENT DR MSC 4480, BETHESDA MD 20892-4480.

**Investigative Skin Biology**
Stephen I. Katz, MD, PhD

Immunology, cell biology, gene therapy, molecular mechanisms of blistering diseases, cell-cell and cell-matrix adhesion, DNA repair, biological aspects of HIV infection, and viral oncogenesis are being investigated. Applicants with an MD or PhD must have a minimum of two years training in dermatology. Dermatology Branch (OE-99), NCI, Building 10, Room 12N238, 10 CENTER DR MSC 1908, BETHESDA MD 20892-1908.

**Molecular Neurobiology**
J. S. Hong, PhD

The signal transduction pathways regulating the expression of neuropeptide and cytokine genes in neural and glial systems are being investigated. Studies on the effects of neuropeptides on the biosynthesis and release of cytokines in microglial cells and potential roles of cytokines in neurodegeneration will be conducted. Applicants should have experience in neuropharmacology, neurochemistry, or molecular biology. Laboratory of Environmental Neuroscience (OE-99), NIEHS, Building 101, Room E1-44, P.O. Box 12233, Mail Drop E1-01, Research Triangle Park, NC 27709.

**Signal Transduction**
Peter M. Blumberg, PhD

The basis for heterogeneity in the signal transduction pathway for the lipophilic second messenger diacylglycerol and its analogs (the phorbol ester tumor promoters) is being investigated. Although protein kinase C receives primary emphasis, other targets such as the chimaerins are also being evaluated. Experience in molecular biology and pharmacology is preferred. Cellular Carcinogenesis and Tumor Promotion (OE-99), NCI, Building 37, Room 3A01, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255.

**Signal Transduction**
Teressa L. Z. Jones, MD

A position is available to study the membrane localization of heterotrimeric G proteins. Research focuses on the role of lipid modifications on G protein membrane attachment and signaling functions and how protein interactions target G proteins to specific intracellular sites. Experience in biochemistry or cell biology is desirable. Applicants should have less than five years of postdoctoral experience. Metabolic Diseases Branch (OE-99), NIDDK, Building 10, Room 8C101, 10 CENTER DR MSC 1752, BETHESDA MD 20892-1752.

**Structural Biology**
James H. Hurley, PhD

The structural foundations of several key cell signaling and regulatory systems from the plasma membrane to the nucleus are being explored. Candidates should have an experimental background in protein biochemistry or structure, a strong interest in x-ray crystallographic structure determination, and not more than five years of previous postdoctoral experience. Laboratory of Molecular Biology (OE-99), NIDDK, Building 5, Room 435, 5 CENTER DR MSC 0580, BETHESDA MD 20892-0580. E-mail: hurley@tove.niddk.nih.gov.

**Additional Opportunities**

The NIHENTE Bulletin Board POSTDOC (fellowship positions) and TENURE (tenure track positions) conferences are accessed via a modem (301-402-2221 or 800-358-2221 with parameters set at 7, Even, 1) or the Internet using Telnet (weylbur.cu.nih.gov) or the World Wide Web (URL: telnet://weylbur.cu.nih.gov). When connected to NIH, use ot100 for terminal emulation, FSE for initials, and A11 for account number. To view tenure track positions, quit the POSTDOC conference and join the TENURE conference.

An electronic version of the Postdoctoral Research Fellowship Opportunities catalog is accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (URL: http://www.nih.gov). When connected with Gopher, select Grants and Research Information and then NIH Office of Education. When connected with WWW, select Grants and Contracts and then NIH Office of Education. If you have further questions, please contact the NIH Office of Education, Building 10, Room 1C119, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, Phone 301-496-2427, Fax 301-402-0483.

**To Apply**

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (MD, DO, DDS, DMD or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, curriculum vitae, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.
**GENETICIST**

The Department of Biology at Loyola University Chicago invites applications for a tenure-track position at the ASSISTANT PROFESSOR level. Candidates must hold a Ph.D. in molecular biology or cell biology. Preference will be given to the research areas of molecular evolution or developmental genetics; however, other areas of research will also be considered. We are seeking an individual with excellent written and oral communication skills who can teach general biology and an upper-level course in his or her area of expertise. The individual will also be expected to develop an active research program and to involve undergraduate and graduate research. Review of applications will begin November 1, 1995, with a starting date of August 15, 1996. Submit letter of application, curriculum vitae, a description of research interests, reprints, and three letters of recommendation to: Dr. William J. Wasserman, Department of Biology, Loyola University Chicago, 6525 N. Sheridan Road, Chicago, IL 60660-6632. Email: wwasser@luc.edu. Information about the Department of Biology can be found at http://www.luc.edu/dept/biology/. Loyola University Chicago is an Affirmative Action/Equal Opportunity Employer.

**ASSOCIATE DEAN RESEARCH**

Northwestern University Medical School invites applications for the position of ASSOCIATE DEAN for Research and Graduate Studies. Candidates should have a doctorate degree, a record of excellence in biomedical research, and administrative experience. The Associate Dean reports to the Vice Dean and is responsible for providing leadership in research program development, research services and infrastructure, graduate education, technology transfer and academic-industrial relations, and policy formulation. Candidates should be qualified for a senior faculty appointment. Submit curriculum vitae and three referencess to: Anthony Fucaloro, Dean of the Faculty, Clarendon Mckenna College, 200 East Ninth Street, Claremont, CA 91710, USA. Applications will be reviewed beginning November 1, 1995 and will continue until the positions are filled. Clarendon Mckenna College is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

**DIRECTOR, TRANSGENIC MOUSE CORE FACILITY**

The University of Chicago is seeking a RESEARCH SCIENTIST to direct a transgenic mouse core facility used by a diverse group of investigators. Appropriate background and training required. Experience with E. coli technology preferable. Send curriculum vitae, names and addresses of three references to: Kenneth S. Polony, M.D., The University of Chicago MC 1027 5841 South Maryland Avenue Chicago, IL 60637

**UNIVERSITY OF CHICAGO**

Department of Organismal Biology and Anatomy

The Department of Organismal Biology and Anatomy seeks applicants for a TENURE-TRACK position beginning July 1, 1996. The position is at the level of assistant professor, but individuals at a higher rank will also be considered. The Department seeks an individual who will develop an outstanding research program in, or overlapping with, the field of molecular biology, biomechanics and physiology, or neurobiology, to build on the Department’s existing strengths in these areas. We seek individuals whose interests can be integrated into an interactive context. Teaching responsibilities will include undergraduate and graduate coursework. Applicants should submit a curriculum vitae, a statement of research interests, and four letters of reference to: OBA Search Committee Chair, University of Chicago, 1025 East 57th Street, Chicago, IL 60637. Applications should be received by November 1, 1995; however, applications will be accepted until the positions have been filled. The University of Chicago is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are strongly encouraged to apply.

**DIRECTOR, PUBLIC INFORMATION**

Ocean Drilling Program (ODP)

Joint Oceanographic Institutions (JOI)

JOI is seeking a Director of Public Information to design and execute a strategy for communicating the scientific benefits of ODP to the public and the scientific community. ODP is an international basic research endeavor to explore the world’s ocean basins to better understand the interplay of oceanic, continental, and climatic processes. See http://www.odp.tamu.edu/. It is the largest such program in the world, currently funded by 19 countries operating through the U.S. National Science Foundation. The new Director will be based in JOI’s Washington, DC office. The ideal candidate will have a science/journalism background, related experience, excellent communication skills, and familiarity with the components of a public information plan. The position requires significant experience in government relations and experience in science public relations, and the ability to work as a member of an information team.

**THE WHEATON COLLEGE BIOLOGY DEPARTMENT**

The Wheaton College Biology Department is seeking applications for two TENURE-TRACK POSITIONS beginning fall 1996. The positions are open to either tenure-track or term appointments. The candidates should have a Ph.D. in biology and have experience teaching at the undergraduate level. Teaching assignments include on-campus courses ranging from introductory biology to upper-level electives. Applications should be sent to: President’s Office, Wheaton College, 200 Forest Street, Wheaton, IL 60187-4397. Wheaton College is an evangelical Christian liberal arts college whose faculty and staff affirm a Statement of Faith and the Statement of Christian Commitment. Women and minority candidates are encouraged to apply.
The Howard Hughes Medical Institute announces the 1996 competitions for fellowship programs that support training in fundamental biological and biomedical research. Awards, based on international competitions, focus on research directed to understanding basic biological processes and disease mechanisms. Fellowships may be held at academic or nonprofit research institutions.

**Fellowships for Biological and Biomedical Sciences**

**Predoctoral Fellowships in Biological Sciences**
Up to five years of support for full-time graduate study toward a Ph.D. degree in biostatistics, cell biology and regulation, epidemiology, genetics, immunology, neuroscience, or structural biology. Applicants must not have completed the first year of postbaccalaureate graduate study in biology. **Application deadline: early November.**

**Postdoctoral Research Fellowships for Physicians**
Three years of support for training in fundamental research subsequent to at least two years of postgraduate clinical training and no more than two years of postdoctoral research training. **Application deadline: mid-December.**

**Research Training Fellowships for Medical Students**
An opportunity for medical students in the United States to explore a burgeoning interest in fundamental research. Support is awarded for one year of full-time fundamental research in a laboratory at the student's medical school or another institution (except NIH in Bethesda, Maryland). **Application deadline: early December.**

**Research Scholars at the National Institutes of Health**
Under this joint HHMI–NIH program, medical students in the United States spend an intensive year in research in the intramural program at NIH in Bethesda, Maryland. Residence is provided at the Cloister on the NIH campus. **Application deadline: early January.**

**1996 Program Announcements and Applications**

For Predoctoral Fellowships:  
Hughes Fellowship Program  
The Fellowship Office  
National Research Council  
2101 Constitution Avenue  
Washington, DC 20418  
United States of America  
Telephone: (202) 334-2872  
Fax: (202) 334-3419  
E-mail: infofell@nas.edu

For Other Programs:  
Howard Hughes Medical Institute  
Office of Grants and Special Programs  
Department AL96  
4000 Jones Bridge Road  
Chevy Chase MD 20815-6789  
United States of America  
Telephone: (301) 215-8889  
Fax: (301) 215-8888  
E-mail: fellows@hq.hhmi.org

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.
ASSISTANT PROFESSOR
Baylor College of Medicine

The Department of Molecular Physiology and Biophysics has a tenure-track ASSISTANT PROFESSOR position in Systems Pharmacology. This position is one of the biology sciences and at least two years of postdoctoral training. The candidate should have a research program in the area of structure and function of membrane proteins. We are especially interested in candidates working with ion channels or other membrane proteins in the cardiovascular system and who have demonstrated a research funding record. In your curriculum vitae, a statement of research interests, and three letters of recommendation to: Chair, Recruiting Committee, Department of Molecular Physiology and Biophysics, Texas Medical Center, One Baylor Plaza, Houston, TX 77030. Closing date for applications is December 31, 1995. Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Pay Employer.

WAKE FOREST UNIVERSITY
Biophysics/Medical Physics/Bioengineering Assistant Professor, Department of Physics

The Wake Forest University Physics Department invites applications for a tenure-track position of ASSISTANT PROFESSOR. Specializations include biophysics, medical physics, or bioengineering, beginning August 1996. The department seeks candidates with outstanding research and teaching interests and capabilities. The successful candidate will be expected to excel in both undergraduate and graduate teaching of physics, to establish an independent research program, to attract students, and to supervise undergraduate and graduate student research. Start-up support will be provided. Collaboration with researchers at Wake Forest's Bowman Gray School of Medicine, Chemistry, or Biology Departments is strongly encouraged. Wake Forest, located in Winston-Salem, North Carolina, is a private university with 5,520 graduate and professional students and professional schools of medicine, law, and business. The Department of Physics offers B.A., B.S., M.S., and Ph.D. degrees; there are currently 20 graduate students. Applicants should submit curriculum vitae, a statement of teaching philosophy, a summary of plans for a research program, and arrange for three letters of reference that include an evaluation of the candidate's potential for teaching and research. Applications should be mailed or FAX: 910-759-6142 by January 1, 1996, to: Howard W. Shields, Department of Physics, P.O. Box 7507, Wake Forest University, Winston-Salem, NC 27109.

Wake Forest University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSISTANT PROFESSOR OR POSTDOCTORAL POSITION available immediately to develop the mechanisms of ion channels. Research is directed at determining the structure-function relationship for the gating kinetics of Ca-activated K channels (BK). This position includes training in oocytes. A Ph.D. and experience in molecular biology techniques applicable to ion channel structural modifications are required. Patch clamping skills would also be useful. The salary and level of appointment are flexible and will depend on the applicant's experience. The position includes faculty level health benefits. Send curricu- lum vitae (ASAP) with the names and telephone numbers of three references: (1) Karl L. Magleby, Department of Physiology and Biophysics, University of Miami School of Medicine, P.O. Box 106450, Miami, FL 33105. Email: magleby@mednet.med.miami.edu; FAX: 305-243-6898; Telephone: 305-243-6236. An Affirmative Action/Equal Pay Employer.

RESEARCH INSTRUCTOR OF MEDICINE

The Division of Atherosclerosis, Nutrition and Lipid Research at Washington University School of Medicine has an immediate opening for a RESEARCH INSTRUCTOR. In the STRUCTOR of Medicine. A Ph.D. or M.D. with training and experience in molecular and cell biology is sought to join project on the regulation in mammalian cells. The project focuses on the regulation of mammalian cells by human low cholesterol syndromes. Responsibilities include help in the design and execution of experiments, teaching of postdoctoral fellows, and supervision of tech- nicians. Positions are available for advancement and further train- ing. Send curriculum vitae and two letters of recommen- dation to: Gustav Schonfeld, M.D., Washington Uni- versity School of Medicine, 660 South Euclid, Box 8046, St. Louis, MO 63110.

POSTDOCTORAL POSITIONS
University of Missouri-Columbia

The Food for the 21st Century Animal Reproductive Biology Program at the University of Missouri-Columbia invites applications for postdoctoral positions beginning immediately in the following programs: Dr. Dennis Lubahn—Molecular characterization of estrogen receptor-minus mice to discover novel functions of estrogen; Dr. Mark Laughlin—Molecular determinants of regula- tion of estrogens and IGF action in the bovine ovary; Dr. William Trout—Role of endometrial oxytocin secretion in mechan- isms of maternal recognition and embryonic survival in swine; Dr. Wade Welshons—Mechanism of estrogen action, estrogen receptor turnover. Applicants should specify research interest, and send a curriculum vitae, three references, and a copy of your B.S., M.S., or Ph.D. degree. Salary is $20,000 to $24,000. For consideration, submit two copies of a curriculum vitae, and a publications list to: Postdoctoral Program, PD9F5050, MS P290, Los Alamos National Laboratory, Los Alamos, NM 87545.

Individuals with disabilities needing reasonable accom- modation should call 505-667-8622. A Teledevice Type Des is available for the deaf (TDD) is available by calling 505-665-5357. Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL CANDIDATES
CELL/MOLECULAR BIOLOGY

The Life Sciences division at the Los Alamos National Laboratory is seeking POSTDOCTORAL CANDIDATES to investigate the role of cell cycle progression and its attendant chromatin structural chang- es in normal and damaged/transformed mammalian cells. Experience with cyclin dependent kinases, other cell cycle regulators, or DNA repair/mutation and/or DNA repair and/or molecular biology desired. For additional technical information, contact: Dr. Joseph A. D’Anna at Telephone: 505-667-8045.

A Ph.D. completed within the last three years or soon to be completed required. Annual starting salaries range from $41,250 to $44,570, plus a generous and comprehen- sive benefits package. For consideration: submit two copies of a curriculum vitae, and a publications list to: Postdoctoral Program, PD9F5050, MS P290, Los Alamos National Laboratory, Los Alamos, NM 87545.

Individuals with disabilities needing reasonable accom- modation should call 505-667-8622. A Teledevice Type Des is available for the deaf (TDD) is available by calling 505-665-5357. Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to participate in ongoing research centered on a molecular and cellular analysis of the mdm2 oncogene, including role of overexpression in pathways of cellular transformation, response to DNA damage, and protein-protein interactions. Excellent research facilities and en- vironment. A strong background in molecular and/or cellular biology or biochemistry preferred. Send curriculum vitae with the names and telephone numbers of three references to: Donna George, Department of Ge- netics, University of Pennsylvania School of Medicine, Clinical Research Building, 415 Curie Boulevard, Philadelphia, PA 19104-6145. The University of Pennsyl- vania is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to carry out the sequencing, analysis, and expression of genes asso- ciated with poykideptide antibiotic biosynthesis in Strepto- myces. Previous experience with molecular biology re- quired; previous experience with Streptomyces highly desir- able. Send curriculum vitae and the names and telephone numbers of three references to: Professor Ronald Parry, Department of Chemistry, Rice University, P.O. Box 1892, Houston, TX 77251.

RESEARCH GENETICIST (PLANTS)

USDA, Agricultural Research Service (ARS), National Forage Seed Development Research Center, Corvallis, Or- egon. Conduct research on the genetics, cytotenics, cytology, and agronomy of hops to develop new hop germplasm. Produce new hop cultivars with improved quality and increased disease and pest resistance. Salary range is $35,578 to $42,641 per annum. This is a full- time, permanent position. For a copy of the announce- ment, please telephone: 503-750-8700. Closing date is October 30, 1995. Open to all U.S. citizens. ARS is an Equal Employment Opportunity Employer.

PLANT MOLECULAR BIOLOGISTS
DNA Plant Technology Corporation

DNAP, a leading agricultural biotechnology company producing commercial fruits and vegetables for the consum- er, has Ph.D. Molecular Biologist positions available in our New Crops Group. Current focus of the R&D pro- gram is on extension of fruit shelf life and improvement in fruit size. Experience with a range of tools for the analysis of gene expression in plants, as well as with the transformation of transgenes for overexpression of plant proteins, is neces- sary. Three or more years of professional experience, which may include postdoctoral work, is necessary. Send curriculum vitae and the names and telephone numbers of three references to: Neal Gutterson, DNA Plant Technology Corp., 6701 San Pablo Avenue, Oakland, CA 94608. Equal Employment Opportunity Employer.
FAMILY UNIVERSITY

BIOLOGY

Two Assistant Professors. Tenure track positions starting September 1996. Candidates with Ph.D. and a strong commitment to undergraduate teaching and research are expected to apply. Start-up moneys are available.

Microbiologist/Molecular Biologist
Teaching responsibilities include lecture/laboratory courses in microbiology for biology and nursing majors and an upper division molecular laboratory course. Participation in the introductory biology course and in grant-writing initiatives is expected.

Molecular Developmental Biologist
Teaching responsibilities include lecture/laboratory courses in genetics and developmental biology for biology majors and the development of an upper division elective course. Participation in the introductory biology course and in grant-writing initiatives is expected.

Fairfield University, the Jesuit University of Southern New England, is located in Fairfield, Connecticut and enjoys a beautiful 200-acre campus in the suburban town of Fairfield within easy access to New York, New Haven and Boston.

Send a letter of application, personal vitae, a statement of teaching and research goals (both personal and undergraduate-oriented), selected reprints, and three letters of references to: Search Committee Chair, Biology Department, Fairfield University, Fairfield, CT 06430.

Deadline is November 1, 1995.

FAIRFAX UNIVERSITY

Women and minorities are encouraged to apply.
Fairfield University is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR ONCOLOGIST/CELL BIOLOGIST

THE UNIVERSITY OF CHICAGO

The Center for Molecular Oncology of the University of Chicago is seeking applicants at the Assistant and/or Associate Professor level to join the newly formed Center. The Center is committed to developing a strong program in molecular oncology, broadly defined, and is closely interfaced with an NCI-designated Cancer Center that includes programs on cytogentic analysis and molecular genetics, cell growth and differentiation, immunology and developmental therapeutics. We are seeking outstanding individuals who are using the approaches of molecular biology, molecular genetics, biochemistry, and cell biology to examine basic mechanisms and/or disorders such as signal transduction, gene and cell cycle regulation, and DNA replication and repair.

Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Faculty positions will be tenure-track in the most appropriate academic department where the candidate will be expected to exercise full membership. New state-of-the-art laboratory space is available in the Institute for Molecular Medicine. This Institute also houses programs in molecular immunology, vascular biology, human genetics, and neurobiology.

Letters of application including curriculum vitae, bibliography, a brief statement indicating research interest, and the names of 3 references, should be sent to: Dr. Michael Weiss, Director, Center for Molecular Oncology, 924 E. 57th Street, Chicago, IL 60637-5419. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

THE UNIVERSITY OF CHICAGO

Molecular and Cancer Biology

As a means of increasing the number of U.S. citizens trained in disciplines of science and engineering of military importance, the Department of Defense plans to award approximately 90 new three-year graduate fellowships in April 1996. National Defense Science and Engineering Graduate Fellowships will be awarded for study and research leading to doctoral degrees in, or closely related to, the following disciplines:

AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

BIOSCIENCES (Includes Toxicology)

CHEMICAL ENGINEERING

CHEMISTRY

COGNITIVE, NEURAL, AND BEHAVIORAL SCIENCE

COMPUTER SCIENCE

ELECTRICAL ENGINEERING

GEOSCIENCES (Includes terrain, water, and air)

MANUFACTURING SCIENCES AND ENGINEERING (Includes Industrial Engineering)

MATERIALS SCIENCE AND ENGINEERING

MATHEMATICS

MECHANICAL ENGINEERING

NAVAL ARCHITECTURE AND OCEAN ENGINEERING

OCEANOGRAPHY

PHYSICS (Includes Optics)


Recipients of 1996-1997 National Defense Science and Engineering Graduate Fellowships do not incur any military or other service obligation.

Specific information regarding the fellowship and an application package are available from Battelle Memorial Institute, a not-for-profit research institution, which is administering the program for the Department of Defense.

Additional information and an application are available from:

NDSEG Fellowship Program
200 Park Drive, Suite 211
P.O. Box 13444
Research Triangle Park, NC 27709-3444
ATTN: Dr. George Outerson
Phone: (919) 549-8505
Fax: (919) 549-8205
NDSEG@ARO-EMH1.ARMY.MIL
http://www.battelle.org/ndsseg

Completed applications must be received by Battelle by January 17, 1996.

POSTDOCTORAL RESEARCH ASSOCIATE. Organic Chemist Position. Synthesis of fluorescent dyes as reagents for specific staining and microanalysis of biological material. The synthesis of compounds for use in chemometric studies of cellular morphology was desirable. The successful candidate will have an opportunity to develop new fluorescent probes in collaboration with biologists and physicists as part of the Chemical Instrumentation and High Resolution Facility. Salary commensurate with experience. Applicants should forward curriculum vitae with experience and references to Dr. Leslie Loew, The Center for Biomedical Imaging Technology, University of Connecticut Health Center, Farmington, CT 06030-1507. An Affirmative Action/Equal Opportunity Employer. Minority/Disabled/Veteran.

POSTDOCTORAL POSITION. Molecular Cyto genetic Studies of Prostate Cancer. An immediate position is available to characterize specific genetic and molecular cyto genetic alterations important for the initiation and progression of prostate carcinoma. The position is funded for one year with potential for extension into a second year. Potential studies include genomic deletion mapping by in situ hybridization and loss of heterozygosity analysis, DNA mutation screening and sequencing, and somatic cell genetic exchanges. Experience with molecular and/or cytogenetic studies is desirable. Applicants should mail or fax their curriculum vitae and the names of three qualified references to: Dr. Robert B. Jenkins, Division of Laboratory Genetics, Mayo Clinic, 200 First Street SW, Rochester, MN 55905. FAX: 507-284-9043. Applications will be accepted until October 30, 1995.

POSTDOCTORAL OR RESEARCH ASSOCIATE POSITION. SIGNAL TRANSDUCTION: EXOCYTOSIS. Position available immediately for research on the control of insulin secretion. Experience in molecular biology and/or electrophysiology required for a combined molecular/neurochemical approach to the study of exocytosis. Please send resume and description of research interests and the names of three references to: Dr. Geoffrey W. G. Sharp, Department of Pharmacology, College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York, NY 10032. FAX: 212-306-6838. Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study ion channels in rat and megakaryocytes. Postdoctoral associates with experience in electrophysiological techniques is highly desirable. Send curriculum vitae, a statement of research experience and the names, addresses, and telephone numbers of three references to: Dr. Alan Pein, Department of Physiology, University of Connecticut Health Center, Farmington, CT 06030-3505. FAX: 203-679-1269; Email: a.pein@uconnvm.uconn.edu. An Affirmative Action/Equal Opportunity Employer. Minority/Disabled/Veteran.

POSTDOCTORAL FELLOWSHIP. PLANT BIOLOGY—PENN STATE. POSTDOCTORAL FELLOWSHIPS to develop cross-disciplinary research on biochemical, molecular, or physiological mechanisms of Plant Responses to the Environment. Send curriculum vitae, a statement of research experience and the names, addresses, and telephone numbers of three references to: Dr. G. Loew, Department of Biology, Pennsylvania State University, University Park, PA 16802. (E-mail: jpell@psu.edu; Telephone: 814-865-0323). An Affirmative Action/Equal Opportunity Employer. Women and Minorities Encouraged to Apply.

POSTDOCTORAL POSITION available to study the molecular mechanism of bacterial ion channel function with electrophysiological techniques. NIH-funded projects include the use of patch clamp and molecular biology to investigate the cell surface and structure/function relationships of E. coli porins. Experience in electrophysiology, preferentially patch clamp, and a Ph.D. in cell biology is required. Please send curriculum vitae and three letters of recommendation to: Dr. Anne De凸ore, Department of Biology and Biophysical Sciences, University of Houston, Houston, TX 77204-5513. FAX: 713-743-6543. Email: adecor@uhunix.uh.edu. The University of Houston is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.


POSTDOCTORAL POSITIONS. Johns Hopkins Oncology Center. POSTDOCTORAL POSITIONS are available to isolate novel genes involved in the proliferation and/or resistance of cancer cells (see PNAS, 91:459-463, 1994). A strong background in molecular and cellular biology is desired. Starting salary of $28,000. Please send curriculum vitae and three references to: Donald Small, M.D., Ph.D., Oncology Center 3-109, Johns Hopkins University School of Medicine, 600 North Wolfe Street, Baltimore, MD 21287. FAX: 410-955-8897. Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP. HEMATOPOIESIS/RETROVIRUS-RELATED MEDIAN TRANSFERENCE. POSTDOCTORAL POSITION available to study hematopoietic stem cell genetics in a feline model. M.D., Ph.D., or D.V.M. graduate with strong background and interest in molecular and cellular hematopoiesis required. Send a curriculum vitae, description of research interests, and names and telephone numbers of three references to: Dr. Markham Loew, Division of Pediatric Hematology/Oncology, Box 357710, University of Washington, Seattle, WA 98195-7710. FAX: 206-543-3560; Email: jankabk@u.washington.edu.

DIABETES RESEARCH. POSTDOCTORAL RESEARCH POSITION available to study pancreatic islet biochemistry. Experience, collaboration and brief discussions with a research team studying diabetes in rodent models is necessary. Send curriculum vitae and three letters of recommendation to: Dr. Michael MacRae, Department of Biochemistry, Medical College of Georgia, 1300 University Avenue, Madison, GA 30706. FAX: 608-262-9300. An Affirmative Action/Equal Opportunity Employer. Minority/Disabled/Veteran.
TECHNICAL ASSISTANCE COORDINATORS

The American Association for the Advancement of Science (AAAS) is seeking candidates for the positions of technical assistance coordinators who will be responsible for planning and providing technical assistance to state, urban, and rural projects engaged in the systemic reform of mathematics and science education K-12. AAAS plans to select eight technical assistance coordinators who will each be responsible for working with eight to ten projects in a multi-state regional area.

Major responsibilities will include developing individualized technical assistance plans for each of the projects and arranging for services planned. This will involve working with a range of contacts in the field of education as well as local, state, and federal government agencies. The coordinators will work closely within the Regional Educational Laboratories, the National Network of Eisenhower Mathematics and Science Education Regional Consortia and Eisenhower National Clearinghouse for Mathematics and Science Education in planning, securing, and delivering assistance. Planning for and participating in national, regional, and local meetings, workshops, and symposia which will advance the goals of systemic reform are also individual and collective responsibilities of the coordinators. These full-time positions are contingent upon AAAS receiving a contract for technical assistance services which is scheduled to begin in October 1995. To best meet the needs of the systemic initiative the positions will be located in regional areas throughout the country.

Qualifications: Positions require extensive university or college level training leading to Master's or doctoral degree in a field related to math and science education: extensive experience in math and science education, including equity issues, content and curriculum, pedagogy, professional development, and assessment; thorough familiarity with K-12 school operations and first-hand experience in systemic reform at the national, state, and local level; experience in planning and conducting meetings and workshops; expertise in technical assistance; and excellent written and verbal skills. For consideration please send cover letter and resume to:

AAAS
Human Resources Department
1333 H St., N.W., Suite #125
Washington, DC 20005

AAAS is an Equal Opportunity Employer and has a non-smoking work environment.

THE RICHARD STOCKTON COLLEGE OF NEW JERSEY

The Richard Stockton College of New Jersey seeks to fill the following vacancies. All positions are for the FALL 1996 semester.

BIOLOGY: Tenure Track, Assistant Professor (Doctorate) or Instructor (A.B.D.) Courses include Human Anatomy, Functional Anatomy, Gross Anatomy, Biology, and core courses in Biology and General Studies. Familiarity with computer applications to anatomy teaching and research desirable.

CHEMISTRY: Tenure Track, Assistant Professor. Doctorate required, postdoctoral experience helpful. Teaching includes General and/or Organic Chemistry, Biochemistry and General Studies courses; supervise student research.

Stockton is a state-supported undergraduate liberal arts college located in the New Jersey Pine Barrens, one hour from Philadelphia. Both the faculty and the student body are ethnically diverse.

SALARY: $30,529-$38,799, may be higher depending on qualifications, experience and increases in the appropriately established compensation plan. Screening begins October 27, 1995. Send letter of application, resume, three letters of recommendation and evidence of completion or expected date of completion of Doctorate to Dr. Barbara Byrne, Dean, Natural Sciences and Mathematics, The Richard Stockton College of New Jersey, A29, Pomona, NJ 08240-0195. Stockton is an AA/EOE. Women and minorities are encouraged to apply. R601231

HEALTH SCIENTIST ADMINISTRATOR

(Biomedical) GS-601-13/14

The Neuroscience and Neuropsychology of Aging Program, National Institute on Aging, National Institutes of Health, Public Health Service, is seeking an accomplished neuropsychologist to direct and develop its extramural program on fundamental neuroscience of aging. Applications are encouraged from candidates with demonstrated strong administrative and research skills in molecular neurobiology and the ability to develop an outstanding research and training program. Applications are encouraged from candidates with demonstrated strong administrative and research skills in molecular neurobiology research, particularly in the areas of neural plasticity or neurotoxicology and cell death.

Send a C.V. and the Optional Application for Federal Employment (OF-612), or the Application for Federal Employment (SF-171) to:

Christine Hartz
NIA Personnel Office
Building 31, Room 2C02
31 CENTER DR MSC 2292
BETHESDA MD 20892-2292
Telephone Number: (301) 496-8347

NIH is an Equal Opportunity Employer
POSTDOCTORAL POSITION in ocular molecular genetics. A position is immediately available to investigate the regulation of gene expression during embryonic development and in normal versus diseased eyes. We are using novel techniques of transgenics, e.g., gene targeting, eye-specific gain/loss of gene functions, to examine the mechanism that maintains normal ocular function. Experiential using molecular cloning and molecular histotechniques is preferred. Applicants at the time of application should be U.S. citizens, nationals, or legal permanent residents. Please send curriculum vitae, statement of research interests, and names of three references to: Dr. Winston Kao, Director, Ophthalmic Research, Department of Ophthalmology, Loyola University, 1120 S. Terrace Drive, Maywood, IL 60153.

POSTDOCTORAL POSITION available to candidates with experience in molecular biology or developmental biology. Study includes the analysis of the actions of vitamin A and retinoic acid during embryonic development and in normal versus tumorigenic epithelial cells. Send curriculum vitae, names of three references, and a statement of research interests to: Dr. Lorraine J. Gudas, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. An Equal Opportunity/Affirmative Action Employer/Minority/Female/Disabled.

POSTDOCTORAL FELLOWSHIP in Islet Physiology/Biochemistry. NIH-funded position available immediately in laboratory investigating mechanism of B-cell dysfunction in diabetic rodent models. Experience with biochemistry, cell biology, and molecular biology techniques required. Send curriculum vitae and references to: Dr. Jack L. Leahy, M.D., New England Medical Center (NEMC) Division of Surgery, 750 Washington Street, Boston, MA 02111. FAX: 617-636-4719. NEMC is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

VISION BIOCHEMISTRY. The Center for Macromolecular Crystallography (CMC) at the University of Alabama at Birmingham invites applications for a POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE to participate in ongoing research projects to determine the three-dimensional surface structures of molecules using automated protein crystallization screens, protein purification, x-ray crystallographic data collection, structure determination using automated protein crystallization screens, and detergent purification of membrane proteins. Send curriculum vitae and phones of three references to: Dr. L. E. Donahue, Ph.D., Center for Macromolecular Crystallography, The University of Alabama at Birmingham, 1918 University Boulevard, Birmingham, AL 35294-0029; or to: Dr. Rose A. Crabbs, Ph.D., Comprehensive Ophthalmology and Visual Sciences, UIC Eye Center, University of Illinois at Chicago, College of Medicine, 1855 West Taylor Street, Chicago, IL 60612. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION in Molecular Pathology to study gene expression in human liver neoplasms and cirrhosis. The position involves molecular biology experience such as cloning, mRNA isolation, PCR, and tissue culture, in addition to experience in signal transduction, cell biology, and cell biology. A Ph.D. or M.D. with research experience in human neoplasms and cirrhosis is required. Please send curriculum vitae and addresses of three referees to: Dr. John G. Crabbs, Ph.D., Comprehensive Ophthalmology and Visual Sciences, UIC Eye Center, University of Illinois at Chicago, College of Medicine, 1855 West Taylor Street, Chicago, IL 60612. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION in neurobiology and molecular biology experience required. The successful candidate will work as a part of a team on an ongoing, externally funded project, expected to be funded for at least three years. Send resume to: Dr. Marcella V. Agee, Ph.D., Department of Neurology, School of Medicine, University of Alabama at Birmingham, P.O. Box 1263, Birmingham, AL 35294-1263. An Equal Opportunity Employer.

RESEARCH ASSOCIATE III. Position available immediately in Oncology/Molecular Pathology to study gene expression in human liver neoplasms and cirrhosis. The position involves molecular biology experience such as cloning, mRNA isolation, and tissue culture in addition to experience in signal transduction, cell biology, and cell biology. A Ph.D. or M.D. with research experience in human neoplasms and cirrhosis is required. Please send curriculum vitae and addresses of three referees to: Dr. J. Davies, Reference No. 1209, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

Clinical Engineer for university in central Ohio. Develops specifications for imaging equipment needs of the hospital; evaluates design engineering standards for specific applications; manages and budgets the radiology and imaging equipment; supervises equipment service contracts with vendors; performs and/or coordinates the repair and modification of radiology and imaging equipment throughout the hospital including MRI and CT scanners, supervises radiology equipment technicians; reviews supplies, instrumentation and facilities relative to safety and performance; trains staff and students on safety and proper use of patient instruments assists in development of policies and procedures. B.S. in electrical or biomedical engineering and six months experience in hospital, medical, or surgical environment required. Send curriculum vitae and names of three references to: Dr. J. Gallagher, Loyola University Medical Center, Department of Microbiology and Immunology, 2160 South First Avenue, Maywood, IL 60153. Email: rgalleg@luc.edu.

Clinical Engineer for university in central Ohio. Develops specifications for imaging equipment needs of the hospital; develops design engineering standards for specific applications; manages and budgets the radiology and imaging equipment; supervises equipment service contracts with vendors; performs and/or coordinates the repair and modification of radiology and imaging equipment throughout the hospital including MRI and CT scanners, supervises radiology equipment technicians; reviews supplies, instrumentation and facilities relative to safety and performance; trains staff and students on safety and proper use of patient instruments assists in development of policies and procedures. B.S. in electrical or biomedical engineering and six months experience in hospital, medical, or surgical environment required. Send curriculum vitae and names of three references to: Dr. J. Gallagher, Loyola University Medical Center, Department of Microbiology and Immunology, 2160 South First Avenue, Maywood, IL 60153.
THE UNIVERSITY OF WESTERN ONTARIO
Department of Plant Sciences

The Department of Plant Sciences at The University of Western Ontario is seeking applications from highly qualified candidates for one or two Assistant Professor (tenure-track) positions beginning approximately July 1, 1996 (start date negotiable). The successful candidates will have research interests in the general area of Environment and Plant Biology and would be able to complement existing research programs in plant physiology, genetics, and ecology.

The criteria we will look for include a Ph.D. and appropriate postdoctoral training in an internationally respected research laboratory, a proven research record including publications of high quality, the ability to work well with others, and evidence of interest, enthusiasm and ability in teaching. The successful candidate will be expected to develop a vigorous and innovative research program, well supported by external funding, and to contribute to the department’s commitment to excellence in graduate and undergraduate training.

The Department has one of the strongest groups of young faculty in the country and has excellent research facilities including a dedicated molecular genetics unit, a new large multipurpose environmental science field station, extensive campus greenhouse/growth chamber space, a new electron microscope and a wide range of modern experimental equipment.

Applications including a c.v. and copies of recent significant papers should be forwarded to: Dr. A.W. Day, Chair, Department of Plant Sciences, The University of Western Ontario, 1513 Richmond Street, London, Ontario N6A 5B7, Telephone (519)661-2111 ext. 6465; Fax (519)661-3835. Arrangements should be made for 3 letters of reference to be sent to the same address. Applications will be accepted until November 30, 1995, or until a suitable candidate(s) is/are found.

Positions are subject to budget approval. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian Citizens and Permanent Residents of Canada. The University of Western Ontario is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities.

INSTITUTE FOR MOLECULAR MEDICINE AND GENETICS

The Medical College of Georgia, a unit of the University of Georgia system, announces the availability of Postdoctoral Fellow and Research Assistant positions within its Institute for Molecular Medicine and Genetics. The Institute offers a highly interactive environment for research and training at the interfaces between human biology and medicine. With the completion of a new building in the fall of 1995, the Institute will encompass 70,000 square feet and will include transgenic animal, molecular biology and imaging core facilities.

Molecular Biology

David S. Dynan, Ph.D., Chief Postdoctoral and Research Assistant positions to study regulation of transcription in human cells and viruses. Systems include HTLV-I Tax protein, studies of RNA polymerase II phosphorylation by DNA-dependent protein kinase, role of Ku autoantigen.

Shu-Lin Lin, Ph.D. Postdoctoral Fellow and Research Assistant positions available to study genetic basis of hematopoietic development in zebrafish; and to develop insertional mutagenesis in zebrafish using retroviral vectors.

Ron J. Bolick, Ph.D. Postdoctoral Fellow position available to study the molecular and biochemical analysis of mouse developmental regulatory genes.

Molecular Immunology

Andrew L. Mellor, Ph.D. Postdoctoral Fellow and Research Assistant positions available to study the elucidation of the role and nature of T cell involvement in autoimmune and transplant rejection using a number of existing transgenic mice as well-defined model systems.

Cell Signaling

John A. Hardin, M.D. Postdoctoral Fellow position available to study mechanisms of immune tolerance and autoimmunity. Certain nuclear proteins will be used as models for antigen processing and presentation in the pathogenesis of humoral and cellular autoimmunity.

James R. Goldenring, M.D., Ph.D. Postdoctoral Fellow positions available to study aspects of signal transduction in polarized epithelial cells including molecular characterization of A kinase anchoring proteins and characterization of Rab small GTP-binding proteins involved in exocytosis.

Richard Cameron, Ph.D. Postdoctoral Fellow position available for cellular and molecular analyses of cell interactions during mammalian brain development.

Chris Wei, Ph.D. Postdoctoral Fellow position available to study the molecular structure of voltage sensitive calcium channels.

Send C.V., names of three references, and indicate which faculty member is of interest to: Ann Gambill, Institute for Molecular Medicine and Genetics, Medical College of Georgia, Augusta, GA 30912-3175. MCG is an EEO/AAE.

MOLECULAR IMMUNOLOGISTS/CELL BIOLOGISTS

THE UNIVERSITY OF CHICAGO

The Gwen Knapp Center for Lupus and Immunology Research of the University of Chicago is seeking applicants at the Assistant, Associate and Full Professor levels to join the newly formed Center. The Center is committed to developing a strong program in molecular immunology. We are seeking outstanding individuals who are using the approaches of molecular biology and cell physiology to examine basic immune mechanisms and/or disorders such as signal transduction, gene regulation, and antigen processing. Existing immunology programs at the University of Chicago include: lymphocyte development, B and T cell activation, antigen presentation, tumor immunology, transplantation, and autoimmunity.

Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Faculty appointments will be tenure-track in the most appropriate academic department where the candidate will be expected to exercise full membership. New state-of-the-art laboratory space will be located within the Institute for Molecular Medicine which is now being formed. This Institute will also house programs in molecular oncology, vascular biology, human genetics, and neurobiology.

Letters of application including curriculum vitae, bibliography, a brief statement indicating research interest, and the names of 3 references should be sent to: Dr. Craig B. Thompson, Director, Gwen Knapp Center for Lupus and Immunology Research, 924 E. 57th Street, Room R410, Chicago, IL 60637-5420. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

THE UNIVERSITY
OF CHICAGO

CONTRIBUTE TO AMERICA'S GOOD HEALTH & SAFETY

Booz & Allen Hamilton, a team-based, international leader in management and technology consulting, has been awarded an important contract to work on scientific/medical applications pertaining to the safety and regulation of food and drugs.

The following Washington, DC metro area based positions require varying levels of experience (ideally with the FDA or similar regulated industry) and a BS in a relevant technical discipline:

**DOCUMENT IMAGING/MANAGEMENT:**
Requires large scale, full life-cycle experience in BPR, workflow design, and product selection/implementation.

**APPLICATION DEVELOPMENT:**
Requires experience with ORACLE 7 tools as well as SQL*Forms, PowerBuilder, Sybase, Visual Basic, or GUI development. Experience with Software through Pictures, data modeling, and computerized patient records helpful for some positions.

**SYSTEMS ARCHITECTURE DEVELOPMENT:**
Experience in the areas of design, integration, and client/server with MS Windows, UNIX, VAX, Banyan Vines, and/or TCP/IP a plus.

Applicants selected may be subject to a security investigation.

We offer a competitive salary, excellent benefits, and the opportunity to contribute your expertise to important projects. For immediate consideration, send a fax/resume and salary requirements, clearly indicating position of interest, to: Dept. 8200/LF. FAX: (703) 982-3501. Booz & Allen Hamilton, 8231 Greensboro Dr., McLean, VA 22102. Equal opportunity employer.

**MOLECULAR IMMUNOLOGISTS/CELL BIOLOGISTS**

**THE UNIVERSITY OF CHICAGO**

The Gwen Knapp Center for Lupus and Immunology Research of the University of Chicago is seeking applicants at the Assistant, Associate and Full Professor levels to join the newly formed Center. The Center is committed to developing a strong program in molecular immunology. We are seeking outstanding individuals who are using the approaches of molecular biology and cell physiology to examine basic immune mechanisms and/or disorders such as signal transduction, gene regulation, and antigen processing. Existing immunology programs at the University of Chicago include: lymphocyte development, B and T cell activation, antigen presentation, tumor immunology, transplantation, and autoimmunity.

Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Faculty appointments will be tenure-track in the most appropriate academic department where the candidate will be expected to exercise full membership. New state-of-the-art laboratory space will be located within the Institute for Molecular Medicine which is now being formed. This Institute will also house programs in molecular oncology, vascular biology, human genetics, and neurobiology.

Letters of application including curriculum vitae, bibliography, a brief statement indicating research interest, and the names of 3 references should be sent to: Dr. Craig B. Thompson, Director, Gwen Knapp Center for Lupus and Immunology Research, 924 E. 57th Street, Room R410, Chicago, IL 60637-5420. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

THE UNIVERSITY
OF CHICAGO
**PROJECT LEADER**

Fort Dodge Laboratories, a Division of American Home Products Corporation and a leading manufacturer in veterinary biologicals and pharmaceuticals, has immediate openings in our department of Biological Research and Development.

The successful candidate should possess:
- A PhD in Microbiology or Immunology or equivalent field or DVM with 1-3 years of experience in vaccine development
- MS or BS in Microbiology or Immunology or equivalent field with 5+ years of experience in the development of veterinary biologicals and management of research projects
- Strong communication skills

The primary responsibility of the successful candidate will be to perform works leading to the licensure of veterinary biologicals. These works include, but are not limited to, designing and conducting in vitro and in vivo studies, analyzing data, and preparing protocols and reports.

In addition to an excellent career opportunity, we will provide the selected individual with competitive compensation and a complete corporate benefit program.

To apply, submit curriculum vitae, including salary requirements, to:

Personnel Director

FORT DODGE

PO Box 518, Fort Dodge, IA 50501

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**FACULTY POSITION, U.C.L.A. PLANT MOLECULAR BIOLOGY**

The newly formed Department of Molecular, Cell and Developmental Biology, would like to add to existing strength in Plant Molecular Biology by hiring two individuals with proven research and teaching accomplishments in the area of Plant Cell, Molecular or Developmental Biology. One appointment will be at a relatively junior level and the second appointment would be in connection with our search for a Chair of the Department of Molecular, Cell and Developmental Biology. Successful candidates’ research programs will be expected to use molecular and genetic techniques to address questions of fundamental importance for plant cell and developmental biology. The candidates will participate in teaching undergraduates in an integrated life sciences curriculum at both the lower and upper division levels. Applicants should send their c.v., a concise research statement indicating future plans as well as the current program, and a brief statement of teaching interests and experience to: Plant Molecular Biology Search Committee, Department of Molecular, Cell and Developmental Biology, Box 951606, U.C.L.A., Los Angeles, CA 90095-1606. Candidates for a junior position should have three letters of recommendation sent to the same address. Candidates for the senior position should include names of three potential references. The committee will start considering candidates in October 1995.

**MOLECULAR PHARMACOLOGY OF ION CHANNELS**

The Department of Pharmacology, University of Kentucky College of Medicine at Lexington is expanding its programs in Molecular Pharmacology. Excellent facilities and new resources are available to support this expansion. A tenure-track position is available immediately at the Assistant Professor level. We encourage applications from candidates whose research involves the use of modern molecular methods in the study of the structure and function of voltage-gated or ligand-gated ion channels. Potential relevance to neurodegenerative, cardiovascular or other related disease conditions is desirable but not essential. Candidates should have a Ph.D. or M.D., with several years of Postdoctoral experience and clear evidence of the ability to sustain or develop an independent, externally-funded research program. The successful candidate should also be interested in possible collaborative departmental projects with other faculty involved in molecular and electrophysiological research. Participation in departmental training of medical and graduate students is also an important aspect of this position. Interested candidates should send curriculum vitae and the names, addresses and phone numbers of three references to:

Search Committee A
Department of Pharmacology
University of Kentucky College of Medicine
MS-309 Medical Center
Lexington, KY 40536-0084

THE UNIVERSITY OF KENTUCKY IS AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER. WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY.
Cell Death/Apoptosis

**IDUN Pharmaceuticals** is an early stage biopharmaceutical company focused on the discovery and development of drugs aimed at the therapeutic modulation of cell death with applications in neurodegenerative diseases, cancer, and inflammation. IDUN invites applications for the following positions:

**Protease Enzymologist**

Ph.D. with minimum 5 years experience in the biotechnology or pharmaceutical industry. Candidates should have significant accomplishments in protease biochemistry with experience in purification, mechanistic analysis, and inhibitor design. Code: PE

**Cellular Neurobiologist**

Ph.D. with minimum 2 years experience in the biotechnology or pharmaceutical industry and reputation in neuronal cell death and/or neurotrophic factor biology. Candidate will lead three research associates in establishing a Neuronal Model Systems group. Extensive experience in primary CNS neuronal cultures, FACS analysis, and immunocytochemistry. Experience with hybridoma technology or in situ hybridization a plus. Code: CN

**Cell/Molecular Biologist**

Ph.D. with significant experience in apoptosis or intracellular signaling. The ideal candidate will have hands-on experience using cell microinjection in combination with either molecular biology or biochemistry. Code: CB

**Neurobiologist**

Ph.D. with at least two years of post-doctoral training and significant experience in mapping of gene expression patterns in the CNS by in situ hybridization and immunohistochemistry. Code: NB

**Molecular Biologist**

Ph.D. with post-doctoral training in molecular biology of human cancer, preferably in the area of programmed cell death. Candidates should have experience in molecular cloning, PCR, and the creation of transfected mammalian cell lines. Code: MB

**Medicinal Chemists**

Candidates will design, prepare and characterize organic compounds for biological evaluation and interact with a multi-disciplinary team to meet project goals. A Ph.D. in Synthetic Organic Chemistry, preferably with 1+ years of post-doctoral experience, and 0-5 years industrial experience are required. Experience in molecular modeling, combinatorial chemistry and/or solid phase synthesis would also be desirable. Code: MC

IDUN Pharmaceuticals' modern laboratory facility is located in La Jolla, CA, close to several outstanding academic centers. IDUN offers the excitement of a start-up company in a rapidly growing scientific field, as well as an attractive compensation package. For confidential consideration, please mail your c.v. (refer to code above) to IDUN Pharmaceuticals, 3050 Science Park Rd. Suite 200, San Diego, CA 92121.

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**Endowed Chair Professor**

**Saint Mary’s College of California**

The Biology Department of Saint Mary's College invites applications for the newly established Fletcher Jones Endowed Chair in Biology at the rank of Associate or Full Professor. The Department seeks a distinguished educator and scholar in the field who will be actively involved in undergraduate Biology major instruction and research. In addition, the successful applicant will be expected to play a leadership role in curriculum development of and instruction in courses for non-science majors in the context of the liberal arts traditions of the College. Teaching responsibilities include seven courses per year in a 3-1-3 academic calendar and may include upper division courses in the applicant's areas of expertise and General Biology for both majors and non-majors. The successful applicant will also be expected to pursue his or her own scholarship/research program in a manner which invites the active participation of undergraduates. Saint Mary’s is a Catholic, co-educational college located 20 miles east of San Francisco. Send a letter of application which addresses the candidate’s match to the qualifications listed above, a curriculum vitae, and have three letters of recommendation, at least two of which discuss teaching ability sent to: Gregory R. Smith, Fletcher Jones Endowed Chair Search Committee, Saint Mary's College, P.O. Box 4507, Moraga, CA 94575-4507. The deadline is January 9, 1996 or until the position is filled. Saint Mary’s is an EOE and committed to being a diverse community.

**Assistant/Associate Professor**

**Saint Mary’s College of California**

St. Mary’s College, Biology Dept., seeks candidates for tenure-track appointment as Assistant/Associate Professor beginning in Fall 1996 who demonstrate a history of excellent teaching, scholarship and service. Preference will be given to applicants who exhibit a commitment to the maintenance of high standards of Biology education and a desire to be an active and enthusiastic participant in the Department, School and College. Teaching responsibilities will include seven courses per year in a 3-1-3 academic calendar and specifically include lower and upper division Cell and Molecular Biology courses for majors and lower division courses in Microbiology and Human Physiology as part of the Intercollegiate Nursing Program. The successful applicant will be expected to pursue his or her own scholarship/research program especially with the involvement of students and in the context of the needs of the Department. Saint Mary’s is a Catholic co-educational college located 20 miles east of San Francisco. Send a letter of application which addresses the candidate’s match to the qualifications listed above, a curriculum vitae and three letters of recommendation (at least two of which discuss teaching ability) to: Gregory R. Smith, Biology Cell and Molecular Search Committee, Saint Mary’s College, P.O. Box 4507, Moraga, CA 94575-4507. The deadline is February 5, 1996 or until the position is filled. Saint Mary’s is an EOE and committed to being a diverse community.
First Annual Conference on Recruitment and Retention of Minority Scientists

"Unlocking Opportunities: Fostering Diversity in the Scientific Workforce in the Pharmaceutical and Biomedical Industries"
26 - 27 October 1995

This is a unique opportunity to be part of an exciting forum where professionals from industry, government, universities and associations will discuss and share strategies related to the recruitment, retention and professional development of minority scientists.

Sponsored By: The American Association for the Advancement of Science
Location: Washington D.C. (Crystal City Marriott, Arlington, Virginia)
Cost: * $395 registration fee*.
          * $340 per person for 2 or more from the same company.
Price includes full conference, opening cocktail reception, continental breakfast and lunch.
(*Does not include hotel accommodations).
For information call: Janis Crowley (202) 326-6532

An activity of Science Linkages in the Community (SLIC) and supported by a grant from the DeWitt Wallace-Reader's Digest Fund.

Minority Advertising Supplement with Bonus Distribution to 27 Minority Organizations

"Diversity and the Scientific Community"
Issue date: 10 November
Space Reservation deadline: 24 October

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4. FREE placement on Science Global Career Network. Every advertisement in the 10 November issue receives placement on the Science world wide web service. Also, full page ads receive a feature index listing that allows on-line users to link instantly to your ad.

For more information or to reserve your space, call Janis Crowley, (202) 326-6532.

Science Global Career Network address:
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Incyte Pharmaceuticals is an innovative, public biotech company applying the tools of computer science to high-throughput cDNA sequencing, bioinformatics, and gene discovery. We offer the following exciting opportunities to join us in the development and commercialization of our comprehensive genomic database.

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PhD Molecular Biology or relevant discipline with 4+ years of postdoctoral experience to be responsible for managing a large-scale library production facility. At least 2 years’ biotech experience also required. Ref: LPM

**DIRECTOR, SEQUENCING OPERATIONS**
Experienced manager with strong background in DNA Sequencing, PhD in Molecular Biology (or related) and 4+ years’ post-doctoral experience. Familiarity with Robotics and automated sequencing technologies essential. Candidate must demonstrate ability to assume the day-to-day management of a production high-throughput sequencing operation. Ref: DSO

**DIRECTOR, PRODUCTION INFORMATICS**
PhD Scientist with 4+ years’ experience in automated DNA sequencing, software development, LIMS setup, and genomic sequencing databases to be responsible for automated analysis of sequencing operation output, automated sample tracking, and setting up a large-scale genomic database. Strong management skills essential. Ref: DPI

Incyte offers a premier R&D facility in the foothills of Palo Alto, California, along with competitive salaries, an outstanding benefits package, and significant opportunities for professional growth. Please mail/fax your resume to Incyte Pharmaceuticals, Inc., Attn: KRH/Ref. ____ 3174 Porter Dr., Palo Alto, CA 94304, FAX 415/885-0572. EOE.

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**Postdoctoral Research at The Wistar Institute**

The Wistar Institute, an independent research organization located on the campus of the University of Pennsylvania, currently seeks postdoctoral applicants.


**Postdoctoral Researcher 2** – Conduct molecular virology studies of herpes simplex virus latency utilizing a mouse model system. We are also studying the use of HSV in gene therapy and cancer therapy. Reply to Dr. Nigel Fraser.

**Postdoctoral Researcher 3** – Study the structure of wild-type p53 and specific mutants. Prior experience in protein engineering, NMR spectroscopy or cryo-electronography is required. This project is in collaboration with structural biology groups. Reply to Dr. Thanos Halazonetis.

**Postdoctoral Researcher 4** – Conduct molecular virology studies on human immunodeficiency virus-1 (HIV-1), stressing mechanisms of AIDS immunopathogenesis and the pre-clinical development of immunotherapeutics (viz., IL-12, IL-13). Reply to Dr. Luis Montaner.


**Postdoctoral Researcher 6** – Sequence organization and gene expression near human and mouse telomeres. Reply to Dr. Harold Riehman.

**Postdoctoral Researcher 7** – Study the molecular mechanism of T cell development in mice. The position requires experience in molecular and/or cellular biology. Reply to Dr. Lisa M. Spain.

Interested applicants are requested to send a C.V. and three references to the appropriate faculty member’s attention: The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104. Equal Opportunity Employer. Minority candidates are strongly encouraged to apply.
Meharry Medical College
Dean, School of Medicine

Applications and nominations are invited for the position of Dean of the School of Medicine at Meharry Medical College. The Medical School is one of four schools of the College; other schools are Dentistry, Graduate Studies and Research and Allied Health Professions. Founded in 1876, the college and the medical school are renown for its training of health care professionals with a sensitivity and orientation to service the underserved.

As a minimum, candidates for the position must:
1. Hold the M.D. or M.D./Ph.D. degree;
2. Qualify for a tenured appointment at the level of professor;
3. Be a recognized scholar and leader in medical education and research;
4. Have the training and experience necessary for the administration of the educational, clinical research and community health programs of the School of Medicine; and
5. Be able to work effectively with internal and external constituents to promote the School and the College.

The candidate must have excellent communicative skills and team leadership ability relate to constituents internal and external to the college. Demonstrable leadership qualities for stimulating and motivating students and faculty are also expected of the successful candidate. In addition, the Dean must provide leadership in external partnerships, including managed care contracting and the development of external partners in a healthcare network. He/she must be responsible for ensuring that goals and objectives related to clinical service (market shares, patients visits, range of services, quality, cost effectiveness and customer responsiveness) are achieved.

Applications and nominations accompanied by an updated curriculum vitae and three references should be submitted to:

Calvin L. Calhoun, Sr., M.D.
Chairman, Search Committee
School of Medicine-Box A-21
Meharry Medical College
1005 D. B. Todd Boulevard
Nashville, TN 37208

Meharry is an Equal Opportunity/Affirmative Action Employer

NEUROIMMUNOLOGIST ASSISTANT PROFESSOR

The Department of Microbiology and Immunology and the Center for Investigative Neuroscience at the Bowman Gray School of Medicine, Wake Forest University are seeking to fill a tenure-track position at the ASSISTANT PROFESSOR level. We are particularly interested in individuals wishing to establish an independent laboratory with research interests in immune-based induction of CNS pathology, the immune response against neurotropic viral or bacterial pathogens, hormonal communication between the CNS and immune system, or CNS inflammation and autoimmunity. The Department has substantial research strengths in the molecular basis of viral and bacterial pathogenesis, molecular cell biology, and cytokines and is the recipient of an NIH-funded predoctoral training program in Immunology and Pathogenesis. The Neurosciences Center is a multi-departmental, multidisciplinary program with more than 100 neuroscientists and an associated graduate program. The current areas of research interest in the Center are: developmental neurobiology, substance abuse, cardiovascular neurosciences/stroke, and special senses. The successful candidate will participate in the teaching of immunology to predoctoral and medical students and will be provided with suitable laboratory and office space as well as start-up funds. Applicants should submit a curriculum vitae, a description of future research plans and the names of three references to: Dr. Steven B. Mizei, Professor and Chair, Department of Microbiology and Immunology, Bowman Gray School of Medicine, Medical Center Blvd., Winston-Salem, NC 27157.

Wake Forest University is an Affirmative Action/Equal Opportunity Employer.

CAREERS '95

Issue Date: 6 October 1995
Space Reservation Deadline: 19 September 1995

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SCIENCE Global Career Network address:
http://www.aaas.org
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For more information contact: Janis Crowley
Phone: (202) 326-6532  Fax: (202) 682-0816

SCIENCE COVERS THE WORLD
PLANT ECOLOGY/TAXONOMY POSITION: The University of Arkansas at Little Rock, Department of Biology, invites applications for a tenure-track ASSISTANT PROFESSOR to begin fall 1996. Applicants must have a Ph.D. in botany, ecology, or related area. We are especially interested in candidates having expertise in vegetation ecology or plant systematics. The successful candidate is expected to teach undergraduate courses (plant ecology, plant taxonomy, botany, and biology) and to develop a research program involving undergraduate students.

The University of Arkansas at Little Rock (www.uarl.edu) is a metropolitan institution with a current enrollment of approximately 12,000 students. The Department of Biology consists of 19 full-time faculty members and over 300 majors in its various degree programs. The Department is in the College of Science and Engineering Technology and offers B.S. degrees in Biology with two concentrations (General Biology and Fisheries and Wildlife Management), Environmental Health Science (four options) and Health Education (two options).

Letters of application should include a curriculum vitae, statements of teaching philosophy and scholarly interests, undergraduate and graduate transcripts, and at least four letters of reference. Review of applications will begin 1 December 1995 and will continue until the position is filled. Applications should be addressed to Dr. William H. Baltosser, Chair of the Faculty Search Committee, Department of Biology, University of Arkansas at Little Rock, 2801 S. University, Little Rock, AR 72204-1099.

The University of Arkansas at Little Rock is an equal opportunity affirmative action employer and actively seeks the candidacy of minorities, women, Vietnam-era veterans and persons with disabilities, under Arkansas law, all applications are subject disclosure.

NEUROSCIENTIST
AND
BIOCHEMIST
POSITIONS AVAILABLE

Ergo Science Incorporated, a private, established biotechnology/biopharmaceutical company, located in the Boston, Massachusetts area, is recruiting neuroscientists and metabolic biochemists to add to its diverse research staff. Neuroscientists and biochemists will interact with a multidisciplinary group of organic chemists, cell biologists, endocrinologists, immunologists, physiologists and chronobiologists to study two research areas: 1) circadian neuroendocrine regulation of metabolism relating to diabetes and atherosclerosis; and 2) circadian neuroendocrine regulation of immune function as it relates to tumor immunology and autoimmune disease.

Neuroscientist applicants must have a Ph.D. and proven research track record in circadian hypothalamic neurophysiology. Candidates must also have expertise in molecular biology, electrophysiology recording, microdialysis, receptor assay and/or 2nd messenger analysis techniques to investigate circadian organization of hypothalamic activities regulating metabolism or immunity.

Metabolic Biochemist applicants must have a Ph.D. and proven research track record and specific expertise in lipid and carbohydrate abnormalities associated with insulin resistance in liver and/or muscle tissue. The company is also seeking similarly qualified Lipoprotein Biochemists with expertise in hepatic lipogenesis, reverse cholesterol transport and/or atherogenesis.

Applicants should send a complete curriculum vitae, a brief description of research experience and names of three references to:

Dr. Anthony H. Cincotta
Director of Research
Ergo Science Incorporated
100 First Avenue, Fourth Floor
Charlestown, MA 02129-2051

ALPHAGENE

AlphaGene is a new biotechnology company which develops high-quality and innovative gene libraries for the emerging biotechnology industry, utilizes these libraries for efforts to map the human genome, and develops novel approaches in the biologic and genetic analysis of human disease.

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SCIENTISTS

Candidates must possess a Ph.D. degree in molecular biology with extensive experience in cloning, DNA sequencing, and expression of heterologous genes in prokaryotic and eukaryotic cells. Experience in the synthesis of gene libraries, PCR, site-directed mutagenesis, and genetics is highly desirable. Scientific talent, dedication, achievement focus, and teamwork skills are a must.

AlphaGene, founded by scientists from Harvard Medical School, is located in the Boston/Cambridge area, amidst strong academic institutions and a growing community of "leading-edge" biotechnology companies. AlphaGene offers a competitive salary, a generous benefits package, opportunities for growth, and an "environment of excellence" for professional and commercial success. Qualified candidates are requested to submit, in confidence, a cover letter, their curriculum vitae, and two references to: Dr. George Scheele, AlphaGene Resources, Building 96, 13th Street, Charlestown, MA 02129. An Equal Opportunity Employer M/F/D/V.
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