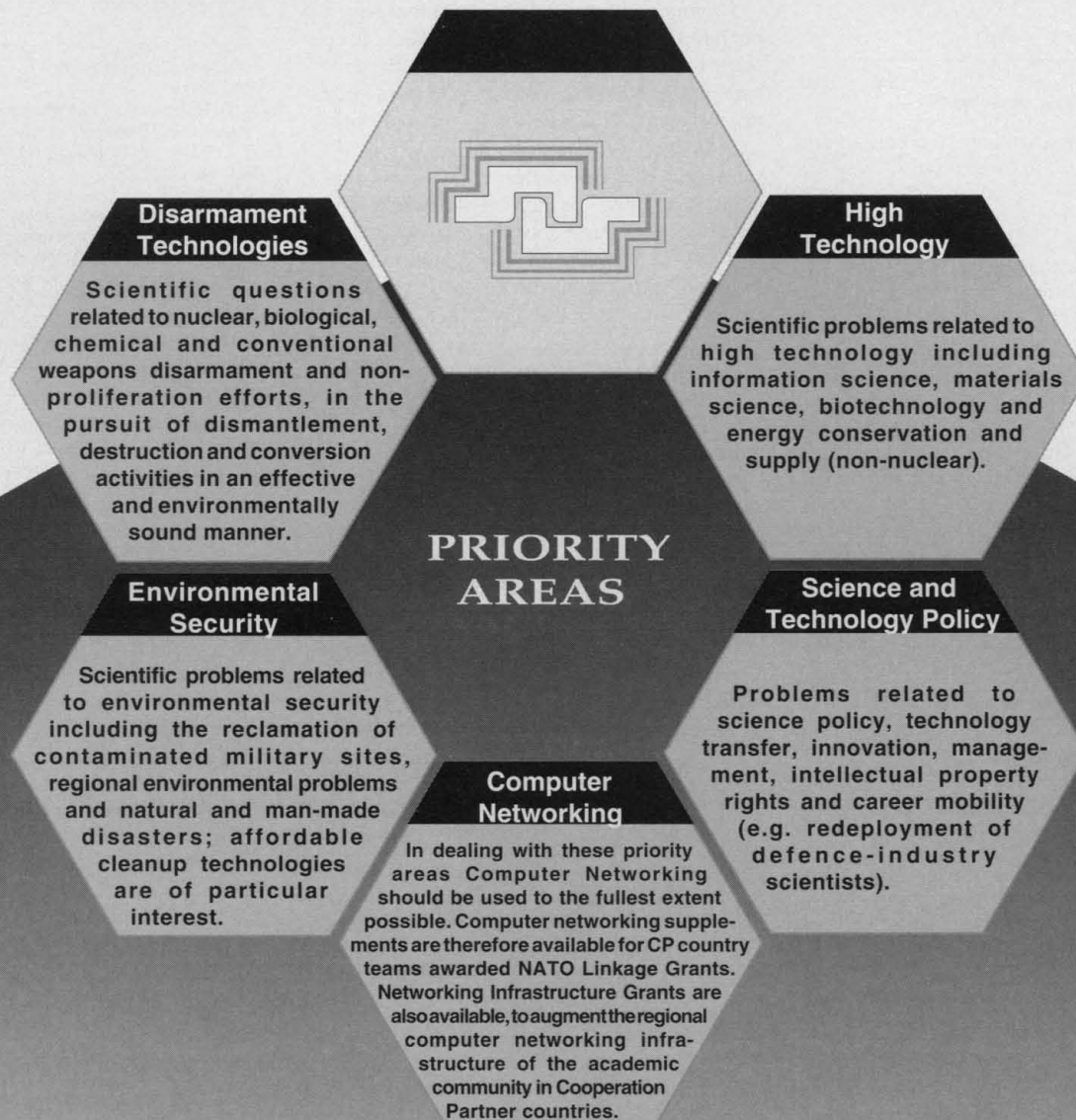


# NATO SCIENCE PROGRAMME

## 1997 CALENDAR OF MEETINGS

The NATO Science Programme provides assistance for scientific collaboration between NATO-country scientists and between NATO-country scientists and scientists in Cooperation Partner (CP) countries (the Commonwealth of Independent States and countries of Central and Eastern Europe).

Support is available for collaboration between NATO-country scientists in any scientific area for Collaborative Research Grants, or to organize Advanced Study Institutes. Support for collaboration between NATO-country and CP-country scientists is **primarily but not exclusively in the Priority Areas** outlined below. The possibilities of support for collaboration between NATO and CP-country scientists are for Collaborative Research Grants, Linkage Grants, Expert Visit Grants, and grants to organize Advanced Research Workshops and Advanced Study Institutes. Further information and application forms for these activities are available at the NATO Science web site or by mail from the NATO Scientific Affairs Division.



Advanced Study Institutes (ASIs) and Advanced Research Workshops (ARWs) to be held in 1997 are given in the following pages. **Each meeting is held under the responsibility of its director(s): all requests for information, attendance or support should be addressed to the contact person listed.** Locations or dates may change. Participation or tuition fees are not required from participants; some participants from NATO countries or Cooperation Partner countries may obtain grants from the meeting director to assist with travel and living expenses. Those wishing to organize ASIs or ARWs should write to the address below for application forms and further information.

Further meetings will be supported during the year, and information on these meetings will be available at the NATO Science web site on the Internet; although the site is continuously updated there will be major postings in mid-April and mid-July (check 'Latest News' for details). Meetings are also posted on the NATO gopher.

The web site address is : <http://www.nato.int/science> The gopher address is: <gopher.nato.int>



Scientific Affairs Division (Ref. 97/1)  
NATO, 1110 Brussels, Belgium

# 1997 ADVANCED STUDY INSTITUTES

Advanced Study Institutes (ASIs) are high-level tutorial courses of two weeks' duration where a subject is treated in depth by lecturers of international standing. Presentations are made to about 100 scientists or research students already specialised in the field, or who have an advanced general scientific background. Attendance at ASIs is open to all suitably-qualified applicants irrespective of nationality, upon application to the contact person listed below.

## JOINT NATO-COOPERATION PARTNER MEETINGS

### DISARMAMENT TECHNOLOGIES

**New Scientific and Technological Aspects of Verification of the Biological and Toxin Weapons Convention (BTWC)**  
**6-16 Jul 1997 : Budapest, Hungary**  
**Contact:** Dr. G.S. Pearson, University of Bradford, Dept. of Peace Studies, Bradford, BD7 1DP, UK (Fax: 44 1672 539582)  
**Co-Director:** Amb. T. Toth, Ministry of Foreign Affairs, Budapest, Hungary 961270

### ENVIRONMENTAL SECURITY

**Bioavailability of Organic Xenobiotics in the Environment and Practical Consequences for Bioremediation**  
**18-29 Aug 1997 : Prague, Czech Republic**  
**Contact:** Prof. J.-C. Block, Université Henri Poincaré, Fac. des Sciences Pharmaceutiques et Biologiques, Labo. Santé et Environnement, 5 rue Albert Lebrun, 54000 Nancy, France (Fax: 33 83 178879/e-mail: block@pharma.u-nancy.fr)  
**Co-Director:** Dr. V.V. Goncharuk, Science Academy of Ukraine, Kyiv, Ukraine 960477

### HIGH TECHNOLOGY

**Advances and Challenges in the Catalytic Activation and Functionalisation of Light Alkanes**  
**18-31 May 1997 : Alcubideche, Lisbon**  
**Contact:** Prof. E.G. Derouane, University of Liverpool, Leverhulme Centre for Innovative Catalysis, POBox 147, Liverpool L69 3BX, UK (Fax: 44 151 794 3589/e-mail: derouane@liverpool.ac.uk)  
**Co-Director:** Prof. J. Haber, Polish Academy of Sciences, Krakow, Poland 960491

**Frontiers in Magnetism of Reduced Dimension Systems**  
**16-27 Jun 1997 : Kyiv, Ukraine**  
**Contact:** Prof. P.E. Wigen, Ohio State University, Dept. of Physics, 174 W.18th Avenue, Columbus, Ohio 43210-1106 USA (Fax: 1 614 292 7557/e-mail: wigen@mps.ohio-state.edu)  
**Co-Director:** Prof. V.G. Baryakhtar, National Academy of Sciences, Kyiv, Ukraine 960938

**Nanostructured Materials: Science and Technology**  
**11-21 Aug 1997 : St. Petersburg, Russia**  
**Contact:** Dr. G.M. Chow, Naval Research Laboratory, Material Science & Technology Division, Code 6323, Washington, DC 20375 USA (Fax: 202 767 2623/e-mail: gmchow@anvil.nrl.navy.mil)  
**Co-Director:** Prof. N.I. Noskova, Russian Academy of Sciences, Ekaterinburg, Russia 961148

**Advanced Light Alloys and Composites**  
**5-15 Sep 1997 : Zakopane, Poland**  
**Contact:** Dr. W. Reif, Technical University of Berlin, Institute of Metallic Materials, Strasse des 17 Juni 135, 10623 Berlin, Germany (Fax: 0303 142 1127)  
**Co-Director:** Prof. R. Ciach, Polish Academy of Sciences, Krakow, Poland 961299

### OTHER AREAS

**Operations Research and Decision Aid Methodologies in Traffic and Transportation Management**  
**10-22 Mar 1997 : Balatonfured, Hungary**  
**Contact:** Dr. P.L. Toint, Facultés Universitaires ND de La Paix, Dept. of Mathematics, 61 rue de Bruxelles, B-5000 Namur Belgium (Fax: 32-81 72 49 14)  
**Co-Director:** Prof. K. Tanczos, Technical University of Budapest, Hungary 960476

**Computational Methods in Mechanisms**  
**16-28 Jun 1997 : Varna, Bulgaria**  
**Contact:** Prof. J. Angeles, McGill University, Dept. of Mechanical Engineering & McGill Centre for Intelligent Machines, 817 Sherbrooke St. West, Montreal, Quebec H3A 2K6, Canada (Fax: 514 398 7348/e-mail: angeles@cim.mcgill.ca)  
**Co-Director:** Prof. E. Zakhariiev, Bulgarian Academy of Sciences, Sofia, Bulgaria 960985

## GENERAL MEETINGS

### LIFE SCIENCES

**Molecular Microbiology**  
**7-17 Apr 1997 : Birmingham, UK**  
**Contact:** Dr. S. Busby, University of Birmingham, School of Biochemistry, Edgbaston, Birmingham B15 2TT, UK (Fax: +44-21 414 3982) 950015

**Protein Dynamics, Function and Design**  
**16-28 Apr 1997 : Erice, Sicily, Italy**  
**Contact:** Prof. J.F. Lefevre, Louis Pasteur University, Bld Sebastian Brant, 67400 Strasbourg-Illkirch, France (Fax: +33 88 655343) 961015

**Cellular Integration of Signaling Pathways in Plant Development**  
**20-30 May 1997 : Maratea, Italy**  
**Contact:** Prof. F. Lo Schiavo, University of Padua, Dept. of Biology, Via Trieste 75, 35121 Padova, Italy (Fax: +39 49 8276280/e-mail: pmb@civ.bio.unipd.it) 961018

**Direct Methods for Solving Macromolecular Structures**  
**22 May-2 Jun 1997 : Erice, Sicily, Italy**  
**Contact:** Prof. S. Fortier, Queen's University, Depts. of Chemistry and Computing & Information Science, Kingston, Ontario K7L 3N6, Canada (Fax: 613 545 6934/e-mail: fortiers@post.queensu.ca) 960458

**Free Radicals, Oxidative Stress and Antioxidants - Pathological and Physiological Significance**  
**24 May-4 Jun 1997 : Antalya, Turkey**  
**Contact:** Prof. T. Ozben, Akdeniz University, Faculty of Medicine, Dept. of Biochemistry, 07070 Antalya, Turkey (Fax: 90 242 2274495) 960403

**Acute Respiratory Distress Syndrome : Cellular and Molecular Mechanisms and Clinical Management**  
**14-24 Jun 1997 : Corfu, Greece**  
**Contact:** Prof. S. Matalon, University of Alabama at Birmingham, Dept. of Anesthesiology, 619 South 19th Street, Birmingham, AL 35233-6810 USA (Fax: +1 205 934 7437/e-mail: Sadis.Matalon@ccc.uab.edu) 961075

**Neuronal Circuits and Networks**  
**15-27 Jun 1997 : Erice, Sicily, Italy**  
**Contact:** Prof. J. Nicholls, Universitaet Basel, Biozentrum, Dept. of Pharmacology, Klingelbergstr. 70, Basel, Switzerland (Fax: 41 61 267 2208) 960434

**Molecular Mechanisms of Lipid and Protein Traffic**  
**16-28 Jun 1997 : Cargèse, Corsica, France**  
**Contact:** Dr. J.A.F. Op den Kamp, University of Utrecht, Ctr. for Biomembranes & Lipid Enzymology, Padualaan 8, 3584 CH Utrecht, The Netherlands (Fax: 31 30 252 2478/e-mail: j.a.opdenkamp@chem.ruu.nl) 960379

**Development and Organization of the Retina : From Molecules to Function**  
**18-28 Jun 1997 : Aghia Pelaghia, Crete, Greece**  
**Contact:** Dr. M.L. Chalupa, University of California at Davis, Center for Neuroscience, Davis, CA 95616, USA (Fax: +1 916 752 2087/e-mail: lmchalupa@ucdavis.edu) 961034

**Angiogenesis: Models, Modulators and Clinical Applications**  
**20-30 Jun 1997 : Rhodes, Greece**  
**Contact:** Prof. M.E. Maragoudakis, University of Patras, Medical School, Department of Pharmacology, Rio, Patras 26110, Greece (Fax: +30 61-994720) 960994

**Face Recognition: From Theory to Applications**  
**23 Jun-4 Jul 1997 : Stirling, United Kingdom**  
**Contact:** Prof. H. Wechsler, George Mason University, Dept. of Computer Science, Fairfax, VA 22030, USA (Fax: 1 703 993 3729/e-mail: wechsler@cs.gmu.edu) 960418

**Targeting of Drugs: Strategies for Stealth Therapeutic Systems**  
**24 Jun-5 Jul 1997 : Cape Sounion, Greece**  
**Contact:** Prof. G. Gregoriadis, University of London, Center for Drug Delivery Research, School of Pharmacy, 29-39 Brunswick Square, London WC1N 1AX, UK (Fax: 44 171 753 5820) 960439

**Molecular and Applied Aspects of Oxidative Drug Metabolizing Enzymes**  
**22-3 Jul 1997 : Kusadasi, Aydin, Turkey**  
**Contact:** Prof. E. Arinc, Middle East Technical University, Ankara, Joint Graduate Program in Biochemistry, 06531 Ankara, Turkey (Fax: +90 312 210 1289/e-mail: earinc@rorqual.cc.metu.edu.tr) 961032

**Gene Therapy**  
**17-28 Aug 1997 : Island of Spetsai, Greece**  
**Contact:** Prof. K. Xanthopoulos, National Center for Human Genome Research, NIH, Gene Expression & Control Section/ Clin. Gene Therapy Branch, Bldg 10, Room 10C103/10 Center Drive Bethesda, MD 20892, USA (Fax: +1 301 496 7184/e-mail: kgx@nchgr.nih.gov) 960987

**Biomolecular Recognition**  
**1-14 Sep 1997 : Island of Spetsai, Greece**  
**Contact:** Prof. B.F.C. Clark, Aarhus University, Dept. of Biostructural Chemistry, Institute of Chemistry, 8000 Aarhus C Denmark (Fax: 45 8619 6199/e-mail: clark@biobase.dk) 960328

**DNA Damage and Repair: Implications for Human Health and Aging**  
**October 1997 : Antalya, Turkey**  
**Contact:** Prof. M. Dizdaroğlu, National Inst. of Standards & Technology, Bldg. 222/A353, Gaithersburg, MD 20899, USA (Fax: +1 301 330 3447/e-mail: miral@enr.nist.gov) 960617

### MATHEMATICS

**Modular Representations and Subgroup Structure of Algebraic Groups and Related Finite Groups**  
**23 Jun-4 Jul 1997 : Cambridge, UK**  
**Contact:** Prof. H.H. Andersen, Aarhus Universitet, Matematisk Institut, 8000 Aarhus C, Denmark (Fax: 45 861 317 69/e-mail: mathha@mi.aau.dk) 960450

**Representation Theories and Algebraic Geometry**  
**28 Jul-8 Aug 1997 : Montreal, Canada**  
**Contact:** Prof. A. Daigneault, Université de Montreal, Dép. de Mathématiques & de Statistique, CP 6128, Succ. Centre-Ville, Montreal, (QC) H3C 3J7, Canada (Fax: 514 343 5700/e-mail: daigneau@dms.umontreal.ca) 960468

### PHYSICS AND ASTRONOMY

**Formation and Evolution of Solids in Space**  
**10-20 Mar 1997 : Erice, Sicily, Italy**  
**Contact:** Prof. J.M. Greenberg, Huygens Laboratorium, PO Box 9504, NL-2300 RA Leiden, Netherlands (Fax: 31 71 275819) 960535

**Dynamical Properties of Unconventional Magnetic Systems**  
**2-12 Apr 1997 : Geilo, Norway**  
**Contact:** Prof. A.T. Skjeltorp, Inst. for Energy Technology, PO Box 40, 2007 Kjeller, Norway (Fax: 47 638 10 920/e-mail: fysikk@ife.no) 960444

**Foams, Emulsion and Cellular Materials**  
**21 Apr-3 May, 1997 : Cargèse, Corsica, France**  
**Contact:** Prof. J.F. Sadoc, Université de Paris-Sud, Laboratoire de Physique des Solides, Batiment 510, F-91405 Orsay Cedex France (Fax: +33 1 69 41 60 86/e-mail: Sadoc@lps.u-psud.fr) 961014

**Unconventional Superconductors**  
**12-23 May 1997 : Cargèse, Corsica, France**  
**Contact:** Prof. D.J. Scalapino, University of California at Santa Barbara, Department of Physics, Santa Barbara, CA 93106-9530, USA (Fax: +1 805 893 8838/e-mail: leslie@spock.physics.ucsb.edu) 960983

**Superstring Dualities, Branes and Integrable Models**  
**26 May-14 Jun 1997 : Cargèse, Corsica, France**  
**Contact:** Dr. L. Baulieu, Université Pierre & Marie Curie Paris VI, LPTHE, Tour 16 (1ere Etage), 4 Place Jussieu, 75252 Paris Cedex 05 France (Fax: +33 1 44 277088/e-mail: baulieu@lpthe.jussieu.fr) 961017



# 1997 ADVANCED RESEARCH WORKSHOPS

Advanced Research Workshops (ARWs) are working meetings of about four days' duration, where scientists and engineers researching at the frontiers of a subject are able to engage in an intense but informal exchange of views, aiming at a critical assessment of existing knowledge and identification of directions for future action. Attendance at ARWs is mainly by invitation, but a few places are available for particularly well-qualified scientists of all nationalities upon application to the contact person listed below.

## JOINT NATO - COOPERATION PARTNER MEETINGS

### DISARMAMENT TECHNOLOGIES

#### Upper Mantle Heterogeneities from Active and Passive Seismology

**13-16 Apr 1997 : Moscow, Russia**  
**Contact:** Prof. K Fuchs, Karlsruhe University, Geophysical Institute, Hertzstr. 16, 76187 Karlsruhe, Germany  
 (Fax: +49 721 71173 )  
**Co-Director:** Dr. L Solodilov, GEON, Moscow, Russia 951493

#### Nuclear Materials Safety Management

**17-21 Apr 1997 : Amarillo, Texas**  
**Contact:** Prof. K.L. Peddicord, Texas A&M University, Dept. of Nuclear Engineering, 129 Zachry, College Station, Texas 77843-3133, USA  
 (Fax: +1 409 345 6443/e-mail: klp7201@acs.tamu.edu)  
**Co-Director:** Mr. L.N. Lazerev, Khlopin Radium Institute, St. Petersburg, Russia 961315

#### Rapid Methods for the Analysis of Biological Materials in the Environment

**19-22 May 1997 : Warsaw, Poland**  
**Contact:** Mr. P.J. Stopa, ERDEC, US Army Edgewood Research, Develop. & Engineering Center, SCBRD-rte, Bldg E31605101 Hoadley Road, Aberdeen Prov. Ground Maryland 21010-5423, USA  
 (Fax: +1 410 671 1912/e-mail: pjstopa@cbddcom.apgee.army.mil)  
**Co-Director:** Prof. M Bartoszo, Mil. Inst. Of Hygiene & Epidem., Pulawy, Poland 960918

#### Advanced Research & Technologies for Detection and Destruction of Buried/Hidden Anti-Personnel Landmines

**9-13 June 1997 : Tomsk, Russia**  
**Contact:** Dr. H.D. Hilgendorf, IABG MBH, Ottobrunn, Einsteinstrasse 20, D-85521 Ottobrunn, Germany  
 (Fax: +49 89 6088 3662/ e-mail: hilgendorf@iabg.de)  
**Co-Director:** Prof. G.B. Manelis, Russian Academy of Sciences, Chernogolovka, Russia 961403

#### Improved Technological Measures to Assure Compliance with the Biological and Toxin Weapons Convention

**1-3 Oct 1997 : Moscow, Russia**  
**Contact:** Dr. G.S. Pearson, University of Bradford, Department of Peace Studies, Bradford, BD7 1DP, UK  
 (Fax: +44 1672 539582)  
**Co-Director:** Dr. O.B. Ignatiev, President's Committee for Conventional Problems of Chemical/Biological Weapons, Moscow, Russia 961373

### ENVIRONMENTAL SECURITY

#### Conversion and Ecology

**25-28 Apr 1997 : Dnepropetrovsk, Ukraine**  
**Contact:** Dr. C Gibbons, EURENG Ltd., 10 South Drive, Harwell, Didcot, OX11 0PT, Oxon UK  
 (Fax: +44 1235 861424/e-mail: carle.gibbons@aeat.co.uk)  
**Co-Director:** Prof. W.M. Zadorsky, USUChT, Dnepropetrovsk, Ukraine 960888

#### Public Health Consequences of Environmental Pollution : Priorities and Solutions

**May 1997 : Lviv, Ukraine**  
**Contact:** Dr. P Scheff, University of Illinois, Great Lakes Ctr for Occupational & Environmental Safety & Health, School of Public Health, M/C 922, 121 West Taylor Street Chicago, IL 60612-7260, USA  
 (Fax: +1 312 413 7369/e-mail: pscheff@uic.edu)  
**Co-Director:** Dr. P Hrytshyn, Ukrainian Branch World Laboratory, Lviv, Ukraine 961367

#### Biosensors for Direct Monitoring of Environmental Pollutants in Field

**4-8 May 1997 : Smolenice, Slovak Republic**  
**Contact:** Dr. D.P. Nikolettis, University of Athens, Chem. Dept., Lab of Analytical Chemistry, Panepistimiopolis-Kouponia, 15771 Athens, Greece (Fax: ++7 23 16 08/ e-mail: analyt@arnold.pchem.uoa.ariadne-t.gr)  
**Co-Director:** Dr. M.A. Trojanowicz, University of Warsaw, Poland 960077

#### Scientific & Technological Problems of Removal from Service of Stationary & Transportation Units Equipped with Nuclear Power Reactors

**19-23 May 1997 : St. Petersburg, Russia**  
**Contact:** Mr. J. Van der Steen, KEMA Nederland B.V., P.O. Box 9035, Utrechtseweg 310, 6800 ET Arnhem, The Netherlands  
 (Fax +31 26 442 3635/e-mail: j.vandersteen@mta9.kema.nl)  
**Co-Director:** Prof. I. Gorynin, Central Research Institute, St. Petersburg, Russia 961068

#### Environmental Pollution in the Ural Mountains

**25-29 May 1997 : Magnitogorsk, Russia**  
**Contact:** Dr. R Wilson, Harvard University, Dept. of Physics, Cambridge, MA 02138, USA  
 (Fax: +1 617 495 0416/ e-mail: wilson@huhepl.harvard.edu)  
**Co-Director:** Dr. V.D. Cherkintsev, Acad. of Mining & Metallurgy, Magnitogorsk, Russia 961298

#### Biochemical Cycling in Marine Sediments

**30 Aug-3 Sep 1997 : Hel, Poland**  
**Contact:** Prof. J.S. Gray, University of Oslo, Dept. of Biology, Section of Marine Zoology and Chemistry, P.O. Box 1064, Blindern 0316 Oslo Norway (Fax: +47 22 85 44 38/e-mail: j.s.gray@bio.uio.no)  
**Co-Director:** Prof. A Szaniawska, Gdansk University, Poland 960883

#### Water Competition and Efficient Use: The Role of Targets

**22-25 Sep 1997 : Eger, Hungary**  
**Contact:** Prof. FL Brown, University of New Mexico at Albuquerque, International Water Res Assn, 1915 Roma NE, Albuquerque, NM 87131-1436 USA (Fax: +1 505 277 9405/e-mail: fibrown@unm.edu)  
**Co-Director:** Prof. L. Somlyódy, Budapest University of Technology, Hungary 961093

#### Managing Environmental Degradation: Dialogue, Cooperation, Data Sharing

**21-25 Jun 1997 : Budapest, Hungary**  
**Contact:** Prof. T. Naff, Univ. of Pennsylvania, 847 Williams Hall, Philadelphia, PA 19104-6305, USA  
 (Fax: +1 215 747 6211/e-mail: tnaff@sas.upenn.edu)  
**Co-Director:** Dr. A.R. Herman, Nat. Tech. Inform. Centre & Library, Budapest, Hungary 960899

#### Ocular Radiation Risk Assessment in Population Exposed to Environmental Radiation Contamination

**29 Jul - 1 Aug 1997 : Kyiv, Ukraine**  
**Contact:** Prof. B.V. Worgul, Columbia University, Eye Radiation & Environmental Research Lab, 630 West 168th Street, New York, NY 10032 USA (Fax: +1 212 305 6749/e-mail: bwv1@columbia.edu)  
**Co-Director:** Mr. Y.I. Kundiev, Kyiv Research Inst. For Occupational Health, Kyiv, Ukraine 961308

#### Sustainable Management of Transboundary Water Courses: Theory and Practice (Eastern and Western European Perspectives)

**September 1997 : Moscow, Russia**  
**Contact:** Prof. T Waelde, University of Dundee, Centre for Petroleum Mineral & Natural Resources Law and Policy, Dundee DD1 4HN UK (Fax: +44 1382 322 578)  
**Co-Director:** Dr. S. Vinogradov, Russian Academy of Sciences, Moscow, Russia 961301

#### Environmental Change, Adaptation and Security

**Autumn 1997 : Budapest, Hungary**  
**Contact:** Prof. S Lonergan, University of Victoria, Department of Geography, P.O. Box 3050, Victoria, BC V8W 3P5 Canada (Fax: +1 604 595 0403/e-mail: lonergan@uvic.ca)  
**Co-Director:** Dr. S. Kerekes, Technical University of Budapest, Hungary 961305

### HIGH TECHNOLOGY

#### Molecular Modeling and Dynamics of Biological Molecules Containing Metal Ions

**15-21 Mar 1997 : San Miniato, Pisa, Italy**  
**Contact:** Prof. L. Banci, University of Florence, Dept. of Chemistry, Via G. Capponi 7, 50121 Florence, Italy  
 (Fax: 0039 55 2757555/e-mail: lucia@risc1.lrm.fi.cnr.it)  
**Co-Director:** Dr. K Varnagy, Kossuth Univ. Debrecen, Hungary 960965

#### Electronic Packaging for High Reliability, Low Cost Electronics

**11-13 May 1997 : Ljubljana, Slovenia**  
**Contact:** Dr. R Tummalala, Georgia Institute of Technology, Manufacturing Research Center, Room 380, 813 Fiesta Drive, NW, Atlanta, GA 30332-0269 USA (Fax: 404 853 0957)  
**Co-Director:** Dr. M Kosec, University of Ljubljana, Slovenia 961293

#### Multilayered and Fibre-Reinforced Composites: Problems and Prospects

**2-6 Jun 1997 : Kyiv, Ukraine**  
**Contact:** Prof. Y.M.Haddad, University of Ottawa, Inst. for Mechanical & Aerospace Engineering, 770 King Edward Ave., (A713) P.O.Box 45 Stn. A, Ottawa, Ontario K1N 6N5 Canada (Fax: 613 5625177/e-mail: ymhaddad@matrix.genie.uottawa.ca)  
**Co-Director:** Prof. S.A. Firstov, Frantsevich Institute, Kyiv, Ukraine 960915

#### Optical Resonators-Theory and Design

**13-20 Jul 1997 : Smolenice Castle, Slovakia**  
**Contact:** Dr. R. Kossowsky, Emerging Technologies Inc., Materials Engineering & Systems Div., 6327 Burchfield Avenue, Pittsburgh, PA 15217 USA (Fax: +1 412 421 4342/e-mail: wk02025@worldlink.com)  
**Co-Director:** Prof. M. Jelinek, Czech Academy of Sciences, Prague, Czech Republic 960582

#### C1-C3 Hydrocarbon Conversion

**14-17 Jul 1997 : Krasnoyarsk, Russia**  
**Contact:** Prof. F. Trifiro, University of Bologna, Dpto. di Chimica Industriale e dei Materiali, V. Risorgimento 4, 40136 Bologna, Italy  
 (Fax: +39 51 644 3680/e-mail: cicatai@boifco.cineca.it)  
**Co-Director:** Prof. A.G. Anshits, Russian Academy of Sciences, Krasnoyarsk, Russia 961058

#### Refractory Metals in Molten Salts - their Chemistry, Electrochemistry and Technology

**10-15 Aug 1997 : Apatity, Russia**  
**Contact:** Dr. D.H. Kerridge, University of Southampton, Dept. of Engineering Materials, Southampton, S017 1BJ, UK. (Fax: 1703 593016)  
**Co-Director:** Dr. E.G. Polyakov, Russian Academy of Sciences, Apatity, Russia 960472

#### Syntheses, Optical Properties and Applications of Near-Infrared (NIR) Dyes in High Technology Fields

**24-27 Sep 1997 : Czech Republic**  
**Contact:** Prof. S. Daehne, Federal Institute for Materials Research and Testing, Rudower Chaussee 5, D-12489 Berlin, Germany (Fax: +49 30 6392 5787/e-mail: daehne@ah.bam-berlin.de)  
**Co-Director:** Dr. J. Slavik, Czech Academy of Sciences, Prague, Czech Republic 961379

#### Challenges for Sulfides in Material Sciences and Catalysis

**27 Sep - 2 Oct 1997 : Varna, Bulgaria**  
**Contact:** Prof. R.A. Van Santen, Eindhoven University of Technology, Schuit Institute of Catalysis, PO Box 513, 5600 MB Eindhoven, Netherlands  
 (Fax: 0031 40 245 5054/e-mail: tgtars@office.chem.tue.nl)  
**Co-Director:** Prof. A.A. Andreev, Bulgarian Academy of Sciences, Sofia, Bulgaria 961338

#### Interfacial Science in Ceramic Joining

**October 1997 : Nova Gorica, Slovenia**  
**Contact:** Dr. A. Bellosi, CNR-IRTEC, via Granarolo 64, 48018 Faenza, Italy  
 (Fax: +39 546 46381/e-mail: bellosi@irtec.bo.cnr.it)  
**Co-Director:** Prof. T. Kosmac, University of Ljubljana, Slovenia 961352

#### Probabilities and Materials: Tests, Models and Applications for the 21st Century

**1-3 Oct 1997 : Russia**  
**Contact:** Prof. G.N. Frantzikonis, University of Arizona, Dept. of Civil Engineering & Engineering Mechanics, Tucson, AZ 85721, USA  
 (Fax: 1 520 621 2550/e-mail: fran@ccit.arizona.edu)  
**Co-Director:** Prof. O. Naimark, Russian Academy of Sciences, Perm, Russia 960993

### SCIENCE AND TECHNOLOGY POLICY

#### Strategic Approaches to the Assessment and Management of Manufacturing Technology Innovation

**June 1997 : Bled, Slovenia**  
**Contact:** Mr. P. Levy, University of Brighton, CENTRIM, Falmer, Brighton, UK  
 (Fax: 44 1273 685896/e-mail: p.r.levy@bton.ac.uk)  
**Co-Director:** Dr. M Junkar, University of Ljubljana, Ljubljana, Slovenia 961356

#### Quantitative Studies for S&T Policy in Transition Economies

**4-6 Sep 1997 : Moscow**  
**Contact:** Dr. S Radosevic, University of Sussex, Science Policy Research Unit, Mantell Building, Falmer, Brighton BN1 9RF, UK  
 (Fax: 44 1273 685 865)  
**Co-Director:** Dr. L Gokhberg, Centre for Science Research & Statistics, Moscow, Russia 961348

#### Technology Transfer: From Invention to Innovation

**6-8 Nov 1997 : Budapest, Hungary**  
**Contact:** Dr. E.J. Duff, University of Manchester, Vuman Limited, Skelton House, Manchester Science Park, Manchester, M15 6SH UK  
 (Fax: 44 161 226 8746)  
**Co-Director:** Dr. A. Inzelt, IKU, Budapest, Hungary 951510

### OTHER AREAS

#### Electron Kinetics and Applications of Glow Discharges

**19-23 May, 1997 : St. Petersburg, Russia**  
**Contact:** Dr. U.R. Kortshagen, University of Minnesota, Department of Mechanical Engineering, 111 Church Street SE, Minneapolis, MN 55455 USA  
 (Fax: 1 612 624 5230/e-mail: uk@tristan.me.umn.edu)  
**Co-Director:** Prof. L.D. Tsending, St. Petersburg State Technical University, Russia 960802

#### New Developments in Quantum Field Theory

**14-20 Jun 1997 : Zakopane, Poland**  
**Contact:** Dr. P.H. Damgaard, Niels Bohr Institute, Blegdamsvej 17, DK-2100 Copenhagen, Denmark  
 (Fax: +45-31 42 10 16/e-mail: phdamg@nbi.dk)  
**Co-Director:** Prof. J Jurkiewicz, Jagellonian University, Cracow, Poland 960609

## GENERAL MEETINGS

### SUPRAMOLECULAR CHEMISTRY

#### Biological Electron-Transfer Chains:

**Genetics, Composition and Mode Operation**  
**3-7 May 1997 : Tomar, Portugal**  
**Contact:** Prof. G.W. Canters, Leiden University, Leiden Institute of Chemistry, Gorlaeus Laboratory, PO Box 9502, 2300 RA Leiden, The Netherlands  
 (Fax: +31-71-5274349/e-mail: canters@rulgca.leidenuniv.nl) 950938

#### Current Challenges on Large Supramolecular Assemblies

**1-6 Nov 1997 : near Athens, Greece**  
**Contact:** Dr. G Tsoucaris, Université Paris-Sud, Chateau-Malabry, CNRS - ERS 128, Centre Pharmaceutique, 92290 Chateau-Malabry France  
 (Fax: +33-1-4683 1303/e-mail: georges.tsoucaris@cep.u-psud.fr) 961350

#### Protein-Protein and Protein-Lipid Interactions in Signal Transduction: Use of Small Synthetic Molecules as Probes and Therapeutic Agents

**6-10 Dec 1997 : Tampa, Florida, USA**  
**Contact:** Prof. S.M. Sebt, H.Lee Moffitt Cancer Center, Dept. of Biochemistry & Mol. Biology, 12902 Magnolia Drive, Tampa, FL 33612 USA (Fax: +1-813-979 6748/e-mail: sebt@moffitt.usf.edu) 961384

## ADVANCED STUDY INSTITUTES (continued)

### Polar Cap Boundary Phenomena

**3-14 Jun 1997 : Longyearbyen, Svalbard, Norway**

**Contact:** Prof. A. Egeland, University of Oslo, Dept of Physics,  
P.O. Box 1048/Blindern, 0316 Oslo 3 Norway  
(Fax: +47 22 85 56 71/e-mail: alv.egeland@fys.uio.no) 961026

### Ultrafast Dynamics of Quantum Systems :

#### Physical Processes and Spectroscopic Techniques

**15-30 Jun 1997 : Erice, Sicily, Italy**

**Contact:** Prof. B. Di Bartolo, Boston College, Dept. of Physics,  
Chestnut Hill, MA 02167, USA  
(Fax: 617/552 8478/e-mail: kyrkos@bcvms.bc.edu) 960362

### Confinement, Duality and Non-Perturbative Aspects of QCD

**23 Jun-4 Jul 1997 : Cambridge, UK**

**Contact:** Prof. P. Van Baal, Rijksuniversiteit Leiden,  
Lorentz Inst. for Theoretical Physics, PO Box 9506,  
NL-2300 RA Leiden, The Netherlands  
(Fax: 31 71 5275404/e-mail: vanbaal@rulgmo.leidenuniv.nl)  
960432

### The Dynamics of Small Bodies in the Solar System:

#### A Major Key to Solar System Studies

**29 Jun-12 Jul 1997 : Maratea, Italy**

**Contact:** Prof. A.E. Roy, Glasgow University,  
Department of Physics and Astronomy, The Kelvin Building,  
Glasgow G12 8QQ, UK  
(Fax: +44 141 3305183/e-mail: daphne@astro.gla.ac.uk) 961027

### Probing the Standard Model of Particle Interactions

**28 Jul-5 Sep 1997 : Les Houches, France**

**Contact:** Dr. F. David, Centre d'Etude de Saclay,  
Gif-sur-Yvette, Service de Physique Théorique,  
91191 Gif-sur-Yvette Cédex, France  
(Fax: 1 6908 8120/e-mail: david@amoc.saclay cea.fr) 960389

### Beam Shaping and Control with Nonlinear Optics

**4-15 Aug 1997 : Cargèse, Corsica, France**

**Contact:** Prof. R. Reinisch, LEMO-ENSERG, 23 av. des Martyrs,  
BP 257, 38016 Grenoble Cedex, France  
(Fax: +33-76856080) 960456

### The Gap Symmetry and Fluctuations in High Temperature Superconductors

**1-13 Sep 1997 : Cargèse, Corsica, France**

**Contact:** Prof. J. Bok, Lab. de Physique du Solide, ESPCI,  
10 rue Vauquelin, 75231 Paris Cedex 05, France  
(Fax: +33 1 40 79 44 25/e-mail: Julien.Bok@espci.fr) 961033

### Current Topics in Astrophysical Physics :

#### Primordial Cosmology

**4-15 Sep 1997 : Erice, Sicily, Italy**

**Contact:** Prof. N. Sanchez, Observatoire De Paris,  
DEMIRM, Ministère de l'Ens. Sup. et de la Rech.,  
61 Ave de l'Observatoire, 75014 Paris, France  
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### Supersymmetry and Trace Formulae: Chaos and Disorder

**8-20 Sep 1997 : Cambridge, UK**

**Contact:** Dr. I.V. Lerner, University of Birmingham,  
School of Physics & Space Research, Edgbaston,  
Birmingham B15 2TT UK  
(Fax: 0121 414 4719) 960429

### Physics of Dry Granular Media

**15-26 Sep 1997 : Cargèse, Corsica, France**

**Contact:** Prof. H.J. Herrmann, University of Stuttgart,  
Institute for Computer Applications I, Pfaffenwaldring 27,  
D-70569 Stuttgart Germany  
(Fax: +49 711 685 3658/e-mail: hans@ica1.uni-stuttgart.de)  
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### Astronomy with Adaptive Optics Laser Guide Star

**22 Sep-3 Oct 1997 : Cargèse, Corsica, France**

**Contact:** Prof. J.C. Dainty, Imperial College,  
Blackett Laboratory- Applied Optics Group,  
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## CHEMISTRY AND MATERIALS

### Electron Crystallography

**22 May-2 Jun 1997 : Erice, Sicily, Italy**

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### Frontiers in the Science and Technology of Polymer Recycling

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**Contact:** Prof. G. Akovali, Middle East Technical University,  
Depts. of Chemistry and Polymer, Science and Technology,  
06531 Ankara, Turkey  
(Fax: 90 312 2101280/e-mail: akovali@rorqual.cc.metu.edu.tr)  
951091

### Oxygen Ion and Mixed Conductors and

#### Their Technological Applications

**15-30 Jul 1997 : Erice, Sicily, Italy**

**Contact:** Prof. H.L. Tuller, MIT, Dept of Materials Science &  
Engineering, Room 13-3126, 77 Massachusetts Ave.,  
Cambridge, MA 02139 USA  
(Fax: +1 617 253 5749/e-mail: hltuller@mit.edu) 960587

### Recent Theoretical and Experimental Advances in Hydrogen Bonded Clusters

**20-31 Jul 1997 : Heraklion, Crete, Greece**

**Contact:** Dr. S.S. Xantheas, Environmental Molecular Sciences  
Lab., Theory, Modeling & Simulation, Battelle Boulevard,  
MS K1-83, Richland, WA 99352 USA  
(Fax: +1 509 3756631/e-mail: ss\_xantheas@pnl.gov) 961091

### Sonochemistry and Sonoluminescence

**18-29 Aug 1997 : Leavenworth, WA, USA**

**Contact:** Dr. La Crum, University of Washington at Seattle,  
Dept. of Acoustics & Electromagnetics,  
Applied Physics Laboratory,  
1013 NE 40th Street Seattle, WA 98105, USA  
(Fax: 206 685 8621/e-mail: lac@apl.washington.edu) 960422

## ENVIRONMENTAL AND EARTH SCIENCES

### Buoyant Convection in Geophysical Flows

**17-27 Mar 1997 : Karlsruhe, Germany**

**Contact:** Prof. E.J. Plate, Universitaet Karlsruhe,  
Inst. für Hydrologie & Wasserwirtschaft,  
Kaiserstrasse 12, 76128 Karlsruhe, Germany  
(Fax: 49 721 66 13 29) 960397

### Soils and Global Change: Carbon Cycle,

#### Trace Gas Exchange and Hydrology

**16-27 Jun 1997 : Bonas, Toulouse, France**

**Contact:** Dr. E.A. Holland, National Center for Atmospheric  
Research, Atmospheric Chemistry Division,  
1850 Table Mesa Drive, Boulder, CO 80303, USA  
(Fax: 303 497 1477/e-mail: eholland@ncar.ucar.edu) 951136

### Modeling the Earth's Climate and its Variability

**1-25 Jul 1997 : Les Houches, France**

**Contact:** Dr. S. Joussaume, DSM,  
Labo de Modélisation du Climat & Envir., Orme des Merisiers,  
Bat. 709, CE Saclay, 91191 Gif-sur-Yvette, France  
(Fax: 1 69 08 77 16/e-mail: sylgouse@saclay cea.fr) 960400

### Ice Physics in the Natural and Endangered Environment

**15-27 Sep 1997 : Maratea, Italy**

**Contact:** Prof. J.G. Dash, University of Washington,  
Box 351560, Physics Dept FM 15,  
Seattle Washington 98195, USA  
(Fax: +1 206 543-9523/e-mail: dash@diral.phys.washington.edu)  
961042

## APPLIED SCIENCES AND ENGINEERING

### Verification of Digital and Hybrid Systems

**26 May-7 Jun 1997 : Antalya, Turkey**

**Contact:** Prof. K. Inan, Middle East Technical University,  
Electrical & Electronics Engineering Dept., Ankara, Turkey  
(Fax: 90 312 2101 411/ e-mail: Inan@srcd.metu.edu.tr) 951119

### Applications of Superconductivity

**8-20 Jun 1997 : Loen, Norway**

**Contact:** Dr. H. Weinstock, Air Force Office of Scientific  
Research, AFOSR/NE, 110 Duncan Avenue, Ste B115,  
Bolling AFB, DC 20332-0001 USA  
(Fax: +1 202 767 4986/e-mail: weinstoc@afosr.af.mil) 961056

### Applied Computational Electromagnetics:

#### State of the Art and Future Trends

**23 Jun-5 Jul 1997 : Samos, Greece**

**Contact:** Prof. N.K. Uzunoglu, National Technical University of  
Athens, Dept. of Electrical & Computer Engineering,  
9 Iroon Polytechniou Str., 157 73 Zografou, Athens Greece  
(Fax: 301 772 3557/e-mail: pragos@naxos.esd.ece.ntua.gr)  
961049

### Computational Models of Speech Pattern Processing

**7-19 Jul 1997 : St. Helier, Jersey, UK**

**Contact:** Mr. K.M. Ponting, Defence Research Agency,  
Speech Research Unit, Room EX-7, St. Andrews Rd.,  
Great Malvern, Worcs WR14 3PS, UK  
(Fax: 44 1684 89 51 03/e-mail: ponting@signal.dra.hmg.gb) 951127

### Computational Logic

**29 Jul-10 Aug 1997 : Marktoberdorf, Germany**

**Contact:** Prof. M. Broy, Technische Universität München,  
Institut für Informatik, 80290 Munich, Germany  
(Fax: 89 289 28183/e-mail: broy@informatik.tu-muenchen.de)  
960427

### Generalization in Neural Networks and Machine Learning

**4-15 Aug 1997 : Cambridge, UK**

**Contact:** Prof. C.M. Bishop, Aston University,  
Dept. of Computer Science & Applied Maths,  
Birmingham B4 7ET, UK  
(Fax: +44 121 333 4586/e-mail: C.M.Bishop@aston.ac.uk) 961022

### Nonlinear Model Based Process Control

**10-20 Aug 1997 : Antalya, Turkey**

**Contact:** Prof. R. Berber, University of Ankara,  
Chemical Engineering Dept., Tandogan, Ankara 06100, Turkey  
(Fax: 90 312 223 2395/e-mail: ridvan@servis.net.tr) 960294

### Workflow Management Systems and Interoperability

**12-22 Aug 1997 : Istanbul, Turkey**

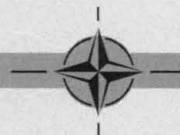
**Contact:** Prof. A. Dogac, Middle East Technical University,  
Dept of Computer Engineering, 06531 Ankara, Turkey  
(Fax: 90 312 2101259/e-mail: asuman@srcd.metu.edu.tr) 960995

## SOCIAL AND BEHAVIOURAL SCIENCES

### Game Theory and Resource Allocation: the Axiomatic Approach

**21-31 Jul 1997 : Stony Brook, USA**

**Contact:** Prof. W. Thomson, University of Rochester,  
Department of Economics, 202 Harkness Hall,  
Rochester, NY 14627 USA  
(E-mail: wth2@dbi.cc.rochester.edu) 960471



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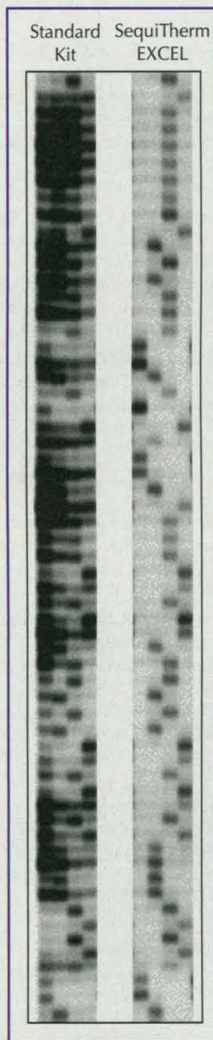
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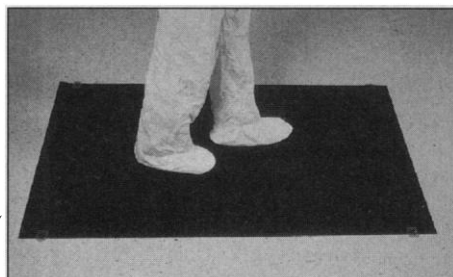
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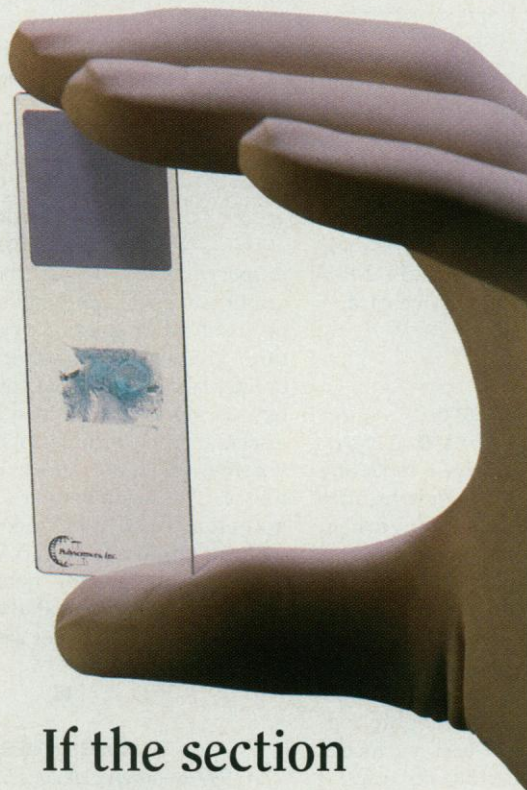
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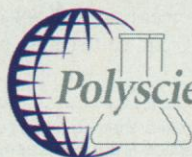
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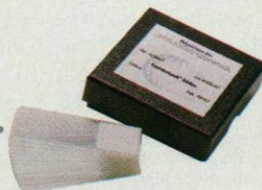
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New Mexico Institute of Mining and Technology has a vacancy for a **VICE PRESIDENT FOR RESEARCH** effective August 15, 1997. The Vice President is the chief official of the Research Division responsible for the encouragement, leadership, and support of research at the Institute and for the administrative and policy making activities of the Division. The Vice President for Research reports to the President of the Institute. The Institute seeks a dynamic research leader with demonstrated innovative administrative ability, strong interpersonal skills, and a firm commitment to affirmative action. The successful candidate must have an earned doctorate in a scientific or engineering field with an established record of scientific or engineering research experience including demonstrated ability to obtain research funding. The candidate must have an accomplished record of research and publications for appointment as a tenured professor within a department of the Institute. Leadership and experience in nonacademic research (for example, national laboratories, industry, private research foundations, etc.) will be considered to be strong assets.

The Vice President for Research will offer dynamic research and administrative leadership to stimulate, coordinate, and provide support for research at New Mexico Tech; act as an advocate for research within the Institute; serve as director of the Geophysical Research Center; manage the research support functions of the Research Division; serve as the Institute's representative and on-campus administrator for the Waste-Management Education and Research Consortium; act as an external advocate and representative for New Mexico Tech's research activity; serve as mentor to new faculty to help them establish their research programs at the Institute; strongly encourage diversity and affirmative action; identify research opportunities and actively encourage development of interdisciplinary research at the Institute; and ensure that high quality proposals are submitted by the Institute. Submit a résumé, transcripts, and names, addresses and telephone numbers of three references. Email applications not acceptable. Submit application material to: **New Mexico Institute of Mining and Technology, Human Resources, Wells Hall Box C-120C, Socorro, NM 87801.** For information about New Mexico Tech, see web site: <http://www.nmt.edu/>. *Affirmative Action/Equal Opportunity Employer.*

The College of Pharmacy, Western University of Health Sciences invites applications for two **TENURE-TRACK POSITIONS** in medicinal chemistry/pharmacology, beginning July 1, 1997. Applicants should have a strong commitment to innovative teaching methodologies, a desire to participate in the graduate program, and ability to establish an extramurally funded research program. Interested individuals should send a letter of interest; a full curriculum vitae; and the names, addresses, and telephone numbers of at least three individuals who may be contacted for a confidential reference to: **Krishna Kumar, Ph.D., Chair, Search Committee, Western University of Health Sciences, College Plaza, 309 East 2nd Street, Pomona, CA 91766-1889.** Telephone: 909-469-5554; FAX: 909-469-5501. Email: [kkumar@cyberg8t.com](mailto:kkumar@cyberg8t.com). *Western University is an Affirmative Action/Equal Opportunity Employer and actively seeks applications from women and minorities.* Western University of Health Sciences is committed to the education and professional development of generalist and primary care oriented health professionals. Successful applicants for this position will be expected to contribute to the advancement of this mission by ensuring humane and caring service to people from all walks of life.

### ENTOMOLOGIST

The National Research Initiative Competitive Grants Program of the USDA seeks a qualified scientist to serve as **PROGRAM DIRECTOR** for grants administration in the area of entomology and biologically based pest management. Candidates must have an advanced degree with major study in entomology or a closely related field. It is preferable that the candidate have a Ph.D. or equivalent specialized experience.

Closing date: February 24, 1997. For information on the position, contact: **Dr. Ed Kaleikau, Division Director, National Research Initiative Competitive Grants Program, CSREES/USDA, STOP 2241, 1400 Independence Avenue S.W., Washington, DC 20250-2241.** Telephone: 202-401-1901; Email: [ekaleikau@recusda.gov](mailto:ekaleikau@recusda.gov). For information on application procedures and forms, contact: **Ms. Laura Farrior, Personnel Management Specialist, Telephone: 202-720-5770.** *USDA is an Equal Opportunity Employer.*

## POSITIONS OPEN

### FACULTY POSITIONS SCHOOL OF EARTH AND ATMOSPHERIC SCIENCES Georgia Institute of Technology

The Georgia Institute of Technology invites applications and nominations for up to five tenure-track **FACULTY POSITIONS** in geophysics, geochemistry, atmospheric chemistry, and atmospheric dynamics. Applicants must have a Ph.D. and be quantitative geoscientists with broad interests in earth systems science. Successful candidates will develop strong independent research programs and participate in both the graduate and undergraduate education programs. These positions will become available in 1997-98 and 1998-99. Candidate evaluations will begin in late January 1997 and continue until the positions are filled. We are searching for candidates at all levels in the following areas: **GEOPHYSICS**—global seismology, geodynamics, and other areas of geophysics that complement our existing programs; **GEOCHEMISTRY**—chemical hydrology of surficial aquatic systems, soils and groundwaters; theoretical geochemistry and mineralogy; and the record of earth surface processes; **EXPERIMENTAL ATMOSPHERIC CHEMISTRY**—especially individuals involved in the development and application of advanced technology instrumentation for airborne field measurements of tropospheric trace gases and aerosols to support current local, regional, and global modeling efforts; **ATMOSPHERIC DYNAMICS, CLIMATE, PALEOCLIMATE**—especially candidates involved with upper atmospheric modeling of trace gases, radiation balances and climate dynamics. Applicants should submit a résumé, selected reprints, a statement of professional research and teaching goals, plus the names, addresses, Email and telephone numbers of three persons whom we may contact for references to: **Philip N. Froelich, Chair, School of Earth and Atmospheric Sciences, Georgia Institute of Technology, Atlanta, GA 30332-0340.** View our web site at: <http://gatech.edu/eas/eas.html>. *Georgia Tech is an Equal Opportunity/Affirmative Action Employer and a Unit of the University System of Georgia.*

### DIRECTOR, CELL IMAGING FACILITY

The Department of Cell and Molecular Biology at Northwestern University Medical School is seeking a **DIRECTOR** of a state-of-the-art cell imaging facility. The facility, a medical school core facility, is equipped to carry out the entire spectrum of light and electron optical techniques on live or fixed material. The facility also houses several computer graphics and Silicon Graphics workstations. The responsibilities of the position include managing the facility; providing training in their use to Medical School faculty, staff and students; overseeing the facility staff; providing investigators with guidance in all aspects of experimental design and interpretation of data; and determining the requirements necessary for maintaining the facility as a state-of-the-art resource for cell imaging. The successful candidate should have a Ph.D. degree and research experience with sophisticated microscopical techniques and digital acquisition and analysis.

Send a complete curriculum vitae including full bibliography, a statement of research experience, a statement indicating experience with cell imaging, and three letters of recommendation to: **Dr. Rex Chisholm, Vice Chair, Department of Cell and Molecular Biology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.**

*Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer.*

### DIRECTOR, GI RESEARCH

Winthrop-University Hospital, a 591-bed teaching hospital affiliated with the State University of New York at Stony Brook School of Medicine, has a position available for a **DIRECTOR** of GI Research in the Division of Gastroenterology, Hepatology, and Nutrition. The position requires a Ph.D. in physiology and pharmacology with a minimum of two years of postdoctoral experience with expertise in electrophysiology (specifically patch-clamp technique) and general background in molecular biology. There is a fully equipped and funded basic science laboratory including full-time technical support. The major focus of the laboratory is to study intestinal transport in inflammatory bowel diseases. The hospital is centrally located on Long Island, approximately 30 minutes from Manhattan and one block from the Long Island Railroad. Please send curriculum vitae and three references to: **Employment Manager, Human Resources Department, Winthrop-University Hospital, 259 First Street, Mineola, NY 11051.** *Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.*



## FETZER INSTITUTE FELLOWSHIP IN THEORETICAL BIOELECTROMAGNETICS

The Fetzer Institute announces the availability of a new two-year postdoctoral research fellowship in theoretical bioelectromagnetics. The purpose of the fellowship is to strengthen the theoretical understanding of the interactions between weak electromagnetic fields and biological systems. Particular emphasis will be placed on the application of principles of nonlinear dynamics to the proposed research.

**ELIGIBILITY:** Candidates must hold a Ph.D. or equivalent degree in an appropriate discipline. In order to foster collaboration between theoreticians and experimental scientists, candidates must also have made arrangements to work in the laboratory of a senior scientist who conducts experimental research.

**APPLICATION:** Candidates must submit a letter of application stating their research interest and presenting an outline of a research plan. The letter must be no longer than three pages. A C.V. including authored publications must accompany the letter. Candidates must also arrange to have a senior member of the chosen laboratory submit a letter directly to the Fetzer Institute that includes a description of the resources available to the candidate. In addition the candidate must have two supporting letters submitted directly to the Fetzer Institute by senior scientists familiar with the candidate's work. Send all materials to: **BIOELECTROMAGNETICS FELLOWSHIP, THE FETZER INSTITUTE, 9292 WEST KL AVENUE, KALAMAZOO, MICHIGAN 49009-9398.**

**DEADLINE:** Applications must be received by the Fetzer Institute by April 15, 1997. Applications arriving after this date will not be accepted. The Institute will notify the successful candidate by June 30, 1997.

**TERMS:** The tenure of the fellowship begins in the fall of 1997 and lasts for two years. The fellowship provides a salary commensurate with the candidate's experience. The fellowship also includes an allowance for research expenses and travel. The Fetzer Institute does not provide indirect costs to the host institution.

FETZER INSTITUTE



## DIRECTOR

University of Missouri Research Reactor (MURR)

The University of Missouri-Columbia announces the search for a director of the research reactor. The MURR is a multidisciplinary research center of national importance. MURR has a three-fold mission of promoting research in neutron-related science and engineering, providing an educational opportunity for students, and providing irradiation and isotope production services. The scientific programs at MURR span a broad spectrum of research disciplines and techniques and include archaeometry, neutron and gamma-ray scattering, neutron interferometry, neutron activation analysis, human and animal nutrition, epidemiology and immunology, radiation effects, therapeutic radiopharmaceuticals, health physics and nuclear engineering. These programs are conducted by both research scientists at MURR and faculty from more than 30 departments.

MURR operates a 10 MW light water moderated reactor that is operational more than 90% of real time. The MURR currently operates with a total annual budget of \$7M with more than 100 research scientists and professional staff. MURR has a strong service program providing irradiation services that currently generates \$3.6M per year. The university is planning an 80,000 sq. ft. laboratory addition and is seeking commercial collaborators to develop additional MURR programming.

The successful candidate will have a nationally recognized scientific research record; demonstrated leadership and strong budget management capability. The director will be responsible for the research, the service functions, and the operations of the MURR. This will require interaction with faculty and staff plus scientists from other institutions, national laboratories and industry. In addition, the director will be expected to expand the funding base with granting agencies and industry. The director reports to the associate provost. A tenured appointment in an appropriate academic department is anticipated. Salary will be competitive. Applications from women and minorities are especially encouraged. Candidates should send a curriculum vitae along with a list of five references to: **Dr. Allan W. Jones, Search Committee Chair, Department of Physiology, MA415 Medical Science Building, Columbia, MO 65212.**

An evaluation of applications will begin April 15, 1997, and will continue until the position is filled.

*The University of Missouri is an Equal Opportunity Employer.*

## POSTDOCTORAL POSITION

### Cold Spring Harbor Laboratory

A postdoctoral position is available immediately to study method development of protein structural analysis. Highly motivated individuals with a strong background in analytical chemistry, protein chemistry and biochemistry are invited. Experiences inorganic synthesis, HPLC and mass spectrometry are desirable.

Please send curriculum vitae, summary of research interest and three letters of recommendation to: **Dr. Ryuji Kobayashi, Cold Spring Harbor Laboratory, 1 Bungtown Rd, Cold Spring Harbor, NY 11724. Email: kobayash@cshl.org; FAX: 516-367-8873.**

Equal Opportunity Employer M/F



## CAREERS FOR WOMEN IN SCIENCE

*Advertising Supplement*

**21 February 1997**

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## GRANTS FOR INTERNATIONAL JOINT RESEARCH IN THE AREAS OF MATERIALS AND GLOBAL ENVIRONMENT

The New Energy and Industrial Technology Development Organization (NEDO), a Japanese governmental implementing agency supervised by the Ministry of International Trade and Industry (MITI) of Japan, has been carrying out an International Joint Research Program since 1988. This program aims to contribute to the enhancement of the international level of industrial technology as well as to the advancement of international exchange by *supporting international joint research teams* which conduct superior research. In addition to supporting international joint research teams which conduct original and innovative *basic research in the materials area*, international joint research teams which conduct *practice research in the global environment area* will be provided with grants in FY 1997. The program in the global environment area will be conducted jointly with the Research Institute of Innovative Technology for the Earth (RITE).

Research grants will be provided to "International Joint Research Teams" which fulfill the following main requirements:

1. Each team, in principle, must be composed of four or more researchers;
2. Each team must consist of researchers of two or more different nationalities;
3. The research organizations where the team members' major activities take place must be located in two or more countries;
4. Each team must appoint a research coordinator and an accounting coordinator. The accounting coordinator must be responsible for accounting matters and function as the liaison between the team and NEDO.

The accounting coordinator's organization and research site must be located in Japan, and he/she must be able to communicate with NEDO in Japanese about all accounting matters. The research coordinator can also hold the post of accounting coordinator.

FY 1997's program is shown below.

Research Area	Field of Research	Amount of Each Grant	Number of Themes to be Adopted	Recipients of Applications
Materials	<b>Basic research</b> concerning the investigation, elucidation and the practical use of materials	about 30,000,000 yen in FY 1997	4 themes	NEDO (Note a.)
Global Environment	<b>Practical research</b> concerning the production, generation and use of oil-alternative energy (excluding electric power generation technologies) which contributes to the conservation and improvement of the global environment	about 30,000,000 yen in FY 1997	1 theme	RITE (Note b.)

\*International joint research teams which conduct research in the energy area and the global environment area (basic research) will not be provided with grants in FY 1997.

### How to Receive and Send Application Forms

For those who wish to receive application forms, please make inquiries at NEDO or RITE depending on your research field. Please send your application forms to the same organization where you made your inquiry.

#### Note a. Materials area

International Joint Research Division,  
Industrial Technology Department  
New Energy and Industrial Technology Development Organization (NEDO)  
Address : PO Box 1151, 29F, Sunshine 60 Bldg.  
3-1-1 Higashi-Ikebukuro, Toshima-ku, Tokyo, 170 Japan  
Phone No. : 81-3-3987-9357  
Telefax No.: 81-3-3981-1536

#### Note b. Global environment area

Research Proposals Reception Section,  
Research Planning Department  
Research Institute of Innovative Technology for the Earth (RITE)  
Address : 9-2 Kizugawadai Kizu-cho Soraku-gun,  
Kyoto, 619-02 Japan  
Phone No. : 81-774-75-2302  
Telefax No.: 81-774-75-2314

Please be informed that the amount of each grant and the number of themes to be adopted may be changed, and that this grant program is subject to government budget approval.

A research team may submit an application a maximum of two times for a grant on the same research plan.

The application period is from January 22, 1997 to April 8, 1997.

No applications will be accepted later than April 8.

**ATTENTION:** If there are some discrepancies in a submitted application—for example, it does not follow the Application Guidebook or the research contents are different from the proposed research area—it will be considered invalid.



## NATIONAL INSTITUTES OF HEALTH

### NATIONAL INSTITUTE OF DENTAL RESEARCH DIVISION OF EXTRAMURAL RESEARCH

The Division of Extramural Research, the organizational unit of the National Institute of Dental Research (NIDR) responsible for promoting and managing all dental research grants and cooperative agreements, training and career development awards, and research contracts for the NIDR, invites nominations and applications for a Health Scientist Administrator or Medical Officer position in the scientific program area of Chronic Disabling Diseases-Neuropathies and Neurodegenerative Diseases.

Applicants should have a D.D.S., M.D., Ph.D. degree (or equivalent doctoral degree), in a science related to health, dentistry and/or medicine; accomplishments in neurology, neurobiology, and/or neuropathies and neurodegenerative diseases as well as demonstrated ability in health science administration. Activities include planning and implementing research initiatives through grants, contracts, and/or cooperative agreements and to provide administrative and scientific oversight of proposals and awards. The position is available immediately.

Appointment in the Federal Civil Service at a GS-12, GS-13, GS-14, or in the Commissioned Corps of the U.S. Public Health Service may be appropriate. Salary ranges from \$45,939 to \$83,922. *U.S. citizenship is required.* Grade and salary is commensurate with qualifications and experience.

Applicants may submit a curriculum vitae and bibliography, resume, Optional Application for Federal Employment, OF-612 (available in any Federal Personnel Office) or any other written format you choose.

Full qualification requirements and further information including knowledge, skills and abilities (KSAs) for this position can be obtained from:

**Ms. Faye Harbrant**  
**Personnel Management Specialist**  
**National Institute of Dental**  
**Research**

**National Institutes of Health**  
**31 Center Drive, MSC 2290**  
**Building 31, Room 2C23**  
**Bethesda, MD 20892**  
**(301) 496-6971**

Application materials must be postmarked and sent by the closing date of April 12, 1997.  
*NIH is an Equal Opportunity Employer*

## RESEARCH

## Process Development

RPI, a leader in the development of ribozyme-based pharmaceutical and agricultural products, is currently seeking two experienced scientists to join our Oligonucleotide Chemistry group at our facility in Boulder, Colorado:

### SCIENTIST, BS/MS

We seek a BS/MS Scientist with 4+ years of broad experience with synthetic oligonucleotides, including synthesis, purification and post-synthetic derivatization. The ability to multitask is an absolute requirement. Previous experience in the biotechnology field would be an advantage. Please refer to Job #085.

### SCIENTIST, Ph.D.

We also seek a Ph.D. Scientist who will identify and develop novel large-scale oligonucleotide purification techniques. Qualifications include a Ph.D. in bio-polymer or organic chemistry and 2+ years of related industrial experience. Hands-on experience in the development of various chromatographic methods (RP, IEX, HIC) is required. The candidate will also possess excellent communication skills together with the ability to work in a fast-paced environment. Please refer to Job #086.

We offer a competitive salary and benefits package, including a stock option plan and a flexible benefits program. For consideration, please send a Curriculum Vitae and the names of three references to:

Ribozyme Pharmaceuticals, Inc., 2950 Wilderness Place (refer to Job #), Boulder, CO, 80301, fax: (303) 449-6995. E-mail: jobs@rpi.com.

No phone calls please. We are an equal opportunity employer.



## Engineers/Research Scientists

## SPECTR<sub>X</sub>

SpectRx, Inc., an Atlanta-based leader in developing non-invasive and minimally invasive medical diagnostic systems is seeking several highly motivated creative individuals for a multi-disciplinary R&D program. Engineers and scientists experienced in mechanical wave propagation through tissues, non-imaging ultrasound applications, simulation and modeling of mechanical and fluid motion in tissues, electro-optical diagnostic systems and computer modeling, optical design, and execution of *in vitro* and *in vivo* experiments are invited to apply. Previous medical device development experience preferred. SpectRx offers significant long-term career opportunities. Send resumes to **Dr. Dail L. Fields, SpectRx, Inc., 6025A Unity Drive, Norcross, GA 30071** or E-mail to **jobs@SpectRx.com**.

No Telephone Calls Please

*Equal Opportunity Employer*

See our Website at **www.spectrx.com**

### ENDOWED CHAIR IN ICHTHYOL- OGY. Search Reopened.

The Rosenstiel School of Marine and Atmospheric Science (RSMAS), University of Miami, seeks an ichthyologist to fill the Maytag Chair. Established in 1957, the Chair is a fully endowed position in the broad field of ichthyology. Candidates must have an established reputation in research and an excellent record of publication, so as to meet the standard for appointment at the academic rank of Full Professor. Candidates from all areas of specialization will be considered. Responsibilities include a strong externally funded research program, directing graduate students, and teaching graduate courses. Southern Florida is a center of recreational fishing, and it is desirable that the interaction of the Chair with this community will continue. Applicants should forward curriculum vitae, a statement of research and teaching interests, and the names of references. Since this is a continuing search applicants considered earlier will not be reconsidered. Send all materials to: **Professor Samuel Snedaker, Search Committee Chair, Division of Marine Biology and Fisheries, RSMAS, University of Miami, 4600 Rickenbacker Cswy, Miami, FL 33149-1098**, for a target date of 15 March 1997. *The University of Miami is an Equal Opportunity/Affirmative Action Employer.*



**Agricultural Research Service**  
**United States Department of Agriculture**

ARS is seeking an interdisciplinary Research Molecular Biologist/Research Plant Pathologist/Zoologist, GS-401/434/410-11/12 in the Nematology Laboratory, Plant Sciences Institute, Beltsville Agricultural Research Center. Salary is commensurate with experience (GS-11: \$38,330-\$49,831 per annum; GS-12: \$45,939-\$59,725 per annum). The position involves planning and conducting independent and cooperative research primarily on the molecular biology and molecular genetics of plant-parasitic nematodes and host-parasite relationships. In addition to the basic educational requirements, applicants must demonstrate 1) knowledge of the principles, methods, techniques and procedures of molecular biology, and of plant pathology, genetics, plant nematology, or parasitology; 2) ability to use molecular techniques (including gene cloning, DNA sequencing, etc.) in research involving plant-parasitic nematode biology or nematode interactions with host plants; 3) knowledge of plant-parasitic nematodes and their relationship to plant diseases; and 4) ability to design, plan, and conduct research and publish results. For information on the research program and/or position, contact **Dr. David J. Chitwood, 301-504-5660**. For information on application procedures/forms, please call **Veronica Olaaje** for a copy of the announcement on **301-344-1014**. Applications in response to this advertisement should be marked **ARS-D7B-049/B-7-03**.

*USDA is an Equal Opportunity Employer*

#### RESEARCH SCIENTISTS INSTRUMENT DEVELOPMENT

The BioCurrents Research Center at the Marine Biological Laboratory has openings for two positions. The successful candidates will join an interdisciplinary NIH research resource focused on the use of self-referencing electrodes in the study of biomedical problems involving ion movement and molecular transport. Both appointees will be expected to complement the Center expertise in cell biology and electronics and to assist with visiting investigators.

**1. Staff Scientist**, as an assistant/associate scientist (**Assistant/Associate Professor** level) available immediately. We are seeking an investigator to contribute expertise in instrumentation, signal extraction and data analysis. The successful applicant will take immediate responsibility for a current research program into the detection of biological voltages in air using Kelvin probes. Experience required: Should have a Ph.D. or equivalent and a strong postdoctoral background in instrument design and development. Duration: The position is open immediately and funded for the current Center cycle (11/30/99). Continued support is subject to performance and funding success. Salary is up to \$50,000 per annum dependent on qualifications.

**2. Research Associate (Postdoctoral)** or an Assistant Scientist.

Available from June 1, 1997. We seek an individual to continue the development of self-referencing voltammetric/polarographic electrodes currently being used for the detection of oxygen flux near single cells. Experience required: Ph.D. or equivalent and experience with electrochemistry and instrumentation preferably in biological systems. Duration: From June 1, 1997 and funded for the current Center cycle (through 11/30/99). Continued support is subject to performance and funding success. Salary: Up to \$40,000 per annum dependent on qualifications.

**Deadline and application:** Both positions are open until a suitable applicant is identified. Please apply, with curriculum vitae, current research interests and names of three referees, to **Human Resources, MBL, 7 MBL St., Woods Hole, MA 02543; 508-289-7422; email: resume@mbledu**. For further information on the BioCurrents Research Center please contact the **Director, P.J.S. Smith; email: psmith@mbledu**. See also **www.mbledu** and **www.ncrr.nih.gov**.

*Equal Opportunity/Affirmative Action/Non-smoking workplace*

## DELIVERING ON THE PROMISE TO ENHANCE PEOPLE'S LIVES

At SmithKline Beecham Pharmaceuticals, our Microbiology Research Department is focused on the discovery of novel anti-microbial agents. Research areas include microbial pathogenesis, drug resistance and new molecular mechanisms essential for bacterial infection, growth and progression of disease. In order to continue the process of strengthening our total commitment to infectious disease research, we are seeking scientists eager to join a technologically advanced team and facility to help enhance our research in microbial disease.

Opportunities exist at all levels of expertise including PhD, postdoctoral fellow, MS and BS. We are seeking candidates with expertise in microbial genetics, molecular biology, biochemistry and animal disease models. Areas of research interest include microbial DNA replication, cell wall and membrane biosynthesis, amino acid biosynthesis, transcription, translation, signal transduction, and the analysis of protein:protein interaction. This highly stimulating, challenging environment provides scientists with numerous opportunities to collaborate with leading academic departments and world-renowned experts in their respective disciplines.

Located in a state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers an excellent compensation/benefits/relocation package and a stimulating work environment in which to grow and excel. For confidential consideration, please forward your resume to: SmithKline Beecham Pharmaceuticals, Job Code DB-MICRO, P.O. Box 2645, Bala Cynwyd, PA 19004. For more information on SmithKline Beecham, visit our Website at <http://www.sb.com>. We are an Equal Opportunity Employer, M/F/D/V.



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*Howard Hughes Medical Institute*

## Manager of Electronic Communications

The Howard Hughes Medical Institute, the nation's largest private philanthropic organization, conducts scientific research in leading academic medical centers throughout the United States. Currently, we have an opening for a **Manager of Electronic Communications** to guide the continuing development of the Institute's website at our headquarters in **Chevy Chase, MD**.

Responsibilities include providing leadership and acting as an in-house resource in the use of new electronic technologies and techniques to enhance the Institute's communications efforts; maintaining a state-of-the-art understanding of website practices, including graphic presentation, innovative uses, and web marketing techniques; establishing policies and procedures; consulting with departments in their development of budgets for web activities; and developing and managing a group of outside consultants and vendors that provides services to the Institute.

Requirements include a graduate degree (Ph.D. preferred) or equivalent combination of experience and education; four years experience in a large research or educational organization with responsibility for web-related and other computer based activities; and broad knowledge of the following: browsers, web databases, database design, web development tools, video web applications, graphics design tools, and other web methodologies and techniques. Demonstrated editorial, technical, graphic and managerial skills are also necessary. Interest in and knowledge of biology preferred.

HHMI offers a competitive salary and excellent benefits package. Please send your resume and salary requirements to:  
**HHMI, Attn: Human Resources Department, 4000 Jones Bridge Road, Chevy Chase, MD 20815-6789. EOE.**

<http://www.hhmi.org>





# SOUTHWESTERN

## DIRECTOR OF GENOME OPERATIONS Genome Science and Technology Center

The McDermott Center for Human Growth and Development at UT Southwestern is pleased to announce a search for a **Director of Genome Operations** in its Genome Science and Technology Center (GESTEC). The GESTEC consists of 40-50 faculty and staff members organized as Mapping, Sequencing, M13, Automation, Resources and Informatics laboratories and is located in state-of-the-art research laboratories in the new North campus facility of UT Southwestern.

The mission of this Center is to develop 100 mb/year of DNA sequencing, develop automation, robotics and informatics tools to support high-throughput operations in sequencing and data analysis, to sequence 10-20% of the human genome over the next 7 years, and to develop approaches to post-genome biology and medicine.

We seek an outstanding individual experienced with large-scale genomic M13 and plasmid shotgun sequencing, high throughput production sequencing, informatics, sequence assembly, physical mapping and sequence annotation and analysis. Experience or background in automation and robotics and the ability to interact with a multidisciplinary team of biologists, physicists, engineers and computer scientists is necessary. We are particularly interested in candidates with experience in large-scale operations for human genomic sequencing and have an interest in a career in academic genomics and a broad vision for the future of biology and medicine in the post-genome era. Prior supervisory experience, good interpersonal skills, and the ability to work within a team environment are a must for the selected candidate. The successful individual would be appointed at the faculty level to a basic science or clinical department (such as Internal Medicine, Biochemistry, Bioengineering, Pathology, Molecular Biology and Oncology, or other) and would supervise operations of physical mapping, DNA sequencing, library preparation and informatics.

The successful candidate would have a Ph.D. and/or M.D., postdoctoral training in genetics, molecular genetics, molecular biology, bioengineering or a related discipline, and experience in genome level research and high-throughput production DNA sequencing. Additional information is available at <http://mcdermott.swmed.edu>.

Interested individuals should send curriculum vitae and at least three professional references to: **Susie Hayes, Executive Assistant to the Chairman, McDermott Center for Human Growth and Development, THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER AT DALLAS, 5323 Harry Hines Blvd., Dallas, TX 75235-8591, Fax (214) 648-1666.**

THE UNIVERSITY OF TEXAS  
SOUTHWESTERN MEDICAL CENTER  
AT DALLAS

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St. Jude Children's  
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## Postdoctoral Fellow and Associate Investigator Positions

Two positions available immediately to investigate the response of leukemic cells to treatment therapy, and determine whether detection of residual disease during therapy is prognostic for survival and/or relapse in childhood leukemia. Experience in molecular biology, PCR, and immunoglobulin/TCR rearrangements is desired. Ph.D. required for postdoctoral position, Ph.D. preferred for associate investigator position. Send curriculum vitae, statement of research interests and the names and addresses of three references to **Dr. Geoffrey Neale, Department of Virology and Molecular Biology, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105. e-mail: [geoffrey.neale@stjude.org](mailto:geoffrey.neale@stjude.org). Affirmative action/equal opportunity employer.**



The Biotechnology Group in DuPont Agricultural Products in Wilmington, Delaware, has openings for outstanding Ph.D. level scientists at principal investigator (senior and starting) and postdoctoral levels with expertise in molecular biology, biochemistry, physiology, or monocot or legume tissue culture to work in the Quality Grains and Crop Protection areas. The Quality Grains group works on lipid, carbohydrate, and protein biosynthesis to create grains with added value. Corn and soybean lines from this work are currently on the market or in advanced product development. The Crop Protection groups use biotechnological approaches to control diseases and pests and to discover new crop protection chemicals. These groups work closely with an active genomics group which includes a large EST sequencing program with advanced bioinformatics capability and a high throughput molecular breeding program. Candidates can expect to work in a highly interactive fashion in a multidisciplinary environment. Wilmington, Delaware is located in the attractive Brandywine Valley midway between New York City and Washington, DC, 25 minutes southwest of Philadelphia. *DuPont is an equal opportunity employer.*

The Biotechnology group is also seeking highly motivated and creative scientists to join an active program in the area of genomic sciences. Individuals will work in programs that are using emerging genome technology to isolate and identify genes from plants, plant pests, and industrially important microorganisms. Programs include a large scale EST program, genetic and physical mapping, high density gene expression analysis, protein expression, and trait functionality assessments. Positions are open for principal investigators (Ph.D.) at starting and senior levels, and for postdoctoral associates.

To apply, candidates may either fax, email, or mail a resume to:

**DuPont Company, Human Resources,  
Agricultural Products Experimental Station,  
Bldg. 402, Room 3206, Wilmington, DE 19880  
FAX: 302-695-8514, Email: [hrgaprod@eavax.dnet.dupont.com](mailto:hrgaprod@eavax.dnet.dupont.com)  
An Equal Opportunity Employer**

## PH.D. SENIOR SCIENTIST BIOANALYTICAL SERVICES

**PANLABS, INC.**, a leading contract research provider located in Bothell, Washington (Seattle area), looking for highly motivated individual with strong background in pre-clinical ADME type studies to help develop a bioanalytical chemistry group focusing on support for drug discovery. Working knowledge of pharmacokinetics and pharmacodynamics is required. Candidate will have a demonstrated performance in the areas of designing and implementing early evaluation studies, and be expected to take a leadership role with lab work and be responsible for designing ADME type studies in collaboration with bioanalytical staff. Work will include comparative *in vitro* and *in vivo* studies; including interspecies comparisons, early bioavailability and PK studies (non-GLP and GLP); ability to coordinate ADME studies; excellent oral and written communication skills; Ph.D. in drug metabolism or related field; experience in use of ADME for drug related studies; background experience with analytical methods such as HPLC, LC-MS. Submit resume to:



PANLABS

**PANLABS, INC.  
A Subsidiary of MDS  
Attn: Human Resources #97-2  
11804 North Creek Parkway South  
Bothell, WA 98011  
Fax: 206-487-3787  
Equal Opportunity Employer**

**Tenure-Track Position  
Assistant Professor  
Equivalent**

**Cell Cycle Regulation**

The National Institute of Child Health and Development has a position available to develop an independent research program using molecular, cellular, and/or genetic approaches to study cell cycle regulation. Of particular interest are applicants studying molecular mechanisms that link cell differentiation, proliferation, or death to the cell cycle. A curriculum vitae, bibliography, three letters of recommendation, and a two-page statement of research interests and goals should be submitted by March 15, 1997. Send to: **Chair, Cell Biology and Metabolism Branch Search Committee, NICHD, c/o Susan Jordan, Building 18T, Room 101, 18 Library Dr. MSC 5430, Bethesda, MD 20892-5430.**

**GRANT**

**NEUROSCIENCE  
The EJLB Foundation  
Scholar Research Programme**

The EJLB Foundation awards each year up to six (6) grants for research projects in all areas of neuroscience that pertain directly or indirectly to schizophrenia and mental disease.

Eligibility for such grants is restricted to young scientists who are pursuing an independent research career and have given evidence of having significant potential. It is also a requirement that these scientists (i) have earned an M.D. and/or a Ph.D. degree; (ii) have completed their post-graduate training; and (iii) have been admitted after **June 15, 1992** as faculty members of a leading university, or an affiliated non-profit research center, in Canada or elsewhere in the world.

Each grant of CAN\$300,000 is disbursed over three (3) years and is non-renewable. The next closing date for receipt of letters of intent is **May 30, 1997.**

Full details regarding this programme and required letter of intent forms may be obtained from:

**The EJLB Foundation  
1350 Sherbrooke Street West  
Suite 1050  
Montréal, Québec  
CANADA H3G 1J1  
Fax (for inquiries only 514-843-4080).**

# Be at the forefront

...of drug development research with the DuPont Merck Pharmaceutical Company. We are focused on meeting unmet medical needs through the discovery and development of innovative compounds leading to novel pharmaceuticals.

**SENIOR/RESEARCH SCIENTIST  
(Cell Biologist) - Leads Discovery**

Senior/Research Cell Biologist sought for development and application of cell culture processes for production of protein, cloned receptor targets, and target primary cell and cell lines in support of high-throughput screening applications involving both whole cell and membrane based assays. Responsibilities include coordinating and prioritizing activities of several staff cell biologists who support wide variety of cell culture utilities. Selected candidate will have expertise in cell surface receptors, cell adhesion molecules, expression of inflammatory and regulatory cytokines, growth factors, and/or control of cell cycle events. Good interpersonal skills essential in a team management approach and in communicating with in-house experts, therapeutic area scientists, and Leads Discovery scientists and management.

Requirements include PhD/MS in Biotechnology, Cell Biology, or Microbiology with 6+ years experience or equivalent. Must have broad experience with many mammalian cell culture types and processes; primary and secondary cell lines, cell line selection, media development, spinner and cell factory scale growth and recovery operations; and demonstrated experience in collaborating with other development groups. Specific experience in reporter based whole cell assays and general assay development a plus. Code:LD197-SRS

**ASSOCIATE SCIENTIST  
(Cell Biologist) - Leads Discovery**

Cell Biologist sought for development and support of cell culture producing proteins/reagents in mammalian cells and cell lines in support of high-throughput screening applications involving both whole cell and membrane based assays. Responsibilities include cell culture applications from flask to spinner and cell factory apparatus. The applicant should be able to independently carry out validated experimental protocols, troubleshoot and maintain production schedules, maintain accurate records, analyze data, communicate in oral and written formats, and work in a team setting. Must be flexible and adapt to varying work demand and schedules necessary to maintain cell line production. Experience in cloning and/or HTS cell based assay development a plus.

Requirements include MS/BS in Biotechnology, Cell Biology, or Microbiology with 3+ years experience or equivalent. Technical knowledge of tissue culture apparatus (incubators, cryopreservation, and microscopy) and procedures a must. Code:LD197-AS

**ASSOCIATE/STAFF SCIENTIST**

Candidate will initiate new programs in Hepatitis C Virus. The successful candidate will have a background in molecular biology and/or mammalian tissue culture. A BS or equivalent in molecular biology, cell biology, or biochemistry is required. Candidate should be familiar with molecular biology, transfection and tissue culture techniques. At least 2 to 3 years laboratory experience is essential. Code: SD-1

**SR. RESEARCH/PRINCIPAL RESEARCH SCIENTIST**

Molecular Biologist/Virologist to join the Enzymology/Virology group for a new program in Hepatitis C Virus. The successful candidate will have a background and interest in the molecular biology and virology of HCV. Interest/expertise in transcriptional regulation of HCV a plus. A PhD and 3-5 years post-doctoral experience is desired. Experience in mammalian tissue culture techniques, transfection techniques and ex-vivo enzyme assays is required. Excellent communication skills, and a flexible, team-oriented approach to scientific discovery are a must. Code: SD-2

Our location, in Wilmington, DE, offers an attractive lifestyle with easy access to all the cultural, academic and recreational activities of the Eastern Seaboard. The DuPont Merck Pharmaceutical Company can offer you an excellent compensation and benefits package. To be considered, please forward your resume, indicating position of interest, to: Human Resources-(Code), The DuPont Merck Pharmaceutical Company, Experimental Station, 400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer, M/F/D/V.

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# REFERENCE REAGENTS FOR MURINE AND HUMAN CYTOKINES

The Biological Resources Branch (NCI), the Division of Microbiology and Infectious Diseases (NIAID), and the National Institute for Biological Standards and Control (United Kingdom) have made available reference reagents for murine and human cytokines. The reagents are available in small amounts (approx. 1 µg/sample) for use in the calibration of *in vitro* bioassays and in-house standards only and are not to be used for experimental purposes.



## HUMAN REFERENCE REAGENTS NOW AVAILABLE:

IL-11	FGF (basic)	MCP-1	NGF
EGF	GRO-α	MIP-1α	

## OTHER HUMAN REFERENCE REAGENTS CURRENTLY AVAILABLE:

IFN-α	IL-1-α	IL-4	IL-8	G-CSF	TGF-β1
IFN-β	IL-1-β	IL-5	IL-9	GM-CSF	TNF-α
IFN-γ	IL-2	IL-6	IL-10	M-CSF	TNF-β
	IL-3	IL-7	LIF	SCF	RANTES

## OTHER MURINE REFERENCE REAGENTS:

IFN-α	IL-3	GM-CSF
IFN-β	IL-4	TNF-α
IFN-γ		

**Dr. Craig W. Reynolds**  
**Biological Resources Branch**  
**NCI-FCRDC**  
**Building 1052, Room 253**  
**Frederick, MD 21702-1201**  
**FAX: 301-846-5429**  
**E-mail: reynoldsc@mail.ncifcrf.gov**  
**www.ncifcrf.gov/FCRDC/BRB/**

TO OBTAIN THESE REAGENTS, CONTACT:

*Shipments will be made collect express. Please allow 3 to 4 weeks for delivery.*

## INFLUENCE THE WAY HEALTH IMPROVES

### Biologist/in vivo Models

At SmithKline Beecham, a Research & Development budget exceeding \$900 million assures the continuing development of breakthrough drugs that will evolve from an established portfolio of compounds. Drugs that will enhance SmithKline Beecham's internationally recognized reputation as a healthcare leader, and which will have a profound impact on the well-being of people around the world. In order to further our efforts, we are seeking an Stem Cell Biologist to join our R&D team.

Working collaboratively with other scientists, this individual will establish and perform small animal (rodent/rabbit) models supporting novel therapeutics discovery in the area of stem cell biology. This will involve small animal care, handling and experimentation, and work with tissue culture, data analysis and team presentations. A BS in biology or a similar discipline and 3+ years' experience, preferably in the pharmaceutical industry, are required. Strong communication and teamwork skills are essential; experience in small animal surgery is highly preferred.

Located in a state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits package and a stimulating work environment. For confidential consideration, please forward a resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code S7-0029, P.O. Box 2646, Bala Cynwyd, PA 19004. For more information on SmithKline Beecham, visit our Website at <http://www.sb.com>. We are an Equal Opportunity Employer, M/F/D/V.

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# AVINA



## STRI-AVINA FELLOWSHIPS FOR WORK AT COCHINOS BIOLOGICAL RESERVE IN HONDURAS

With support from the Avina Foundation, the Smithsonian Tropical Research Institute, a Smithsonian Institution research center in the Republic of Panama, invites applications for assistantships, graduate student, pre- and postdoctoral fellowships in marine and terrestrial research at Cochinos Biological Reserve in Honduras. Disciplines include conservation biology, ecology, anthropology, social anthropology, human ecology, aquaculture, marine fisheries and stock enhancement, evolution, and behavior and physiology of tropical plants and animals. Applicants from Latin American countries are encouraged to apply. Those applicants from developed nations will receive preference if their university provides partial stipend or other in-kind support. Latin American applicants will receive full support.

**Postdoctoral fellowships:** Stipend (\$20,000/year), round-trip travel to Honduras, relocation and research allowance based upon the budget needs and justification presented by the application.

**Predocctoral fellowships:** Stipend (\$13,000/year), round-trip travel to Honduras, relocation and research allowance based upon the budget needs and justification presented by the application.

**Graduate student fellowships:** Award (\$3,000) includes stipends, round-trip airfare to Honduras, and modest research allowance.

Applications should include: research proposal, curriculum vitae, two letters of reference, and copy of official university transcripts for graduate students. Applicants are urged to consult with the member of the STRI scientific staff who will serve as advisor before submitting application.

Program deadlines are: March 15 and June 15. Send application to: **Office of Education, Smithsonian Tropical Research Institute, Unit 0948, APO AA 34002-0948, USA** or **P.O. Box 2072, Balboa, Republic of Panama, Fax: (507) 232-5978, email: fellows@tivolli.si.edu.**

DELIVERING ON THE PROMISE

# BIOGEN

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In 1996, we introduced to the U.S. pharmaceutical market our first proprietary product, AVONEX™ (Interferon beta-1a) for treatment of relapsing forms of multiple sclerosis. This was a significant corporate milestone which marks our transformation into a fully operational biopharmaceutical company. With an experienced management team, more than 650 talented employees and one of the strongest financial profiles in the industry, today we are poised to build on our record of success. We are now seeking to add the following committed professionals with strong values to join the Biogen team.

## Scientist

You will be responsible for developing and validating immunoassays to support preclinical and clinical development of products, stability testing, and product release. This includes the generation, characterization, and labeling of reagents; assay development, optimization and validation; as well as writing of SOPs, assay development reports, and study reports. Management of technical staff will be required on an as needed basis. Requires a PhD and at least 3-5 years of relevant experience. You should have proven experience in assay development and validation as well as sample testing, in addition to troubleshooting assays efficiently. You should possess good project management skills and be able to understand the background biology behind a project sufficiently well to enable data interpretation and recommendations for further experiments. Requires excellent communication skills and the ability to interact well with and present data to scientists from diverse disciplines, as well as management experience and excellent record keeping skills. Knowledge of GLP and GMP regulations required.

## Section Head/Senior Manager - Bioanalytical Testing

In this new position you will establish and direct functions to meet program needs for bioanalytical sample testing for product characterization, release and stability; and non-clinical and clinical pharmacokinetic, pharmacodynamic and immunogenicity studies. The right candidate will be able to provide technical leadership in areas of statistical quality control, assay troubleshooting and failure analyses, assay validation, and laboratory performance standards. Evaluating and balancing resource and capacity requirements across locations (e.g. Cambridge, RTP, Europe, contract labs) to meet needs of programs and maintain data and method integrity will be critical to success. You will also be responsible for the promotion and maintenance of GMP/GLP compliance. A Ph.D. in Cell Biology, immunology or related discipline with 10 years post-doctoral experience, with at least five years management experience - preferably in a clinical or quality control function is required for this position. Experience with quality control principles and/or regulatory submissions highly desirable.

**Biogen offers what few companies in our industry can - Professional Challenge, Stability, Growth, and one of the strongest financial profiles in the industry. In addition, our compensation and benefits package, including equity participation, is one of the best in the industry, and is designed to attract and retain the finest talent available. If you are one of the best, this is your opportunity to join our expanding universe. Please forward your resume to, indicating appropriate job code:**

Biogen, Inc., Dept. DP, 14 Cambridge Center,  
Cambridge, MA 02142 Fax: (617) 679-2546  
E-mail: [resumes@biogen.com](mailto:resumes@biogen.com)

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to conquer, treat, or prevent  
debilitating diseases.*

## DRUG DISCOVERY RESEARCH AT SCHERING-PLOUGH

At the Schering-Plough Research Institute, insightful scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of exploratory pharmaceutical discovery, become part of an advanced multidisciplinary research group focused on drug metabolism studies.

## SENIOR SCIENTIST Drug Metabolism

Our Exploratory Drug Metabolism Department has an excellent opportunity for a highly qualified and experienced Scientist to independently initiate studies in support of ongoing drug discovery programs and interpret/report results to senior management. This will include conducting radiolabeled metabolism studies to investigate the absorption, distribution, metabolism and excretion of drug discovery candidates, as well as developing sensitive analytical methods (HPLC, GC) to complement LC/MS/MS for sample analysis.

To qualify, you will need a PhD in Analytical chemistry, Pharmacology or a related field and 1-4 years of demonstrated experience in analytical method development and absorption, distribution, metabolism and excretion (ADME) studies. Background must include the surgical techniques needed to conduct highly specialized *in vivo* metabolism studies such as biliary excretion, enterohepatic circulation and portal vein uptake. Strong verbal/written communication and computer data management skills are essential.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume with salary requirements to: Human Resources-KB, Dept. DS-96-06-KB, Schering-Plough Research Institute, 2015 Galloping Hill Road, K-15, Kenilworth, NJ 07033-0539. You may also respond via e-mail to: [spri@spcorp.com](mailto:spri@spcorp.com). Please include the Department Code for your position of interest in the Subject Line. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



Schering-Plough  
Research Institute

Using Science for Human Advantage



## POSITIONS OPEN

### FACULTY POSITION BIOCHEMISTRY AND MOLECULAR BIOLOGY

Applications are invited for a tenure-track **FACULTY** position in the Department of Biochemistry. The position will most likely be filled at the rank of Assistant Professor, but consideration will be given to candidates for higher ranks.

We are seeking an exceptional candidate with a strong record of accomplishments at the postdoctoral level in a field of biochemistry and molecular biology related to cancer. The position is partially supported by the Walther Cancer Research Institute, headquartered in Indianapolis.

The successful candidate will be an active participant in the teaching programs of the Department, which include undergraduate, graduate, and medical curricula. A significant part of the evaluation of faculty candidates will be the perceived effectiveness of the candidate as a teacher.

Competitive start-up funds and excellent laboratory space will be provided. University-wide support facilities include antibody production, peptide and DNA synthesis and sequencing, mass spectrometry, macromolecular NMR analyses, and the computing center. The life science research community at Purdue University numbers well over 100 investigators actively engaged in all aspects of modern biological research. Purdue has a Basic Cancer Research Center funded through NCI, in which the successful candidate will participate.

Curriculum vitae, the names and addresses of three individuals who can supply letters of reference, and a two page summary of research interests are required for an application. The screening of applications will commence immediately and will continue until the position is filled.

#### Biochemistry Search Committee Department of Biochemistry

Purdue University  
West Lafayette, IN 47907-1153 USA

*Purdue University is an Affirmative Action/Equal Opportunity Employer.*

### DEPARTMENT OF VETERANS AFFAIRS ASSOCIATE CHIEF OF STAFF FOR RESEARCH AND DEVELOPMENT

The Veterans Administration Maryland Health Care System (VAMHCS) invites applications for the position of **ASSOCIATE CHIEF OF STAFF** for Research and Development. The VAMHCS consists of the four VA health care facilities in Maryland with a total inpatient capacity of 1095. The tertiary care facility, the Baltimore VA Medical Center, is located adjacent to and has a dynamic academic, clinical, and research affiliation with the University of Maryland School of Medicine. Based on VA funding the VAMHCS research program ranks among the top ten VA programs nationally. The incumbent will play a critical role in policy development and management of the VAMHCS research and development program. Physicians, dentists or Ph.D. scientists who are U.S. citizens and have strong scientific and managerial backgrounds, indicating an ability to provide leadership in determining the direction of the VAMHCS research and development program, are encouraged to apply. Salary will be commensurate with education and experience. If qualified, please send curriculum vitae to: **Chief of Staff (11), Baltimore VA Medical Center, 10 North Greene Street, Baltimore, MD 21201.** *The VAMHCS is an Equal Opportunity Employer.*

Two **ASSISTANT PROFESSORS:** Tropical Plant Ecologist and Molecular Biologist. The expanding Department of Biological Sciences at Florida Atlantic University invites applications for two tenure-track positions. Teaching duties include both undergraduate and graduate courses. The Department currently offers degrees through the Master's level. Submit résumé, pertinent reprints, a statement of teaching and research interests, and the names of three references to the appropriate individual below. Mail applications to: **Department of Biological Sciences, Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33431-0991.** *Florida Atlantic University is an Equal Opportunity/Affirmative Action Employer. The closing date is March 13, 1997.*

**Tropical Plant Ecologist:** Applicants will have research interests in either ecophysiology or population biology, and will assist in developing an interdisciplinary environmental sciences program. Applications should be sent to **Dr. Daniel Austin.**

**Molecular Biologist:** Applicants must have a minimum of two years of postdoctoral experience, and research interest in an area with direct relevance to environmental issues. Applications should be sent to **Dr. Herbert Weissbach.**

## POSITIONS OPEN

### CURATOR OF MAMMALOLOGY AND ORNITHOLOGY

Michigan State University seeks a **MAMMALOGIST** to serve as Curator of Mammalogy and Ornithology in the Michigan State University Museum and **ASSISTANT PROFESSOR** of zoology in the Department of Zoology. This is a 12 month, continuing tenure stream, joint academic appointment (75% museum, 25% zoology). The successful candidate will be responsible for curating an extensive collection of recent mammals (36500 specimens) and birds (10700 specimens), maintaining an active funded research program, and participating in exhibit and public programs in the Museum. In addition, the curator will carry a teaching assignment of one course per year in zoology in the areas of mammalogy, ornithology, or vertebrate biology. The Museum and Department of Zoology participate in the University's Interdepartmental Program in Ecology and Evolutionary Biology, and the successful candidate's research program is expected to contribute substantively to this program. Individuals interested in this position should submit a curriculum vitae, five letters of reference, and a statement that addresses the following: the candidate's experience in curating a mammal collection; the scope and future direction of their research program; how their research will utilize and enhance a mammal collection; and strategies that can be used to enhance the use of collections in research, teaching, exhibits, and public programming. Materials should be sent to: **Co-chairpersons, Curator of Mammalogy and Ornithology Search, Michigan State University Museum, Michigan State University, East Lansing, MI 48824-1045.** All application material must be received by February 17, 1997. *We strongly encourage women and minority candidates to apply. Michigan State University Museum is an Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT PROFESSOR, YALE UNIVERSITY

The Department of Pharmacology, Yale University School of Medicine invites applications for a tenure-track appointment at the **ASSISTANT PROFESSOR** level. The Department currently has a strong program in biochemical and molecular pharmacology, neuroscience, and cancer chemotherapy, and is building a program in the area of protein structure. Applications from candidates with experience that would strengthen or complement these areas would be particularly welcome. Candidates should have a Ph.D. or M.D. degree, postdoctoral experience, and a strong commitment to research. Applications by 1 April 1997 should include curriculum vitae, description of research interests, and have three letters of reference sent to: **Joyce A. Chase, Executive Assistant to the Chairman, Faculty Search Committee, Department of Pharmacology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

### FIELD STATION DIRECTOR

The Rocky Mountain Biological Laboratory seeks a full-time **DIRECTOR.** RMBL is a private, independent field station in the Elk Mountains of Colorado. Since 1928 it has provided facilities for research and education in the biological sciences. Director's responsibilities include administration of operations and teaching and research programs, fundraising, scientific leadership, and serving as public liaison. Candidates should have experience in teaching and research (Ph.D. preferred) and strong interpersonal, public communication, and administrative skills. Starting date: September 1, 1997. Additional information at Web site: <http://gunnison.com/~rmb/rmb.html> and Email: [rmb@gunnison.com](mailto:rmb@gunnison.com). Send curriculum vitae, statement of interest, and three letters of recommendation by April 15, 1997 to: **Search Committee, RMBL, P.O. Box 519, Crested Butte, CO 81224.** *RMBL is an Affirmative Action/Equal Opportunity Employer.*

### BOSTON UNIVERSITY SCHOOL OF MEDICINE

Applications for a **FACULTY** position are invited from accomplished scientists interested in the behavioral, molecular, or cellular bases for drug and/or alcohol abuse. The appointment can be made at any level. Start-up funds, core facilities, and modern laboratory space are available to establish a state-of-the-art research program. Please send curriculum vitae, a brief statement of research goals, and the names and telephone numbers of at least three references to: **Dr. David H. Farb, Department of Pharmacology, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118.** *Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### FACULTY POSITIONS IN PHARMACOLOGY AND PHYSIOLOGY UNIVERSITY OF ROCHESTER

The Department of Pharmacology and Physiology at the University of Rochester Medical Center invites applications for three new tenure-track positions to be filled at the **ASSISTANT PROFESSOR** level. Candidates qualified for higher ranks will also be considered. Applicants must have earned the Ph.D. or M.D. degree and have completed significant postdoctoral training. Preference will be given to applicants whose research interests complement existing departmental strengths in the areas of cell signaling, ion-channel function, and cell injury and cell death, although outstanding candidates with general research interests in neuropharmacology and cardiovascular pharmacology will also be considered. The University of Rochester Medical Center has recently announced plans for a major expansion of research activities in aging and development, cancer, and vaccine biology and immunology. Applicants whose research interests relate to these areas are particularly encouraged to apply. The successful candidates will be expected to develop independent, extramurally funded research programs and to participate fully in graduate and professional teaching programs. Review of candidates will begin immediately and will continue until the positions are filled. Applicants should send their curriculum vitae, three recent reprints, a statement of research interests and plans, and the names of three referees to: **Dr. Trevor J. Shuttleworth, Chair, Faculty Search Committee, Department of Pharmacology and Physiology, University of Rochester Medical Center, Box 711, 601 Elmwood Avenue, Rochester, NY 14642.** For information about the Department, see Web site: <http://www.pharmacol.rochester.edu>. *The University of Rochester is an Equal Opportunity/Affirmative Action Employer. Applications from women and underrepresented minorities are encouraged.*

### FACULTY POSITION UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Physiology and Biophysics invites applications for a faculty position at the **PROFESSOR** level. We are seeking candidates who would establish a major research effort in proteins, crystallography, and maintain an x-ray diffraction facility. The successful candidate will have a significant track record of solving protein structures, and interest in collaborations with existing research projects in the Department and on the UCI campus. The position will involve teaching both medical students and graduate students. We will accept applications until March 1, 1997. Send a curriculum vitae, a research description, and letters from three references to: **Janos K. Lanyi, Chair, Department of Physiology and Biophysics, University of California, Irvine, CA 92697-4560.** *University of California is an Equal Opportunity/Affirmative Action Employer committed to excellence through diversity.*

The Environmental Studies Department at San Jose State University invites applications for an **ASSISTANT PROFESSOR** starting in August 1997. Salary range: \$37,000 to \$46,000. Qualifications: Ph.D. in a physical, life, or social science relevant to environmental sciences and studies. An interdisciplinary Ph.D. will also be considered. Priority given to applicants with technical, analytic, and policy skills relating to the environmental impact assessment process under NEPA and CEQA.

Send a letter of application, curriculum vitae, names of three references, and a facsimile of graduate transcripts to: **Dr. Gary A. Klee, Chair, Search Committee, Environmental Studies Department, San Jose State University, San Jose, CA 95192-0115.** Telephone: 408-924-5455; FAX: 408-924-5477. Applications must be postmarked by March 1, 1997. Do not send letters of recommendation in initial application. *SJSU is an Equal Opportunity/Affirmative Action/Title IX Employer.*

### TENURE-TRACK FACULTY POSITION CHEMISTRY

Applicants are sought for a tenure-track full-time **FACULTY** position. Minimum requirements: Master's degree in chemistry from an accredited college or university. Equivalency considered. Preferred: two years of teaching chemistry with emphasis in organic chemistry. For application forms and procedures contact: **Personnel Services Office: Telephone: 310-860-2451 ext. 2284; FAX: 310-467-5003** or write to: **Cerritos Community College, 1110 Alondra Boulevard, Norwalk, CA 90650.** *Cerritos Community College is an Equal Employment/Affirmative Action Employer.*

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Chiron Corporation's mission is to end human suffering caused by disease through the development of products that transform the practice of medicine. Since 1981, our company has been at the forefront of biotechnology, using genetic engineering and other tools to develop products for the diagnosis, prevention and treatment of human disease. We currently have the following opportunity available for a motivated, independent individual:

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In this capacity, you will be responsible for the positional cloning of human disease genes. The successful candidate must have a PhD in Genetics, Molecular Biology, Biochemistry, or a related discipline and experience with the following areas: cDNA selection, sample sequencing, mutational analysis, cDNA cloning, and gene expression. A record of productivity and publication in peer-reviewed journals is desirable. Job Code: 2200

We offer a generous compensation and benefits package. If you have the dedication, spirit and flexibility to rise to our many challenges, send your resume, indicating Job Code of interest, to: Chiron Corporation, Human Resources, 4560 Horton Street, Emeryville, CA 94608. We are an Equal Opportunity Employer.

**CHIRON****Research Scientist II**

Genetic Therapy Inc. based in the Washington, D.C. area, is a leader in the development of human gene therapy products for genetic and acquired diseases. Founded in 1986, GTI and its collaborators represent one of the largest groups of scientists dedicated to research and development in the field. We have employment opportunities in the following areas:

**Research Scientist II  
Cardiovascular Gene Therapy Group**

Individual will be a member of a team that will investigate novel gene delivery strategies to the vasculature. Must have experience in vessel wall biology. (Job code 157-070-7/S)

**Research Scientist II  
Non-Viral Vectors Group**

Individual will join a new research team which will develop non-viral vectors for in vivo applications. Experience in the development or application of non-viral vectors would be an advantage. (Job code 70-072-7/S)

Candidates for both positions must have a Ph.D. in a scientific discipline and at least 2 years of relevant research experience; or equivalent. Good communication skills and a strong publication record are required.

GTI offers a stimulating and challenging environment in a rapidly growing company, with competitive salaries and benefits. Please fax or mail resume, to:

**FAX: (301) 948-0503**  
**Attn: Job Code**  
**Genetic Therapy, Inc.**  
**938 Clopper Road**  
**Gaithersburg, MD 20878**



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Few healthcare companies can offer you as many opportunities to impact the future of human health as Hoffmann-La Roche. We have more products in the pipeline than ever before — and our momentum continues to build. If you want to be part of a world-class research effort that is improving the lives of people all over the world, consider this opportunity in our Nutley, New Jersey location.

In this high profile role, you will design and conduct *in vitro* metabolism studies for new drug candidates. This will involve qualitative and quantitative determination of parent compound and metabolite on an NCE using HPLC and mass spectral analysis.

To qualify, you must have a Ph.D., along with 1-3 years postdoctoral background in biochemistry, chemistry or a similar field. Experience using mass spectrometry for metabolite identification and structural analysis and the ability to design/conduct *in vitro* metabolism studies using isolated cellular systems are musts. Familiarity in the use of radiolabeled compounds is preferred.

We provide a salary and benefits package that fully reflects our status as a premier healthcare organization. To be considered, forward your resume and salary requirements to: Stella Strazdas, Hoffmann-La Roche, Staffing Dept. 7SS01DM, 340 Kingsland Street, Nutley, NJ 07110-1199. No telephone calls or agencies, please. Hoffmann-La Roche is an equal opportunity employer.

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Biometric Research Branch • National Cancer Institute**

Announcement No.: CA-97-2326

The Biometric Research Branch of the National Cancer Institute is establishing a research program on Molecular Statistics and Bioinformatics. Applications are solicited for a scientist to provide leadership in building a research program in the development of statistical, mathematical and computational methodology for the analysis of genome and gene expression data in order to identify cancer associated genes, elucidate their functions, determine the steps of tumor development, identify molecular targets and develop genome based approaches to the prevention, detection, diagnosis and treatment of cancer. The successful candidate will also participate in the development and conduct of a training program in molecular statistics and bioinformatics for statistical, mathematical, physical and computational scientists. This position will offer the candidate the opportunity to collaborate with outstanding scientists in a multidisciplinary national effort, to participate in the discovery of new approaches to reducing cancer mortality and to develop the field of molecular statistics.

Candidates should have a doctoral degree in statistics, mathematics, computer science or life sciences with experience in computational biology and genomics. Statistical scientists with a record of research creativity and productivity but less experience in computational biology are encouraged to apply for appointment at a less senior level.

This is a GS-14/15 Civil Service position with a salary range from \$62,843 to \$95,531 per annum. In addition, a recruitment bonus and relocation expenses may be paid. Physicians may be eligible for a Physician's Comparability Allowance of up to \$20,000 a year. Benefits include a retirement plan, health and life insurance, and sick and annual leave. The position may also be filled through the Commissioned Corps of the U.S. Public Health Service. U.S. citizenship is required.

Applicants should submit an Optional Application for Federal Employment (OF-612) or a current curriculum vitae and bibliography, a statement of research interests, and selected publications to **Mr. Cuong Tran, Personnel Management Assistant, Personnel Management Branch, 6120 Executive Boulevard, Executive Plaza South, Room 550, MSC 7209, Rockville, MD 20852. Applications must be postmarked by March 31, 1997.** For further information call Dr. Richard Simon, Chief, Biometric Research Branch, National Cancer Institute (301) 496-0975.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

## POSITIONS OPEN

### UNIVERSITY OF SOUTHERN MAINE MOLECULAR BIOLOGIST

The University of Southern Maine invites applications for a tenure-track molecular biology **ASSISTANT PROFESSOR** position starting August 1997. This position will complement the ongoing teaching and research activities in the M.S. program in applied immunology as well as the B.S. programs in biological sciences and biochemistry. The successful candidate must be committed to excellence in teaching at a public comprehensive university that serves both traditional and nontraditional students, and to developing a research program that actively involves graduate and undergraduate students. Opportunities to interact with area hospitals, research organizations, and industry are available.

We seek candidates with a Ph.D. and preferably with postdoctoral training in contemporary molecular biology; a strong background in infectious disease and microbiology; and hands-on experience in gene cloning, DNA sequencing, and gene expression.

Candidates should send a curriculum vitae, description of research interests and accomplishments, up to three recent publications, a statement of teaching philosophy, and names and addresses of three references to: **Chairperson, Applied Medical Sciences, John Mitchell Center, University of Southern Maine, Gorham, ME 04038.** USM is an Equal Employment Opportunity/Affirmative Action Employer committed to diversity, quality, and reasonable accommodation.

Review will begin March 14, 1997 and continue until the position is filled.

### TENURE TRACK FACULTY POSITIONS NEUROBIOLOGY/IMMUNOLOGY

The Department of Oral Biology at the Ohio State University, College of Dentistry invites applications for three tenure-track positions at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR**. Successful applicants will be expected to develop competitive, independent research programs and to excel in graduate and professional instruction. Current departmental research is focused on the neural and immune systems. We are especially interested in individuals using modern neural, cellular, or molecular biology approaches to study either oral sensory and motor systems or neuroendocrine modulation of inflammation and immunity. Individuals with other backgrounds, such as wound healing or tissue engineering, that would complement and extend existing research interests are encouraged to apply. Applicants should have a Ph.D. with or without a D.D.S., appropriate postdoctoral experience, a strong record of scholarship, and demonstrated ability to develop an extramurally supported research program. Send curriculum vitae, a brief statement about your research program, and the names and addresses of three references to:

**Dr. Keith E. Alley**  
Ohio State University  
College of Dentistry  
305 West 12th Avenue  
Columbus, OH 43210

### FACULTY POSITION IN ANIMAL CELL BIOLOGY

The Center for Gene Research and Biotechnology at Oregon State University invites applications for a 1.0 FTE, 12 month, tenure-track faculty position at the level of **ASSISTANT PROFESSOR**. Applicants will have a Ph.D., M.D. or D.V.M. degree, significant postdoctoral research experience, and demonstrated expertise in molecular or genetic approaches to the field of cell biology using vertebrate or invertebrate systems. The successful candidate will be expected to set up an independent, externally funded research program and to teach in the Molecular and Cellular Biology Graduate Program. The candidate will be housed in a suitable academic department and will have access to all of the shared facilities and personnel of the CGRB. OSU is a Land Grant, Space Grant, Sea Grant and Carnegie I research institution.

Application review will begin March 7, 1997 and continue until the position is filled.

Send a curriculum vitae, statement of research interests, and three reference letters to: **Terri L. Lomax, Chair, ACB Search Committee, Center for Gene Research and Biotechnology, Oregon State University, Corvallis, OR 97331-7303. Telephone: 541-737-3347; FAX: 541-737-3045; Email: animal-cell-search@bcc.orst.edu.**

Oregon State University is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to the needs of dual career couples.

## POSITIONS OPEN

### ASSISTANT PROFESSOR OF BIOLOGY VERTEBRATE BIOLOGIST

Bemidji State University invites applications for a **TENURE-TRACK POSITION** beginning September 2, 1997. Qualifications: Ph.D. in some area of vertebrate biology conservation ecology. Competence in avian and mammalian natural history, behavior, evolution, and conservation required. Applicants must have a publication record in avian, mammalian, and conservation biology and a familiarity with classical and molecular taxonomy. Individuals with a completed doctorate, collegiate teaching experience, and experience with large class management will be given preference. The responsibilities for this position may involve teaching and preparing laboratories in general biology, mammalogy, ornithology, evolution, conservation biology, and literature of biology. The individual will also be required to advise undergraduate and graduate students enrolled in biology programs and to develop an active research program involving students. Salary is competitive and commensurate with training and experience. Applications should be submitted by February 28, 1997. A letter of application, résumé, copies of transcripts of all graduate courses, and the names, addresses, and telephone numbers of three or more references should be sent to: **Dr. Kenneth R. Lundberg, Dean, College of Social and Natural Sciences, Bemidji State University, 1500 Birchmont Drive, N.E., Bemidji, MN 56601-2699. FAX: 218-755-2822.** Bemidji State University is an Equal Opportunity/Affirmative Action Employer/Educator.

### DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY

The Department is seeking appropriately qualified applicants for two limited-term positions at the **ASSISTANT PROFESSOR** level. Applicants must possess a Ph.D. or M.D. in pharmacology, toxicology, or a related discipline and preferably will have completed at least one year of postdoctoral training. Although all outstanding candidates will be considered, preference will be given to those who have experience in molecular neuropharmacology, cardiovascular pharmacology, signal transduction, or a related discipline. The successful candidate is expected to develop an active, externally funded research program and to participate in some undergraduate and graduate teaching. Salaries will be commensurate with qualifications and experience. The Department will sponsor the successful applicants in seeking external salary support from appropriate sources. The successful candidates will be appointed initially for five year terms. The deadline for these applications is April 1, 1997 and applicants should forward a curriculum vitae, three letters of reference, and a description of proposed research to: **Dr. J. R. Bend, Chair, Department of Pharmacology and Toxicology, University of Western Ontario, London, Ontario N6A 5C1 Canada.** In accordance with the requirements of Immigration Canada, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Western Ontario is an Equal Opportunity Employer.

### ASSISTANT/ASSOCIATE PROFESSOR

A tenure-track **FACULTY** position is available for an outstanding candidate in any area of developmental and cell biology and neuroscience. Candidates using contemporary molecular and cellular techniques to study aspects of morphogenesis, cellular differentiation, bone or craniofacial development are encouraged to apply. Extramural research support is required. Candidates will be expected to contribute to team teaching of dental students and to graduate training. Interested applicants should send a curriculum vitae, statement of research interests, three reprints, and names of references to: **Dr. Lee Robertson, Department of Biological Structure and Function, Oregon Health Sciences University, 611 S.W. Campus Drive, Portland, OR 97201.** Affirmative Action/Equal Opportunity Employer.

The Cardiology Division, Department of Medicine at Columbia University, College of Physicians and Surgeons, is seeking full-time, tenure-track research physiologists or biochemists at the **ASSISTANT PROFESSOR** level. Candidates should have experience in biochemical correlates of contractile failure including molecular techniques, a history of publication, and grant support. Candidates should possess a Ph.D. or M.D. Send curriculum vitae to: **Steven Bergmann, M.D., Ph.D., Director, Nuclear Cardiology, PH 10-Stem 405, Columbia University, 630 West 168th Street, New York, NY 10032.** We take Affirmative Action toward Equal Employment Opportunity.

## POSITIONS OPEN

### FACULTY POSITIONS Medical University of South Carolina Department of Microbiology and Immunology Charleston, South Carolina

The Department of Microbiology and Immunology of The Medical University of South Carolina invites applications for a tenure-track faculty position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** levels. Expertise in development of viral vectors for gene therapy delivery is required. For the associate level, evidence of a funded program is also required. Expertise in cellular and molecular approaches is expected. The successful applicant will have a Ph.D. and/or M.D.; be expected to establish or bring a high quality, extramurally funded research program; participate in graduate student training; and interact in the developing gene therapy program.

Applicants should send their curriculum vitae, a summary of future research plans, and the names and addresses of three references to: **James S. Norris, Ph.D., Professor, Department of Microbiology and Immunology, 171 Ashley Avenue, BSB203, Charleston, SC 29425-2230. FAX: 803-792-2464; Email: norrisjs@musc.edu.**

Information concerning the Department can be found through the Web site: [www2.musc.edu/mic.html](http://www2.musc.edu/mic.html).

The Medical University of South Carolina is an Equal Employment Opportunity/Affirmative Action Employer.

**ASSISTANT PROFESSOR:** The Department of Physiology at East Carolina University School of Medicine invites applications for a tenure-track faculty position at the level of Assistant Professor. We are seeking individuals with a Ph.D. or equivalent, postdoctoral experience, and clear evidence of potential for extramural funding. The search is focused on the recruitment of individuals who employ modern approaches to the investigation of fundamental biological questions. The successful candidate will be expected to develop a strong, independent research program; to participate in the training of Ph.D. candidates; and to contribute to departmental teaching responsibilities in the medical and allied health programs. Salaries and start-up funds are competitive and commensurate with qualifications and experience. Send curriculum vitae, a statement of research interests, and names and addresses of three references to: **Stephen C. Wood, Ph.D., Chairman, Department of Physiology, ECU School of Medicine, Greenville, NC 27858.**

Review of applications began on January 1, 1997 and are continuing until a suitable candidate has been identified.

An Equal Opportunity/Affirmative Action University. Accommodates individuals with disabilities. Applicants must comply with the Immigration Reform and Control Act.

### BIOLOGICAL SCIENCES DEPARTMENT

**ASSISTANT PROFESSOR**, beginning level, full-time continuing position beginning fall semester 1997. Responsibilities include teaching courses in immunology, mechanisms of disease, and parasitology; and directing the Medical Technology Program. Additional responsibilities may include teaching courses in community and environmental health, human anatomy and physiology, and introductory biology; and directing the Pre-Medicine Program. Ph.D. or appropriate terminal degree required. Applicants should have strong commitment to teaching undergraduates. Previous teaching experience preferred. Final determination will be based upon successful interview which may include teaching demonstration performance. Submit letter of application, curriculum vitae, and three letters of reference by February 21, 1997 to: **Dr. David G. Trainer, Search Committee Chairperson, Biological Sciences Department, East Stroudsburg University, East Stroudsburg, PA 18301.**

ESU is an Equal Opportunity Employer.

Minorities and women are strongly encouraged to apply.

A Pennsylvania State System  
of Higher Education University

### RESEARCH ASSISTANT PROFESSOR

The Department of Pharmacology has an opening which can lead to a **TENURE-TRACK POSITION** in areas of cell-cell and interactions and adhesion coupled to signal transduction, function of cadherins and transport properties of polarized cells. Candidate should possess Ph.D. or M.D. Background should be in cell and molecular biology, protein chemistry, and transgenic and gene knockout technology. For fullest consideration send curriculum vitae, summary of research interests, and names of three references by March 1, 1997 to: **Dr. Asrar B. Malik, Professor and Head, Department of Pharmacology, University of Illinois at Chicago, 835 South Wolcott, Room E403, Chicago, IL 60612.** UIC is an Affirmative Action/Equal Opportunity Employer.





## COLORADO STATE UNIVERSITY

### Position Announcement

#### Director, Colorado Agricultural Experiment Station

Candidates must have an earned doctoral degree relevant to Colorado Agricultural Experiment Station programs and be tenurable at the rank of Professor. The successful candidate must have demonstrated excellence in agricultural and related research; effective administrative leadership and public relations skills; and a strong interest in research administration. An understanding of the role and mission of a land-grant university is also required. Candidates must support Colorado State's commitment to increasing gender and ethnic diversity and to providing equal opportunity to the handicapped. Salary will be competitive and commensurate with experience.

Send nominations and/or applications to **Dr. Gordon D. Niswender, Chair of the Search Committee, Animal Reproduction and Biotechnology Laboratory, Colorado State University, Fort Collins, CO 80523-1683**. All applications must be received on or before March 3, 1997. Applications must include a statement of interest and qualifications; the applicant's current vitae; contact information for five references qualified to comment on the applicant's qualifications for this position; and a one-page statement of the applicant's vision and philosophy of the Agricultural Experiment Station in a modern land-grant institution. *Qualified applicants who would enhance diversity at Colorado State University are strongly encouraged to apply.*

## GENETICS AND HUMAN GENETICS

### Faculty Positions at Michigan State University

The Department of Zoology invites applications for two **tenure-track** positions in these areas. (1) Genetics, **Assistant Professor**, with expertise in any area of basic animal and/or human genetics. (2) Human Genetics, **Rank Open**, with expertise in basic human genetics. This position may hold special interest for geneticists wanting to participate in the MSU Center for Hearing Research, but applicants with other interests are also encouraged to apply. A joint appointment in the Department of Pediatrics and Human Development in the College of Human Medicine is expected for the human genetics position. MSU also hopes to make several additional faculty appointments in the areas of animal and human genetics during the next few years.

Applicants should have an active research program and a commitment to excellence in both research and teaching. The Department of Zoology has faculty with expertise in ecology, evolution, animal behavior, cell and developmental biology, and genetics. The Graduate Program in Genetics is a cross-departmental Ph.D. program with sixty participating faculty in all areas of genetic research. The Center for Hearing Research is an interdisciplinary project that involves faculty from several programs, including the College of Human Medicine, and includes research on inherited forms of hearing impairment.

Applicants at the Assistant Professor rank must have postdoctoral experience with demonstrated productivity and potential for independent research. Applicants at the Associate Professor and Professor ranks must have a commensurate record of productivity.

Screening begins March 3, 1997. Send curriculum vitae, statements of research and teaching interests, and three letters of reference to: **Genetics Faculty Search Committee, Department of Zoology, 203 Natural Science Building, Michigan State University, East Lansing, MI 48824**.

*Women and minority scientists are especially encouraged to apply. Michigan State University is an Affirmative Action/Equal Opportunity Employer.*

## PROFESSOR AND HEAD DEPARTMENT OF BIOCHEMISTRY University of Iowa College of Medicine

The University of Iowa, College of Medicine is seeking an outstanding individual to provide leadership as executive officer of the Department of Biochemistry.

Candidates are expected to have the PhD, MD or comparable degree, an active and internationally recognized research program, and a strong record of commitment and effectiveness in promoting medical, graduate, and undergraduate education. The individual selected will have demonstrated administrative ability and experience, excellent communication and interpersonal skills, and a dynamic and innovative approach to leadership that will build on existing strengths in research and teaching. With 22 faculty, the Department has active research programs in molecular biology, cell biology and biophysical chemistry. Additional information about research and educational programs is available on the Web at: [www.medadmin.uiowa.edu/deptment/biochem/biochem.htm](http://www.medadmin.uiowa.edu/deptment/biochem/biochem.htm).

Please direct applications, including curriculum vitae, list of publications and names of three or more references to the address below. Applications submitted by March 1, 1997 are assured of full consideration.

**Dr. Robert E. Fellows, Chair**  
**Biochemistry Search Committee**  
**The University of Iowa College of Medicine**  
**c/o Mary Jo Young**  
**200 CMAB**  
**Iowa City, IA 52242**

*The University of Iowa is an affirmative action/equal opportunity employer. Women and minorities are encouraged to apply.*

## NEUROBIOLOGY POSITIONS

The Mount Sinai School of Medicine is offering two challenging opportunities with the department of Neurobiology.

### POSTDOCTORAL POSITION Glutamate Receptors and Hippocampal Circuitry

**Mount  
Sinai**

Study shifts in glutamate receptor expression and distribution in genetically-manipulated mice designed to model memory disorders and/or neurodegenerative diseases. Experience with confocal and/or electron microscopy and a strong interest in quantitative microscopy are required. Opportunities are also available to extend these analyses into human neuropathology.

### FACULTY POSITION Associate or Assistant Professor, Neurobiology and Neurobiology of Aging

This program, co-sponsored by the Department of Geriatrics and Adult Development and the Fishberg Research Center for Neurobiology, entails animal models of related functional decline and neurodegenerative disorders. Ideal for an electrophysiologist with a strong interest in electrophysiological approaches to the elucidation of age-related decline in neocortical and/or hippocampal functions.

Send curriculum vitae, names of three references, and a brief description of your research interests to: **Dr. John H. Morrison, Research Center for Neurobiology, Mount Sinai School of Medicine, Box 1065, One Gustave L. Levy Place, New York, NY 10029-6574**. Equal Opportunity Employer. We foster diversity in the workplace.

**The Mount Sinai Medical Center**

## POSITIONS OPEN

### ASSISTANT PROFESSOR OF MARINE SCIENCES

The Department of Marine Sciences of the University of Georgia's School of Marine Programs seeks a tenure-track **ASSISTANT PROFESSOR** for fall 1997 in the area of biological and physical interactions in marine environments. Specific research areas could include, but are not limited to, microzooplankton or zooplankton processes. Current faculty conduct research on a wide range of biological, chemical, and physical marine and freshwater processes, and collaborate on large scale studies of the land and sea interface. The successful candidate will be expected to develop an independent, funded research program, participate in our graduate and undergraduate instructional program, and will be encouraged to collaborate with School of Marine Programs faculty in Athens and at our coastal facilities at the Marine Institute on Sapelo Island, and the Marine Extension Service in Brunswick, Georgia, and on Skidaway Island. Applicants should send by March 7, 1997 a curriculum vitae, brief statements of research and teaching interests, and names of three references to: **Chair, Search Committee, Department of Marine Sciences, Ecology Building, University of Georgia, Athens, GA 30602.** Women and minority candidates are especially encouraged to apply. *The University of Georgia is an Equal Opportunity Employer.*

### ASSISTANT PROFESSOR PROTEIN CRYSTALLOGRAPHY

Applications are invited for a tenure-track position in the Department of Biological Structure at the University of Washington School of Medicine. Applicants must have a Ph.D. degree, or the foreign equivalent, with at least three years of postdoctoral experience focusing on all aspects of protein crystallography. The successful candidate will be expected to establish a vigorous, externally funded research program in the area of structural biology, in particular crystallography of proteins involved in developmental biology and/or neurobiology. Applicants will be expected to contribute to team-taught courses for health professionals and to participate fully in all aspects of relevant graduate student training programs. Candidates should send curriculum vitae, a description of research interests, and three letters of reference by March 1, 1997 to: **Dr. Wim G. J. Hol, Search Committee Chair, Department of Biological Structure, University of Washington, P.O. Box 357420, Seattle, WA 98195-7420.** *The University of Washington is an Affirmative Action/Equal Opportunity Employer.*

### ASSOCIATE PROFESSOR

The Department of Veterinary Anatomy and Cell Biology is seeking a cell and molecular biologist for a tenure-track faculty position at the **ASSOCIATE PROFESSOR** level. Applicant must have a Ph.D. or equivalent degree in a biological or biomedical science, postdoctoral experience, research background in cell and molecular biology, ability to teach a departmental course in the professional curriculum, and currently have extramural funding. Application deadline is February 28, 1997, or until suitable applicant is found. Submit curriculum vitae; names, addresses and telephone numbers of at least three references; and a summary of current research to: **Dr. John Martin, Chair of Search Committee, (Reference Number 000878), Department of Veterinary Anatomy and Cell Biology, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803.** *LSU is an Equal Opportunity/Affirmative Action Employer.*

### RESEARCH ASSOCIATE POSITION

A **RESEARCH SCIENTIST** position, Ph.D. level, in protein structural chemistry is available to join ongoing programs in technology development and computer applications: 1) Develop and implement micro-methods for detection and selective isolation of DNA binding proteins, phosphoproteins, and phosphopeptides for mass spectrometric (MS) analysis; applied research opportunities are anticipated. Applicant must have experience with protein isolation and biochemistry, immunochemistry, affinity techniques, and HPLC and 2-D gels; some knowledge of MS desirable. 2) Develop and implement bioinformatics and project information management resources specifically related to the interface between protein structural chemistry and genomics. Experience with biochemistry and/or molecular biology, fundamentals of mass spectrometry, and with Intranet based resources required. Please send curriculum vitae and names of three references to: **Dr. Paul Tempst, Molecular Biology Program, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021.** *Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.*

## POSITIONS OPEN

### **COLUMBIA™** **Colorado Division**

#### TRAUMA RESEARCH

Applications from M.D. and/or Ph.D. to develop a program in basic or clinically related trauma research within a currently functioning research program. Salary and start-up funds available. Two thousand square feet of fully equipped research space available. Application letter, including curriculum vitae and names of three references, should be sent to:

**Richard Lester Yuki, M.D.**  
**Columbia-HealthONE Trauma Service**  
**501 East Hampden Avenue**  
**Englewood, CO 80110**  
**FAX: 303-788-6928**

#### **NEW HAMPSHIRE DEPARTMENT OF HEALTH AND HUMAN SERVICES RISK ASSESSMENT POSITION (ENVIRONMENTALIST III)** **\$29,094 to \$34,437**

The Bureau of Health Risk Assessment is seeking to fill a full-time **RISK ASSESSMENT POSITION** in Concord, New Hampshire. Typical duties include reviewing human health risk assessments prepared by private consulting firms for technical accuracy and conformance with federal and state guidelines. The qualified candidate will work under the direction of the state toxicologist to evaluate toxicological and other scientific literature to develop health based guidelines for chemical contaminants in select media (e.g., air toxics). As a member of a small but dynamic state health department, the successful candidate will gain experience in a number of areas of environmental health, including the preparation or review of health risk assessments, preparing fish consumption advisories, and responding to indoor air quality complaints. Minimum qualifications: Bachelor's degree with major study in environmental health or a related science and four years of experience in the field of public health, risk assessment, toxicology, or environmental epidemiology. Preference is for candidate to have at least a graduate level degree in toxicology, environmental health or a related field, and direct experience in risk assessment. For further information contact: **Dennis Pinski at Telephone: 603-271-4664.** An application for employment may be obtained from and returned to: **The Department of Health and Human Services, 6 Hazen Drive, Concord, NH 03301, ATTN: Human Resources/Code Number 40345. Telephone: 603-271-4286.** Please attach transcripts to completed applications. This position will remain open until a qualified applicant is found. *Equal Opportunity Employer.*

#### **POSITION FOR MEDICAL OFFICER** **Laboratory of Bacterial Toxins** **Center for Biologics Evaluation and Research** **(CBER)** **Food and Drug Administration**

A **TRAINING POSITION** for a medical officer in CBERS's Laboratory of Bacterial Toxins is available immediately. The successful candidate will participate in the review of license applications and investigational new drug applications for vaccines and related products and conduct research on bacterial pathogenesis. Applicants should hold an M.D. degree in infectious disease and have an interest in molecular microbiology. Experience in epidemiology and laboratory based research is desired.

The Laboratory of Bacterial Toxins is located on the main campus of the National Institutes of Health in Bethesda, Maryland. The Laboratory is part of the Division of Bacterial Products in the Office of Vaccines Research and Review. The Laboratory of Bacterial Toxins has responsibilities for regulating toxin related vaccines and conducts research on the biochemistry and immunochemistry of bacterial virulence factors. *The position is available to citizens and permanent residents of the United States.*

Interested candidates should send their curriculum vitae with bibliography and the names of three references by February 24, 1997 to: **Dr. Willie F. Vann, Chief, Laboratory of Bacterial Toxins, Office of Vaccines Research and Review, CBERS, 1401 Rockville Pike, Suite 200S, HFM-428, Rockville, MD 20852. Telephone: 301-496-9695.**

*The Center for Biologics Evaluation and Research is an Equal Opportunity Employer. FDA is a smoke-free workplace.*

## POSITIONS OPEN

Cubist Pharmaceuticals, Inc. is recruiting scientific **RESEARCH** staff to join a multidisciplinary scientific team within a strong Molecular Biology Department. The team will develop new target based biological assays for antibacterial and antifungal drug discovery. The ideal candidates will complement the existing molecular biology strengths of the Department by having expertise in at least one of the following areas:

**RESEARCH SCIENTISTS.** Research scientists hired for either position will participate in the identification and validation of novel antibiotic targets and supervise research associates. Job Code RS1: Candidates should have a Ph.D. degree in biochemistry or enzymology, experience developing quantitative biological assays and one to five years of postgraduate experience. Familiarity with molecular biology and automated technology a plus. Job Code RS2: Candidates should have a Ph.D. degree in microbiology with a broad based knowledge of pathogenic microbial physiology and genetics and one to five years of postgraduate experience. Familiarity with molecular biology and automated technology a plus.

**RESEARCH ASSOCIATES.** Job Code RA1: Candidates should have a B.S. or M.S. degree in biochemistry, enzymology or related field, and an understanding of molecular biology. Candidates should have at least one year of laboratory experience post degree. Experience in assay development and use of automation a plus.

Cubist Pharmaceuticals, Inc. offers competitive compensation; comprehensive group insurance and benefits; including 401(k); tuition reimbursement; free parking, and transportation reimbursement. For consideration please mail, fax or Email a cover letter and curriculum vitae to: **J. Simone, Human Resources Manager, Cubist Pharmaceuticals, Inc., 24 Emily Street, Cambridge, MA 02139. FAX: 617-576-0232, Email: jsimone@cubist.com.** *Cubist is an Equal Opportunity Employer.*

#### **SCIENTIST** **CELL BIOLOGY** **Southern California**

Allergan, a research and technology driven company, is committed to bringing innovative specialty therapeutic products and surgical devices to the global marketplace. Join us on a project involving microvascular endothelial cell activation and neovascularization. Requires a Ph.D. with strong background in cell culture and molecular biology techniques as well as strong interpersonal, teamwork, and verbal and written communication skills. Preference will be given to those with exposure to ocular tissues and models of angiogenesis. We prefer two or more years of postdoctoral and industry experience. Background in growth factors and/or cell adhesion molecules is a plus.

We reward our employees with a competitive salary, an excellent benefits package, and a great working environment. Please send résumé to: **Allergan, ATTN: Joyce Smith, T2-1B, JS/3761/SC, 2525 Dupont Drive, Irvine, CA 92715.** No phone calls please. *Equal Opportunity Employer.*

#### **AUTOMATION TEAMS MANAGER**

Bohdan Automation is a rapidly growing, hi-tech leader in the laboratory automation industry. We are seeking a candidate to join our leadership team. This person will oversee teams of scientists, programmers, and engineers responsible for the development of customized laboratory automation projects. We are looking for a scientist or engineer with a B.S. degree or equivalent; five years of related experience; and a background that includes experience in project management, supervision, laboratory automation, and customer service. Excellent verbal and written communication skills are a must.

Please send résumé including salary history to:

**Bohdan Automation**  
**ATTN: Department ATM**  
**1500 McCormick Boulevard**  
**Mundelein, IL 60060**  
**or FAX to: 847-680-1199**

**Cell/Molecular Biologist, VISITING ASSISTANT PROFESSOR.** Two year leave replacement, August 1997. Ph.D. in molecular or cell biology and commitment to undergraduate teaching and research required. Teaching responsibilities include introductory team taught courses with laboratory, cell physiology, and molecular genetics. Candidates should be willing to work in a scholarly community committed to Christian higher education and the Lutheran tradition. Review begins 1 March 1997. Submit application, curriculum vitae, transcripts, and three letters of recommendation to: **Dr. David W. Scupham, Chair, Biology Department, Valparaiso University, Valparaiso, IN 46383-6494.**

## **Gene Therapy DNA Vaccines**

**Group Leader,  
Scientist, Post-Docs**

# MAXYGEN

Maxygen is establishing a group dedicated to DNA shuffling, ('molecular breeding' or 'sexual PCR') for the discovery of new viral and plasmid vectors for Gene Therapy and DNA Vaccines. We are looking for creative, dynamic individuals with proven scientific track records. The Gene Therapy Group will be using our proprietary shuffling technology to generate extensive molecular diversity with genes, plasmids, vectors and viruses. Various recombination techniques are used in combination with low level mutagenesis and natural diversity. This diversity is screened or selected with appropriate assays and improved variants are then subjected to reiterative rounds. Thus, an empirical approach and powerful selective assays yield novel solutions to difficult problems that currently limit exploitation of vectors in areas such as gene therapy and DNA vaccines.

### **Molecular Evolution**

Maxygen is an independent spin-off from Affymax Research Institute. Maxygen is a state-of-the-art technology center focused on the development of evolution technology for the optimization of single genes, pathways, episomes and viruses. Please see our Website at [WWW.MAXYGEN.COM](http://WWW.MAXYGEN.COM) for information. Resumes, incl. e-mail address to: Maxygen Inc., Attn: W. Stemmer, 3410 Central Expressway, Santa Clara, CA 95051. E-mail: [tim\\_stemmer@qmgates.affymax.com](mailto:tim_stemmer@qmgates.affymax.com). EOE

## **President**

### **Buck Center for Research in Aging**

The Board of Directors of the Buck Center for Research in Aging invites applications or nominations for the position of President.

The President will be the chief executive officer of the Buck Center for Research in Aging, a new independent research institute dedicated to increasing the healthspan through interdisciplinary research on aging. The Center, designed by I.M. Pei, will initially be comprised of a Research Service and Education Building and one Laboratory Building situated on picturesque Mount Burdell in Marin County, California.

The President should be an accomplished scholar with a strong commitment to research in aging and may have either worked previously in the field of aging or have a national reputation in an area directly relevant to the Center's mission. The President will lead the team that will develop one of the world's great institutions for research on aging and will be responsible for the overall management and administration of the Center as well as the identification, recruitment and oversight of the research scientists. In addition, the President will have the overall responsibility for fundraising, community and public relations, and interactions with affiliated universities. The President may also supervise his/her own active research program. To assist the President, there will be a Vice President for Administration. A meaningful affiliation with one or more major Bay Area academic institutions is envisioned.

Interested candidates should send their resumes and names of at least three references to: John W. Rowe, M.D., Chairperson, Buck Center President Search Committee, Office of the President, The Mount Sinai Medical Center, One Gustave L. Levy Place, New York, NY 10029-6574.



**DANA-FARBER  
CANCER INSTITUTE**

### **POSTDOCTORAL TRAINING OPPORTUNITIES IN**

#### **CANCER IMMUNOLOGY**

The Dana-Farber Cancer Institute seeks to fill postdoctoral training positions for translational research in the area of cancer immunology. Background and/or experience in the biochemical, genetic and cellular techniques involved in murine T-cell research is preferred. M.D., Ph.D. and M.D./Ph.D candidates must be U.S. citizens or permanent residents of the U.S. and commit to a minimum two-year training period. A joint appointment will be held in an appropriate department of the Harvard Medical School. Please forward a CV to:

**Harvey Cantor, Director  
Postdoctoral Training Program  
Dana-Farber Cancer Institute  
44 Binney Street, LHRB 210  
Boston MA 02115**

*DFCI is an Equal Opportunity Employer*

## **BS/MS Scientist**

### **Safety & Metabolism**

Pfizer scientists are involved in some of the most critical research in the world today. As a Fortune 100 company, we have established a product pipeline that is unparalleled, and an intellectual, collaborative environment that inspires scientific achievement. Join our Animal Health team, and participate in creating innovative solutions to disease and illness.

In addition to a fast-paced, yet collegial environment, we offer very competitive salaries and excellent benefits including relocation assistance. For confidential consideration, please forward resume suitable for electronic scanning (i.e., eliminate italics, bullets, bolds, underlines and staples) to: Employee Resources, Pfizer, Inc, Job Code #2054, Central Research Division, Eastern Point Road, Groton, CT 06340. For more information about Pfizer, see us on the Internet at: <http://www.pfizer.com>. We are an equal opportunity employer M/F/D/V.

This key position is ideal for you if you are interested in the analysis, disposition, and metabolism of drugs. The responsibilities focus on the development and use of bioanalytical methods for monitoring drugs and metabolites using state-of-the-art instruments. Additionally, you would be responsible for the development and validation of sensitive bioanalytical assay methods for analysis of drugs in biological fluids and tissues. Related duties involve the collection of biological samples and the use of in vivo and in vitro techniques.

Qualified applicants will possess a BS or MS in chemistry, biochemistry, or pharmacology; superior interpersonal and communication skills (verbal and written) and strong computer competencies. Knowledge of GLP study conduct/requirements and handling of radioisotopes are desirable.



*We're part of the cure.*



## POSITIONS OPEN

### PLANT PHYSIOLOGIST (BIOCHEMIST)

USDA, Agricultural Research Service (ARS) announces a position for a **RESEARCH PLANT PHYSIOLOGIST (BIOCHEMIST)**, GS-14, for the Red River Valley Agricultural Research Center at Fargo, North Dakota. The successful applicant will lead a research unit in the discovery of new control strategies for invasive perennial weeds. In addition the incumbent is responsible for independent research on the identification and characterization of vulnerable biochemical targets in perennial weeds that increase their susceptibility to control and reduce their ability to survive environmental and physiological stress. Applicants must meet minimum education requirement, plus at least one year of research experience at the postdoctoral level equivalent to the next lower grade. Salary of \$63,169 to \$82,120 is commensurate with qualifications. For Vacancy Announcement Number ARS-D7W-055 and application forms, call **Ms. Melanie Nyquist at Telephone: 701-239-1203** and for information on research, contact **Dr. Don Zimmerman at Telephone: 701-239-1370**. U.S. citizenship is required. Application must be postmarked on or before February 17, 1997. *ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

The Department of Chemical Engineering at North Carolina State University invites applications for a tenure-track faculty position at the rank of **ASSISTANT PROFESSOR** with research specialization in biochemical engineering. Qualifications include a Ph.D. in chemical engineering or a related area. The applicant is expected to establish a strong program that will attract extramural funding as well as have commitment to excellence in teaching at the undergraduate and graduate levels. Applicants should provide a curriculum vitae, a short description of proposed research, and the names of at least three references. This information should be sent to: **Prof. Robert M. Kelly, Search Committee Chair, Department of Chemical Engineering, North Carolina State University, P.O. Box 7905, Raleigh, NC 27695-7905. Telephone: 919-515-6396; FAX: 919-515-3465; Email: kelly@che.ncsu.edu**. Review of applications will begin February 15, 1997. *North Carolina State University is an Affirmative Action/Equal Opportunity Employer. Women and minority applicants are especially encouraged to apply.*

### ASSISTANT PROFESSOR

The Biology Department of Rutgers University-Camden seeks a broadly trained **BIOLOGIST** for a tenure-track position, beginning September 1997. Ph.D. required and postdoctoral experience preferred. This position entails teaching undergraduate and graduate courses in microbiology or genetics as well as courses in introductory biology. Please send curriculum vitae, statement of research interests, and three letters of recommendation to: **Dr. H. Lee, Chair, Biology Department, Rutgers University, Camden, NJ 08102**. Review of completed applications will begin on March 1, 1997 and continue until the position is filled. *Rutgers is an Equal Opportunity/Affirmative Action Employer.*

### COMPUTATIONAL STRUCTURAL BIOLOGIST

Postdoctoral project: characterization of metal ion sites in protein structures; creation of interactive structural database with HTLM, VRML, and Java; and application of these results to novel metalloprotein design. Superb facilities and environment. Dynamic interactions with multidisciplinary faculty in Metalloprotein Structure and Design Group. Experience with computational and structural biology preferred. *Minority applicants encouraged*. Send curriculum vitae to: **Dr. John Tainer, The Scripps Research Institute, La Jolla, CA. Email: jat@scripps.edu**.

### NIH FUNDED POSTDOCTORAL POSITION AVAILABLE

Ongoing studies in molecular endocrinology: Structure-function relationships of cholecystokinin/gastrin receptors (*Nature* 362:348-350, 1993; *J. Biol. Chem.* 270:5019-5023, 1995; *Mol. Pharmacol.* 50:436-441, 1996). *In vivo* studies of CCK receptor function (gastric mucosal differentiation, food intake, gallstone formation) utilizing "knockout" mice (*Gastroenterology* 112:280-286, 1997). Applicant must have basic knowledge of molecular biology and be a U.S. citizen or permanent resident. *Equal Opportunity Employer*. Submit curriculum vitae and references to: **Alan Kopin, M.D., Tupper Research Institute, Tufts University Medical School, 750 Washington Street, Box 239, Boston, MA 02111**.

## POSITIONS OPEN

Brooklyn College/CUNY invites applications from neuroscientists/developmental biologists for tenure-track position at the **ASSISTANT PROFESSOR** level in the Department of Biology beginning September 1997. We seek applicants who will develop a research program that generates external funding and trains undergraduate and graduate research students. We are especially interested in applications from individuals whose research uses *Drosophila* as a model system. Applicants must have a Ph.D. degree, postdoctoral training, publications, and a strong commitment to undergraduate education. A complete application consists of: curriculum vitae, statement of research plans, and three letters of recommendation (to be sent directly from three referees). Submit applications by March 10, 1997 (deadline may be extended) to: **Dr. R. H. Gavin, Department of Biology, Brooklyn College, 2900 Bedford Avenue, Brooklyn, NY 11210-2889**. *An Affirmative Action/Equal Employment Opportunity Employer, Minorities/Females/Disabled/Veterans.*

### FACULTY POSITION DEPARTMENT OF BIOLOGY

The Department of Biology of City College of City University of New York invites applications for a **TENURE-TRACK POSITION** in the area of physiological ecology starting September 1997. The successful candidate will be expected to have a Ph.D., postdoctoral experience, the capacity to generate an independent research program, and a strong commitment to undergraduate teaching, as well as graduate training at the Master's and Ph.D. levels. The Biology Department maintains an active affiliation with the American Museum of Natural History, and curators at the museum participate in the graduate program. Teaching responsibilities will include introductory biology as well as courses in physiology and the candidate's area of specialization.

Send your curriculum vitae, description of future research plans, statement of teaching philosophy, and the names and addresses of four current references by February 28, 1997 to: **Dr. Sharon Cosloy, Chair of Biology, City College of CUNY, 138th Street and Convent Avenue, New York, NY 10031**. *An Equal Opportunity/Affirmative Action Employer, Minorities/Females/Disabled/Veterans.*

**POSTDOCTORAL FELLOW:** Immediate opening for individual interested in revealing the molecular mechanisms regulating isoactin dynamics in living cells. Experience in molecular biology, protein biochemistry, creation of mutant cell lines, and production of targeted disruptions for gene knockouts preferred. Send curriculum vitae, copies of recent reprints, and names and Email addresses of three references to: **Ira M. Herman, Ph.D., Professor of Cell and Molecular Physiology, Tufts University School of Medicine, Boston, MA 02111. Email: iherman@opal.tufts.edu**. Material must be submitted by March 15, 1997.

**POSTDOCTORAL RESEARCH FELLOWSHIP** position immediately available, for Ph.D. or M.D., in project dealing with molecular and cellular biology of thermogenesis and energy expenditure at Lady Davis Institute of Medical Research, McGill University. Candidates must have some experience using molecular biology techniques and cell culture. Send curriculum vitae, references, and a letter outlining research interest and career goals to: **J. Enrique Silva, M.D., Division of Endocrinology, Jewish General Hospital, 3755 Cote-Ste-Catherine, Montreal, QC H3T 1E2 Canada**.

**POSTDOCTORAL FELLOWSHIP**, Harvard Medical School. Position available immediately to study biochemical and cellular regulation of nitric oxide synthases. Applicant must have strong background in protein chemistry, cell signaling, and basic molecular biology. Submit curriculum vitae, research interests, and names of three references to: **Thomas Michel, Ph.D., M.D., Brigham and Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115. FAX: 617-732-5132. Email: michel@calvin.bwh.harvard.edu**.

**POSTDOCTORAL POSITION** in molecular biology is available immediately to study molecular mechanisms of cementoblast and osteoblast differentiation. Expertise in molecular biology techniques is essential. Send curriculum vitae and names of three references to: **Dr. Moon-II Cho, State University of New York at Buffalo, School of Dental Medicine, Department of Oral Biology, B10 Foster Hall, Buffalo, NY 14214-3092. FAX: 716-829-3942; Email: micho@sdm.buffalo.edu**. *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### POSTDOCTORAL POSITION NITRIC OXIDE IN CORTICAL PLASTICITY

A **POSTDOCTORAL POSITION** is available to study the role of endogenous nitric oxide production in dynamically modulating synaptic signaling in the intact visual cortex. Studies utilize *in vivo* electrophysiology, micro-iontophoresis and computer based quantitative analysis of visual stimulus displays. Candidates should have Ph.D. in a relevant discipline and experience in electrophysiology. Send curriculum vitae and names of three references to: **Dr. Michael J. Friedlander, Department of Neurobiology, University of Alabama at Birmingham School of Medicine, 1719 6th Avenue South, 516 CIRC, Birmingham, AL 35294-0021. Email: mjjf@nrc.uab.edu; FAX: 205-934-6571; Telephone: 205-934-0100**.

*UAB is an Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL RESEARCH ASSOCIATE RETINAL RESEARCH

A full-time position is available April 1, 1997 to study functional domains of rhodopsin through site directed mutagenesis and expression in transgenic mice. Candidates should have a Ph.D. in biochemistry and/or molecular biology and the ability to work well with a team of investigators. The position is supported by a federal research grant and is funded for three years.

Send curriculum vitae and three references to: **Neal S. Peachey, Research Service, Hines VA Hospital, P.O. Box 7003, Hines, IL 60141 USA. FAX: 708-216-2615; Email: npcahc@luc.edu**. *Equal Opportunity Employer, Minorities/Females/Disabled.*

### NEUROPHYSIOLOGIST

**POSTDOCTORAL POSITION** available in the Department of Physiology and Neurobiology to study alterations in synaptic physiology in a genetic mouse model of human learning disorders. Experience needed with brain slice and standard electrophysiological techniques, to characterize the effects of neocortical malformations on the synaptic physiology of cortical and thalamic circuits. Send curriculum vitae, description of previous research experience, and names of three references to: **Joe Lo-Turco, Physiology and Neurobiology, Box U-156, University of Connecticut, Storrs, CT 06269**. Search Number 97A197. *An Equal Opportunity Employer.*

**POSTDOCTORAL** associate synaptic integration positions available for individuals interested in use-dependent modulation of synaptic function and with experience in voltage-clamp, optical calcium measurements, and/or computational modeling. Research projects will address interactions between nicotinic and metabotropic synapses in sympathetic ganglia (for background, see: *J. Physiol.* 491:413, 1996 and 494:287, 1996 and 498:201, 1997). Send curriculum vitae and names of three references to: **Dr. John P. Horn, Department of Neurobiology, E1440 BST, University of Pittsburgh, School of Medicine, Pittsburgh, PA 15261. Telephone: 412-648-9429; Email: jph+@pitt.edu**. *Affirmative Action/Equal Opportunity Employer.*

Three **POSTDOCTORAL POSITIONS:** 1) Isolation and expression of the gene for vanadium bromoperoxidase from marine algae; candidates must have experience in molecular biology. 2) Mechanistic enzymatic or biomimetic investigations of vanadium haloperoxidases. 3) Mechanistic studies of a new polyunsaturated fatty acid oxidase/desaturase enzyme, from marine algae. Send curriculum vitae, areas of expertise, and three letters of recommendation to: **Professor Alison Butler, Department of Chemistry, University of California, Santa Barbara, CA 93106-9510. Email: butler@sbmm1.ucsb.edu; FAX: 805-893-4120**. *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** is available immediately to conduct molecular genetic studies on the effects of ozone on Arabidopsis. Experience in molecular biology is required and familiarity with Arabidopsis genetics preferred. Send résumé and three reference letters to: **Keith Davis, Plant Biotechnology Center, 1060 Carmack Road, Columbus, OH 43210 or Email: davis.68@osu.edu**.

**POSTDOCTORAL POSITION** available to study novel regulators of the CF gene product (CFTR). Applicants must have a Ph.D. with experience in patch-clamping and/or molecular biology. Send curriculum vitae and three references to: **Dr. Kevin Kirk, Cystic Fibrosis Research Center and Department of Physiology and Biophysics, University of Alabama at Birmingham, Birmingham, AL 35294-0005**.

**DIRECTOR OF THE  
BIODIVERSITY RESEARCH  
CENTER OF THE CALIFORNIAS  
San Diego Natural History Museum**

The San Diego Natural History Museum invites nominations and applications for the position of Director of the Biodiversity Research Center of the Californias (BRCC). A major renovation and expansion of the Museum building and programs is currently in the design and fund-raising phase. The BRCC represents a refocusing of the Museum's research program and is the product of a 122-year tradition of systematics research, scientific collecting (botanical, zoological, paleontological, and mineralogical), and scientific publication in this region (southern California and Baja California).

**Qualifications:** Ph.D. in the Life Sciences; professional standing and demonstrated research accomplishments in one or more of the Museum's research areas; museum experience including curatorial responsibilities; demonstrated managerial and administrative abilities; strong interpersonal skills; bilingual (verbal and written; Spanish and English). Bicultural (Mexico and USA) experience preferred. **Responsibilities:** scientific and administrative leadership of research and support staff; planning and implementation of scope and direction of BRCC; maintenance of active research program; and development and facilitation of grants and contracts by and for BRCC staff. Send for information packet to: **BRCC Search Committee; San Diego Natural History Museum; PO Box 1390; San Diego, CA 92112. Email: paleosdnhm@earthlink.net.** Closing date is 15 April 1997.

*SDNHM is an equal opportunity employer.*

**SCIENTIFIC OPPORTUNITIES AT  
BOEHRINGER MANNHEIM CORPORATION**

Boehringer Mannheim Corporation-Laboratory Diagnostics, a rapidly expanding biotechnology company, has excellent opportunities for experienced professionals to join our international team. Currently in Concord, California, these positions will be relocated with us to our new state of the art facility in Pleasanton, California later this year.

**CELL BIOLOGIST**

You will develop tools and methods for the isolation and identification of rare cell populations, focusing on the identification of cancer and cancer staging. This will entail fractionation and enrichment of human blood cells, light and fluorescent microscopy, immunofluorescent staining, fluorescent *in situ* hybridization, and cell cultures. Requires a B.S./M.S. degree in the biosciences with 5 years' experience in cell biology and cell isolation/separation techniques. Experience with immunohistochemistry and FISH desirable. (REF-CB)

**R&D-DNA PROBES SCIENTIST**

You will develop and implement nucleic acid-based assay methods for pathogens in clinical samples. Requires a Ph.D. with 3-10 years' lab experience in molecular biology with success in the design of nucleic acid amplifications (i.e. PCR) systems for detecting target sequencing. Familiarity with automated DNA sequencing and supervisory skills are highly desirable. (REF-DPS)

**R&D-DNA PROBES DIAGNOSTIC SCIENTIST**

You will participate in the development of DNA probe-based diagnostic tests for infectious disease agents. You will work with the development and optimization of sample pretreatment procedures, optimization of PCR primers and labeled probes, and investigation into interferences caused by sample and reagent impurities. Your Ph.D. should be supported by 3-10 years of lab experience in molecular biology area with demonstrated success in of Polymerase Chain Reaction technology. (REF-DPDS)

We offer a comprehensive salary and benefits package. To apply, please note "REF" code and send resume to **Boehringer Mannheim, Human Resources Dept., 2400 Bisso Lane, P.O. Box 4117, Concord, CA 94524-4117, AA/EOE.**



**BOEHRINGER  
MANNHEIM  
CORPORATION**

**ALLEGHENY UNIVERSITY OF THE  
HEALTH SCIENCES**

**The Institute for Addictive Disorders**

Jerome J. Platt, Ph.D., Director

**and MCP•Hahnemann School of  
Medicine**

**Department of Psychiatry**

Trevor R.P. Price, M.D., Chairman

invite applications from highly qualified individuals and groups of researchers with funding in the addictions. Allegheny University of the Health Sciences has made a major commitment to research in the addictions, both through the establishment of the Institute for Addictive Disorders (IAD) and the planned expansion of addiction activities and clinical services in support of research in the Department of Psychiatry, in collaboration with the IAD. Applicants may be from the preclinical or clinical sciences. Extensive and sophisticated laboratory facilities and library available. Opportunity to work in a highly active and stimulating research environment, with senior researchers. Tenure line appointments available for highly qualified investigators with a history of achievement. Interested persons should contact **Jerome J. Platt, Ph.D. [(212) 762-4307], Allegheny University of the Health Sciences, Institute for Addictive Disorders, Broad & Vine Streets, MS 984, Philadelphia, PA 19102** or **Trevor R.P. Price, MD [(215) 762-4494], Allegheny University of Health Sciences, Department of Psychiatry, MCP• Hahnemann School of Medicine, Broad & Vine Streets, MS 403, Philadelphia, PA 19102.**

**ASST OR ASSOCIATE PROFESSOR  
Microbiology and Immunology**

CUNY Medical School/SBE is recruiting a new faculty member for the Dept of Microbiology and Immunology. CUNY Medical School/SBE is a seven-year integrated curriculum leading to a Bachelor of Science (B.S.) and Doctor of Medicine (M.D.) Degrees. Founded in 1973 and located on the City College Campus, its primary mission is to: expand access to medical careers for under-represented minorities and economically disadvantaged inner-city youth and to encourage and prepare students to provide primary care in New York's underserved urban community. It has the highest proportion of under-represented minority medical students in New York State and one of the highest in the nation. The Dept offers access to state-of-the-art research facilities.

**Responsibilities:** To teach medical students, allied health professional students and graduate students and conduct research in the areas of molecular or cellular immunology, or infectious disease.

Candidates are expected to have a Ph.D. or M.D. degree, or equivalent, and to have completed appropriate post-doctoral training with a demonstrated record of significant research accomplishments. Individuals should have teaching/research experience in molecular or cellular immunology, virology, or infectious disease.

Candidates must possess a strong belief in the values of diversity and multiculturalism. Position requires both the interest and skills for effective interaction with students of multi-ethnic backgrounds in an urban setting.

Salary:	Basic Sciences (Non-M.D.)	Clinical (M.D.)
Assistant Professor	\$42,167-67,409	\$62,323-89,209
Associate Professor	\$52,244-78,309	\$70,385-100,108

Interested individuals should send a curriculum vitae, copies of recent publications, a brief statement of future research goals and three letters of references by March 31, 1997 to:



**Dr. Richard Colco, Chairman  
Department of Microbiology and Immunology  
CUNY Medical School/  
Sophie Davis School of Biomedical Education  
138th Street and Convent Avenue - J920  
New York, NY 10031**

CUNY Medical School has a strong commitment to the principle of diversity. In that spirit we are particularly interested in receiving applications from a broad spectrum of people, including women and under-represented groups. Reasonable accommodations provided for individuals with disabilities upon request.

**Wanted: Committed, ambitious  
scientist. Must be a team player  
with a vision for the future.  
M.D./Ph.D., Ph.D., M.S. or  
B.S. degree necessary.**

### ***Does this describe you?***

If it does, then plan to attend the bioSCIENCE Career Fairs sponsored by SCIENCE. The bioSCIENCE Career Fairs offer the perfect opportunity for scientific professionals to meet in person with representatives from top biotechnology and pharmaceutical companies, universities, governmental agencies and institutions.

#### ***Next 1997 bioSCIENCE Career Fairs***

##### **AAAS/bioSCIENCE Career Fair**

Seattle, WA at the Washington Convention Center  
18 February: 11am - 5pm

##### **Cambridge, MA on the MIT Campus**

84 Massachusetts Ave., Stratton Bldg. Student Center, 2nd Floor, La Salla Room  
28 February: 11am - 4 pm  
1 March: 11am - 3 pm

To pre-register, please submit your resume or CV via fax: (202) 289-6742, or via e-mail: [bioscience@aaas.org](mailto:bioscience@aaas.org). Indicate the career fair location you are submitting it for. **Remember to bring multiple copies of your CV or resume with you to the Career Fair, a copy will be necessary to register.** Admission to all of the events is FREE.

*For more information, please call (202) 326-7018*

## **bioSCIENCE CAREER FAIRS**

bioSCIENCE Career Fair Information Online: <http://www.sciencemag.org>  
(Choose SCIENCE Professional Network from the menu)

Do not contact MIT directly. They are not responsible for organizing this event.



## TRINUCLEOTIDE REPEATS AND HUMAN GENETIC DISORDERS

A post-doctoral position is available immediately to study the molecular basis of human neurological disorders such as Fragile X syndrome and Friedreich's Ataxia that result from trinucleotide repeat expansion. Specific areas of interest include mechanisms of repetitive sequence instability, the basis of the chromosome fragility associated with certain triplet expansion diseases, the effects that expanded repeats have on gene expression, and the normal function of the genes affected in these disorders. Demonstrated competence in core molecular biology techniques is essential. Experience with mammalian tissue culture techniques, the analysis of DNA/chromatin structure, protein expression/purification, and/or the analysis of low level transcripts would be desirable. Candidates should have received their degree within the last 5 years. Applicants should submit their Curriculum vitae and three letters of reference as soon as possible to:

**Karen Usdin, Ph.D., Building 8,  
Room 202, 8 Center Drive MSC 0830,  
National Institutes of Health,  
Bethesda, MD 20892-0830; email  
ku@helix.nih.gov; fax: 301-402-0240**

NIH is an Equal Opportunity Employer

## RESEARCH BIOPHYSICIST

NATIONAL INSTITUTES OF HEALTH

A position for a Research Biophysicist-Staff Scientist is available in the National Institute of Child Health and Human Development, National Institutes of Health. The successful candidate will be expected to conduct research on calcium signaling in pituitary and hypothalamic cells. Applicants must possess an M.D. or Ph.D. degree and have experience in the application of photometry, imaging, and confocal microscopy to calcium measurements in single cells and *in situ* preparations. A strong background in physics, mathematics, and computing is required, as well as expertise in pituitary cell purification and culture, and analysis of hormone secretion. The candidate will work as a member of a multi-disciplinary research team led by an independent principal investigator. Salary range of \$38,000 to \$45,000. Applicants should be American citizens or resident aliens. Send CV, statement of research experience, and three letters of recommendation within four weeks to:

**Dr. Kevin J. Catt, Chief  
Endocrinology and  
Reproduction Research Branch  
Building 49, Room 6A-36  
National Institutes of Health  
49 Convent Drive  
Bethesda, MD 20892-4510**

NIH is an Equal Opportunity Employer

# KUWAIT UNIVERSITY

## Faculty of Science Geology Department

### Announcement of Faculty Openings

The Faculty of Science of Kuwait University announces two faculty positions in the Department of Geology in the following fields of specialization:

Structural Geology  
Petroleum Geology (Reservoir Geology)  
Marine Geophysics

These positions will be available commencing in the Fall of 1997. Applicants should possess excellent teaching skills and must have received the Ph.D. or its equivalent before hiring. Preference will be for applicants eligible to the title of Professor (i.e. for applicants with 8 years experience and more than 17 refereed publications after Ph.D.).

Salaries are competitive and are **tax-free**; monthly salary ranges from KD 875 - 1035 for Associate Professor, KD 1135 - 1295 for Professor (1 KD = approximately \$3.3 U.S.). Numerous fringe benefits are included, such as free National Health Care, housing allowance, free private education for non-Arab children, paid vacations, free air transportation for expatriate families to and from their home country for summer holidays and severance gratuity. Employment contracts are available for an initial 2-year period and are renewable. Generous in-house research grants are readily available.

Applications may be obtained from:

**Embassy of the State of Kuwait  
Kuwait University Office  
3500 International Drive, NW  
Washington, DC 20008  
Tel: (202) 363-8055**

All applications (including a complete resume, contact address including phone, fax and e-mail, names and addresses of three references and a list of copies of research publications) should be forwarded no later than 2 weeks after the publication of this announcement by express mail or courier service to:

**Dean of the Faculty of Science  
Kuwait University  
P.O. Box 5969 - Safat  
Kuwait 13060**

## POSITIONS OPEN

### POSTDOCTORAL POSITION

Positions available immediately for individuals with training in cellular and/or molecular immunology to study effects of cannabinoids on macrophage functionality. Experience in cell culture, immune cell function assays, and biochemistry required. Experience in gene cloning, expression, and modification in eukaryotic systems recommended. Please send curriculum vitae, description of research interests, and names of three references and contact numbers to: **Guy A. Cabral, Ph.D., Department of Microbiology and Immunology, Medical College of Virginia, Virginia Commonwealth University, Richmond, VA 23298-0678. FAX: 804-828-8220; Email: gacabral@gems.vcu.edu. Department Web home page: <http://views.vcu.edu/~dconrad/micro.html>.**

### POSTDOCTORAL RESEARCH ASSOCIATE

Position immediately available in laboratory studying the genetics and physiology of polyhydroxyalkanoate (PHA) synthesis. Specific project involves cloning and characterization of genes and gene products that mediate PHA production. Candidate should possess good skills in molecular biology and a knowledge of bacterial physiology. Position is funded by a grant from the USDA. Submit curriculum vitae and names of three references to: **Dr. Douglas Dennis, Department of Biology, James Madison University, Harrisonburg, VA 22807. Email: dennisde@jmu.edu; FAX: 540-568-3333. JMU is an Affirmative Action/Equal Opportunity/Equal Access Employer.**

### POSTDOCTORAL POSITION PLANT MOLECULAR BIOLOGY

Available immediately, to participate in the design and construction of plant virus vectors and transgenic plants for use in the production of vaccines *in planta*. Priority will be given to candidates with experience in the production of transgenic plants, protein purification, and molecular biology techniques. Please send résumé and names of references to: **Dr. K. Andrew White, Department of Biology, York University, 4700 Keele Street, Toronto, Ontario M3J 1P3 Canada. FAX: 416-736-5698; Email: kawhite@yorku.ca.**

### POSTDOCTORAL or RESEARCH ASSOCIATE POSITION

available immediately to study the pathobiology of progressive renal disease in animal models and in cell culture. Techniques include northern and western analysis, reverse transcription PCR, *in situ* hybridization, ELISA detection of cytokines, immunohistochemistry, and cell and tissue culture. Send curriculum vitae to: **Jonathan R. Diamond, M.D., Division of Nephrology, The Milton S. Hershey Medical Center, P.O. Box 850, Hershey, PA 17033. The Pennsylvania State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply. For your health, Hershey Medical Center is a smoke-free campus.**

**POSTDOCTORAL POSITION** available immediately for an NIH funded research study that investigates the cellular and molecular aspects of host-parasite interaction in the skin with particular emphasis on the role of antigen presenting cells and cytokines in vaccine-induced immunity against *Schistosoma mansoni*. A Ph.D. with experience in cellular immunology and molecular biology is essential. If interested, please send your curriculum vitae to: **K. Ramaswamy, Department of Biomedical Sciences, University of Illinois College of Medicine at Rockford, 1601 Parkview Avenue, Rockford, IL 61107. FAX: 815-395-5666; Email: ramswamy@uic.edu for more information. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available to study fatty acid-mediated signal transduction. Cell biological and molecular biological techniques will be used to define mechanisms in cell preparations. Experience in molecular biology and tissue culture is essential. Interested applicants should forward a curriculum vitae and three letters of reference to: **David J. Schneider, M.D., Cardiovascular Division, E217 Given Building, The University of Vermont, Burlington, VT 05405. Email: djschnei@zoo.uvm.edu.**

**POSTDOCTORAL FELLOW** needed to study signaling mechanism coupled to platelet adhesion receptors. This position requires a Ph.D. and/or M.D., and experience in molecular biology, protein biochemistry, and tissue culture. Please send a curriculum vitae and the names of three references to: **Dr. Xiaoping Du, Department of Pharmacology (MC 868), University of Illinois at Chicago College of Medicine, 835 South Wolcott Avenue, Chicago, IL 60612 or Email: xdu@uic.edu.**

## POSITIONS OPEN

### ECOTOXICOLOGY POSITIONS POSTDOCTORAL AND TECHNICAL

Three openings in ecotoxicology and ecological risk management. One postdoctoral will develop quantitative methods and generate PC-based programs implementing the methods. The second will investigate bioaccumulation dynamics and bioavailability of metals and radionuclides in aquatic biota. The technical position (M.S. level preferred) will conduct bioaccumulation and toxicity experiments with aquatic biota. For the postdoctoral positions, 20% of time will be spent developing grants. Send curriculum vitae and names of three references to: **Dr. Michael C. Newman, Savannah River Ecology Laboratory, P.O. Drawer E, Aiken, SC 29802. An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available immediately to study plant community changes in temperature and humid grassland ecosystems as affected by grazing animals and other inputs. *Must be a U.S. citizen and have a Ph.D. in plant ecology or botany.* Experience or training in spatial variability analysis and ecosystem modeling desirable. Salary of \$37,507 to \$48,761, GS-11, based on qualifications. Submit curriculum vitae, transcripts, and names and telephone numbers of three references to: **Dr. M. A. Sanderson, USDA-ARS, Curtin Road, University Park, PA 16802-3702.** For announcement, forms, or information contact Dr. Sanderson at: **FAX: 814-863-0935 or Email: mas44@psu.edu.** Applications accepted until position is filled. *USDA is an Equal Opportunity Employer.*

**Neurovascular biology POSTDOCTORAL POSITION**, Section of Neurosurgery, Yale Medical School. Research explores angiogenesis activity in vascular malformations of the brain using human tissue and animal models, and disease gene expression in lesional tissue and its functional impact on cultured endothelial cells. Applicants should have a doctoral degree in cell or molecular biology, with previous work in some aspect of vascular biology or developmental neurobiology. Eligibility for research scientist career track after two postdoctoral years. Inquiries and curricula vitae to: **Issam A. Awad, M.D., Professor of Neurosurgery and Head, Yale Neurovascular Surgery Program; Email: issam.awad@yale.edu; Telephone: 203-737-2096; FAX: 203-785-6916. Yale University is an Equal Opportunity/Affirmative Action Employer.**

**NIH POSTDOCTORAL POSITIONS:** One position available immediately for Fellow to work on the interactions of retroviral Gags with cellular proteins. Background in protein biochemistry (protein-protein interaction), cell biology, and molecular biology is required. Salary range begins with \$28,000 and will be commensurate with experience. Qualified and interested candidates should send curriculum vitae and names and addresses of three references to: **Herbert C. Morse III, Chief, Laboratory of Immunopathology, NIAID, Building 7, Room 304, 7 Center Drive MSC 0760, Bethesda, MD 20892-0760. Telephone: 301-496-6379; FAX: 301-402-0077. Email: hmorse@atlas.niaid.nih.gov. NIH is an Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** at MIT available immediately to study the mechanisms of synaptic plasticity at the level of single synapse and synapse formation using a combination of biophysical (patch-clamp, real-time confocal image), molecular, and cell biological (transfection and gene knockout) techniques. Experience with techniques from electrophysiology and molecular biology desirable. Send curriculum vitae and names of three references to: **Prof. Guosong Liu, E25-435, MIT Department of Brain and Cognitive Sciences, Cambridge, MA 02139. Email: liu@mit.edu.**

**POSTDOCTORAL POSITION** is available immediately to study molecular mechanisms of leukocyte chemotactic receptor regulation. Experience in cellular/molecular biology is essential. Please send curriculum vitae and a statement of research interest to: **Hydar Ali, Ph.D./Ralph Snyderman, M.D., Duke University Medical Center, Department of Medicine, Room 201C MSRB, Box 3680, Research Drive, Durham, NC 27710. Email: ali00001@mc.duke.edu. Duke University is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available to study the structure, mechanism, and regulation of the vacuolar (H<sup>+</sup>)-ATPases. Experience in protein chemistry or molecular biology necessary. Send curriculum vitae and the names of three references to: **Dr. Michael Forgac, Department of Physiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111.**

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS CELL BIOLOGY-MAYO CLINIC

Position available to study the role of the large GTP-binding protein dynamin in vesicle based protein transport in epithelial cells and neurons.

Another position available to study the detrimental effects of alcohol on vesicle based protein trafficking in epithelial cells.

*Applicants should be permanent U.S. residents or citizens; have a Ph.D. or M.D. degree; and have experience in biochemical, cell biological, or molecular techniques.* Send résumé and letters of reference to: **Mark A. McNiven, Ph.D., 1721 Guggenheim Building, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905.**

*Mayo Foundation is an Affirmative Action/Equal Opportunity Educator and Employer.*

**POSTDOCTORAL POSITION** available for studying the molecular pathways which mediate mammalian cell-cell and cell-ECM interactions. Studies focus on the action of the lbc oncogene which mediates actin cytoskeletal reorganization through the Rho small GTP binding protein. Applicants must possess Ph.D., experience in molecular and cell biology, and biochemistry techniques; and U.S. citizenship or permanent residency to qualify for NIH training grant funding. Please send curriculum vitae and names of three references to: **Deniz Toksoz, Ph.D., Department of Physiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111.** Material must be submitted by March 15, 1997. *Equal Opportunity Employer.*

### POSTDOCTORAL POSITION MICROBIAL ECOLOGY

**POSTDOCTORAL POSITION** is available immediately in a project investigating dechlorinating microbial communities in PCB-contaminated sediments using the methods of chemical and molecular ecology along with traditional techniques. Recent Ph.D. with strong background in molecular biology and microbial ecology is preferred. Send curriculum vitae and the names of three references to: **G. Y. Rhee, Wadsworth Center and School of Public Health, State University of New York-Albany, Empire State Plaza, Albany, NY 12201-0509.** Grant funds for this project are administered through Health Research Inc. (HRI). *HRI is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately to study the role of neurotrophins and neuronal activity during visual system development. Study emphasizes *in vivo* mechanisms controlling axonal growth and synapse formation. A combination of *in vivo* imaging, pharmacology, cell culture, and electrophysiological techniques will be used. *Applicants must be U.S. citizens or resident aliens.* Send curriculum vitae and names of three references to: **Dr. S. Cohen-Cory, Mental Retardation Research Center, NPI 58-258, University of California, Los Angeles, Los Angeles, CA 90095. Email: scohenco@ucla.edu. UCLA is an Equal Opportunity Employer.**

**POSTDOCTORAL POSITIONS** available immediately to study cardiac oxidative injury and protection using established transgenic mouse models in which antioxidants are specifically overexpressed in the heart (*JBC* 271:12610-12616, 1996). Experiences in molecular biology, immunohistochemistry, cardiophysiology, cardiopathology, and cardiotoxicology are preferred. Send curriculum vitae and names of three references to: **Dr. Y. James Kang, Department of Medicine, University of Louisville, 530 South Jackson Street, Louisville, KY 40292. FAX: 502-852-0846.**

**POSTDOCTORAL POSITIONS**, University of California at San Francisco are available to study mammalian heat shock response and proteins: 1) Role of hsp's functioning as molecular chaperones in protein synthesis, folding, and assembly, and 2) Identification of agents that activate hsp expression *in vivo* for protection of tissues and organs against ischemia-reperfusion and/or other injuries. Send curriculum vitae and three letters of reference to: **W. J. Welch, UCSF Box 0854, San Francisco, CA 94143-0854. Email: welch@itsa.ucsf.edu. UCSF is an Affirmative Action/Equal Opportunity Employer.**

Two **POSTDOCTORAL POSITIONS** are available immediately for studies of: 1) neutrophil-mediated bacterial killing, and 2) adhesion receptors mediated signals in platelets. Applicants must have experience in molecular biology and/or cell biology and biochemistry. Please send curriculum vitae and references to: **Dr. Beatrice Haimovich, University of Medicine and Dentistry of New Jersey, Department of Surgery, MEB Room 434, New Brunswick, NJ 08903. Email: haimovic@umdnj.edu.**



## HOLLAND LABORATORY DEPARTMENT OF MOLECULAR BIOLOGY HOLLAND LABORATORY

A number of POSTDOCTORAL POSITIONS are available immediately for highly motivated scientists with a recent Ph. D. to investigate signal transduction mechanisms relevant to angiogenesis and the pathobiology of the vessel wall. Areas of research interest in the Department of Molecular Biology include signaling by receptor tyrosine kinases (JBC 271:25049, 1996) and cytoplasmic serine/threonine kinases (JBC 270:10351, 1995) trafficking of intracellular proteins (JBC 270:290939, 1995), and cell-extracellular matrix protein interactions (JBC 129:1403, 1995). Please send curriculum vitae and names of three references to:

Gene Liao, Ph. D.  
Chair, Search Committee  
Department of Molecular Biology  
Holland Laboratory  
American Red Cross  
15601 Crabbs Branch Way  
Rockville, MD 20855

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## Aeiveos Sciences Group Molecular Genetics of Aging

ASG is a biotechnology company dedicated to elucidating the molecular mechanisms of aging and applying this knowledge to reducing the negative impacts of aging on human health. Several immediate openings exist for talented, highly motivated individuals for the following positions:

### Ph.D. Scientists / Sr. Scientists

**Molecular Biologists** with training in genetics. Job designation will depend upon the level of experience. Familiarity with genotype analysis of complex traits and/or prior experience in a high throughput setting will be an asset. Individuals with prior industrial experience are strongly encouraged to apply (**Reference Code: CNT**).

**Molecular Biologist** to conduct research on differential expression of genes involved in aging, caloric restriction, and oxidative stress. Position requires prior experience in molecular biology techniques including differential gene expression analysis, cloning and characterization of genes (**Reference Code: DGE**).

### Bioinformatics

**Scientific Database Engineer** for our expanding bioinformatics group whose main responsibilities include design, implementation, and administration of databases to assist scientific projects. The position requires a BS/BA in Biology, Computer Science or related fields and at least two years experience with Oracle database including knowledge of Pro\*C and PL/SQL. Familiarity with UNIX and Windows NT as well as Java and JDBC is preferred (**Reference Code: INF**).

Qualified individuals should submit their curriculum vitae or resume for review to: **Human Resources (Reference Code), Aeiveos Sciences Group, P.O. Box 31083, Seattle, WA 98103-1083. ASG is an Equal Opportunity Employer.**

## GLOBAL CAREER OPPORTUNITIES

# SCIENCE in Europe

Science will be attending the following symposia and providing free bonus issues to delegates. All advertisements will also be placed on SCIENCE Professional Network free for a full two weeks on the Internet.

**USGEB (Union Eur Experimental Biologie)**  
20-21 March 1997 - Geneva Switzerland  
Issue Date : 7 March 1996

**European Congress For Molecular Cell Biology**  
22-25 March 1997 - Brighton UK  
Issue Date : 7 March 1996

**Salon du Laboratoire 1997**  
24-27 March, Paris France  
Issue Date : 14 March

**Protein Society 2nd European Symposium**  
13 -15 April : Cambridge - UK  
Issue Date : 14 March

**Important:** Booking deadlines for advertisements fall two weeks prior to all issue dates.

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Australian Museum

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SES, Level 1, Upper Band. Total remuneration package will be negotiated within the range of \$106,465 to \$114,940 p.a. Responsible for the formulation and achievement of strategic directions in the Museum's scientific activities including research, collection management, conservation and information sciences/technology. Achieve high level of contribution of science to commercial operations and integration with Public Programs and marketing activities. Participate as a member of the Museum's Management Team and assist the Director in achieving appropriate strategic directions for the Museum as a whole. Qualifications: Thorough understanding of the role and functions of modern museums in society and their unique contribution to the increase of knowledge and public understanding. Achievement in scientific research of a high standard and appropriate tertiary qualifications. Commitment to the communication of science to the widest possible audience. Thorough knowledge of issues, trends and debates relating to science. Demonstrated capability in leadership, management, interpersonal skills, conflict resolution and communication. Effective decision making, strategic thinking and planning skills. Proven experience in policy formulation and financial management. Demonstrated capacity to implement EEO, OH&S and Cultural Diversity policies and programs. Information Package: Roger Muller +612 9320 6230 or rogerm@amsg.austmus.gov.au or Web site <http://www.austmus.gov.au>

Applications to the Recruitment Officer, Australian Museum, 6 College Street, Sydney NSW 2000 Australia by the 21st March 1997.

No Smoking in the work place is Australian Museum policy.



## POSITIONS OPEN

### UNIVERSITY OF MIAMI Department of Molecular and Cellular Pharmacology Molecular Cardiology Laboratory

Several **POSTDOCTORAL POSITIONS** are available immediately to study ischemic heart disease at the molecular level including effects of redox stress, protein kinase and G-protein signaling pathways, regulation by proto-oncogenes, the influences of aging on these pathways, and development of gene transfer, adenovirus, and transgenic models to validate new approaches for gene therapy. We are particularly interested in the response pathways of cardiac myocytes and endothelial cells to hypoxic and oxidative stresses, the initiation signals for myocyte hypertrophy, and cell cycle regulation including cyclins, cdk's and tumor suppressor genes (*J. Biol. Chem.* 267: 25535, 1993; *J. Biol. Chem.* 268:16852, 1993; *Circ. Res.* 74: 679, 1994; *Card. Res.* 30:975, 1995; *Mol. Cell Biol.* 16:1035, 1996; *Circ. Res.* 1997, in press, March issue). We have excellent laboratory and office space with the full spectrum of modern molecular and cellular facilities including specialized redox equipment, and electrophysiology, patch-clamp, microinjection, optical, and transgenic facilities. Interested candidates should contact and send curriculum vitae to: **K. Webster and N. Bishopric, University of Miami Medical Campus, RMSB, 6th Floor, Miami, FL 33101. Telephone: 305-243-6779; FAX: 305-243-4555; or Email: kwebster@chroma.med.miami.edu. The University of Miami is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available April 1, 1997 to study the molecular and cellular biology of the anabolic effects of interleukin-15 on skeletal muscle (*Endocrinol.* 136: 3669, 1995). Work will comprise investigation of IL-15 signal transduction; effects on muscle-specific transcription factor expression; and myofibrillar protein dynamics in myogenic cell cultures, expression of IL-15 mRNA in tissues, and creation of transgenic mice. Applicants should have experience in molecular biology. Laboratory is well integrated and affiliated with the extensive biomedical research community of the University of Washington. *U.S. citizens* should send curriculum vitae, statement of research experience, and names and telephone numbers of three references to: **LeBris S. Quinn, Ph.D., VA Puget Sound Healthcare System, American Lake Division, Tacoma, WA 98493. FAX: 206-589-4004. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** is available in x-ray crystallography to study the structure and function of recombinases/topoisomerases interacting with novel DNA structures. Strong interest in biochemical function and mechanism of recombinases and/or topoisomerases required. Novel tools in chemistry and biochemistry will be developed and applied to determine the structure and function of recombinases by x-ray crystallography and *in vitro* biochemistry and molecular biology. Additional information about the laboratory can be obtained from the World Wide Web at: [www.rockefeller.edu](http://www.rockefeller.edu). Send current curriculum vitae and three letters of recommendation by Email or FAX to: **Milton H. Werner, Ph.D., Laboratory of Molecular Biophysics, The Rockefeller University, 1230 York Avenue, Box 42, New York, NY 10021. FAX: 212-327-7222; Email: mwerner@rockvax.rockefeller.edu.**

### POSTDOCTORAL RESEARCHER ION CHANNELS—PATCH CLAMPING Cystic Fibrosis Research Laboratory Stanford University

Three year position now open to study ion channels relevant to cystic fibrosis. Strong background in patch clamping required. Ph.D. in molecular and cell biology, physiology, or biophysics expected. Stipend: \$22,500 to \$36,000 per year depending on experience. Please send résumé and names of references to: **Dr. Jeffrey J. Wine, CFRL, Building 420, Jordan Hall, Stanford University, Stanford, CA 94305-2130. Email: wine@stanford.edu. Equal Opportunity Employer.**

### ANIMAL MODELS AND RETROVIRAL VACCINE SECTION

The SIV<sub>231</sub> genetic/phenotypic variants selection *in vivo*, upon different route of inoculations, are being studied in naive or vaccinated Rhesus macaques. Major interests include the characterization of coreceptor usage of emerging viral strain in disease development. *Candidates must be U.S. citizens or permanent residents.* Position available now. Applicants must have a M.D. or Ph.D. and have few years of postdoctoral experience. Send applications to: **Genoveffa Franchini, M.D., Animal Models and Retroviral Vaccine Section, DBS, Building 37, Room 6A11, Convent Drive MSC 4255, Bethesda, MD 20892-4255. Telephone: 301-496-6007; FAX: 301-496-8394.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION DEPARTMENT OF MICROBIOLOGY

Molecular genetics position available to analyze the function of DNA repair genes in a fungal system. Training in molecular biology or biochemistry is essential.

Please send curriculum vitae and names of references to: **W. K. Holloman, Department of Microbiology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. Email: wkholl@med.cornell.edu. Cornell University Medical College is an Equal Opportunity/Affirmative Action Employer.**

### EUNICE KENNEDY SHRIVER CENTER FOR MENTAL RETARDATION, INC.

The Biomedical Sciences Division of the Shriver Center has **POSTDOCTORAL POSITIONS** available immediately to study development of the olfactory system in mammals. Projects include: 1) the analysis of mechanisms that regulate the migration of olfactory neurons, including cells that contain luteinizing hormone-releasing hormone (LHRH); 2) the identification of molecular cues for guidance of olfactory axons to targets in the main and accessory olfactory bulbs. Preference given to candidates with experience in molecular and cellular neurobiology. Interested applicants should send curriculum vitae, a brief description of research interests, and the names of three references to: **Dr. Gary Schwarting, The Shriver Center, 200 Trapelo Road, Waltham, MA 02154. Additional information can be obtained at our Web site at: <http://www.shriver.org>.**

*The Shriver Center is an Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL POSITIONS Department of Pharmaceutical Sciences Biochemical and Molecular Toxicology

Positions are available to study the mechanism of vitamin E protection against chemical induced hepatotoxicity. One project will determine the *in vivo* and *in vitro* uptake and subcellular distribution of cytoprotective vitamin E analogs and develop therapeutic strategies to enhance the antioxidant capacity of cellular vitamin E. A second project will investigate the role of gene expression and signal transduction pathways in vitamin E analog cytoprotection against necrosis and apoptosis. Applicant must have a Ph.D. in a biomedical or pharmaceutical science, and experience in HPLC and *in vitro* studies (project 1) and in molecular biology techniques (project 2). Send curriculum vitae, names and telephone numbers of three references, and project preference to: **Dr. Marc Fariss, College of Pharmacy, Washington State University, Pullman, WA 99164-6510. WSU is an Equal Opportunity/Affirmative Action Employer and Educator.**

### POSTDOCTORAL POSITION IN BACTERIAL PATHOGENESIS Department of Microbiology University of Colorado Health Science Center

A **POSTDOCTORAL POSITION** in bacterial pathogenesis is available immediately in the Department of Microbiology at the University of Colorado Health Sciences Center to work on molecular characterization of structure-function relationships of cholera toxin and/or development by genetic engineering of novel cholera toxin-like chimeras for use as vaccines. Research facilities and environment for professional development are excellent. Salary is commensurate with training and experience. A Ph.D. in microbiology, cell or molecular biology, biochemistry, genetics or a related field is required. Submit curriculum vitae, bibliography, and names of three professional references to: **Dr. Randall Holmes, Department of Microbiology, UCHSC, Campus Box B-175, 4200 East Ninth Avenue, Denver, CO 80262. The University of Colorado Health Sciences Center is committed to Equal Employment Opportunity and Affirmative Action.**

**POSTDOCTORAL POSITIONS** are available for structure-function studies of G-protein coupled receptors and for expression cloning of novel receptors. A strong background in molecular biology is preferred. Send curriculum vitae and three letters of recommendation to: **Michael R. Lerner, M.D., Ph.D., University of Texas Southwestern Medical Center at Dallas, Dermatology Department, 5323 Harry Hines Boulevard, Dallas, TX 75232-9069. FAX: 214-648-9292; Email: mrlerner@aol.com. U.T. Southwestern is an Affirmative Action/Equal Opportunity University.**

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH FELLOW NEUROIMAGING OF HUMAN DRUG ABUSE

NIDA-funded position to study the sites and mechanisms of action of cocaine and nicotine and their interactions with cognitive processes in human drug users using fMRI. M.D. or Ph.D. and background in drug abuse, cognitive neuroscience, and functional imaging desirable. Send curriculum vitae, research interests, and names of three references to: **Elliot A. Stein, Ph.D., Department of Psychiatry and Behavioral Medicine, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226. Email: estein@post.its.mcu.edu. An Equal Opportunity Employer.**

### POSTDOCTORAL POSITION Genetic Engineering of Plant Stress Resistance

To elucidate the biosynthesis and engineer the production of the osmoprotectants glycine betaine and DMSP in plants (see *Planta* 193:155, 1994; *Plant Physiology* 111:965, 1996). Funding available for two years. Should have background in biochemistry and molecular biology; experience with transformation preferred. Send résumé and names of three references to: **Dr. Andrew D. Hanson, University of Florida, Horticultural Sciences Department, Gainesville, FL 32611-0690. Telephone: 352-392-1928; FAX: 352-392-6479; Email: adha@gnv.ifas.ufl.edu.**

## COURSES & TRAINING

### ANNUAL COURSE-IN FLOW CYTOMETRY

When: 8-13 June 1997

Where: National Flow Cytometry Resource  
Los Alamos, New Mexico

A methods **COURSE** in flow cytometry will be offered with special emphasis on applications in cell biology and immunology. The course will be aimed toward individuals with several years of experience in flow cytometry. Lectures and laboratory sessions will include applications in immunology and cell biology, chromosome analysis, cytochemistry, multivariate analysis, fluorescence probes, single cell nucleic acid analysis, intracellular antigen quantification, special applications, and new technology.

Course tuition: \$995.00 (U.S.) For detailed information contact: **Ms. Ruby Archuleta, National Flow Cytometry Resource, Mail Stop M888, Los Alamos National Laboratory, Los Alamos, NM 87545. Telephone: 505-667-2750; FAX: 505-665-3024; Email: archuleta\_ruby\_r@lanl.gov, or the NFCR home page at: <http://www-ls.lanl.gov>.**

### SUMMER INSTITUTE IN STATISTICAL GENETICS

June 1-14, 1997 at North Carolina State University. A series of three-day workshops on statistics for geneticists; genetics for statisticians; population, quantitative, and forensic genetic data analysis; QTL mapping; sequence analysis; phylogenetic reconstruction; and molecular evolution data. See Web page URL: [http://www2.ncsu.edu/ncsu/CIL/stat\\_genetics/](http://www2.ncsu.edu/ncsu/CIL/stat_genetics/) for details or contact: **Dr. B. S. Weir, FAX: 919-515-7315; Email: weir@stat.ncsu.edu. North Carolina State University is a land-grant university and constituent institution of The University of North Carolina.**

## ANNOUNCEMENT

### A CALL FOR RESEARCH PROJECTS DESIGNED TO UPREGULATE THE MUSCLE PROTEIN—UTROPHIN

Duchenne muscular dystrophy (DMD) is a fatal genetic disease caused by the deficiency of dystrophin in muscle—a genetic defect identified in 1986. The protein utrophin is an autosomal homologue of dystrophin that is primarily expressed at the neuromuscular junction in adult skeletal muscle and is found in low levels in the extrajunctional regions of DMD muscle. Recent studies have demonstrated that utrophin can rescue dystrophin deficient muscle *in vivo* in animals and thus provide strong support for a therapeutic strategy in DMD involving utrophin upregulation. The Muscular Dystrophy Association is inviting applications for **RESEARCH PROJECTS** aimed at the upregulation of utrophin as a measure to treat DMD. To obtain a grant application please forward a letter of intent briefly summarizing the proposed protocol and outlining its specific aims to:

**Muscular Dystrophy Association  
Director of Research Development  
3300 East Sunrise Drive  
Tucson, AZ 85718  
Telephone: 520-529-2000  
FAX: 520-529-5454**

## GLOBAL CAREER OPPORTUNITIES

### UNIVERSITY OF ST. ANDREWS Centre for Biomolecular Sciences Research Fellow in Structural Neurobiology

A one year Medical Research Council post is available immediately. The grant is awarded under the pilot scheme and successful outcome in this one year period substantially increases chance of renewal for three years. The project aims to describe the interaction between the amyloid AB peptide and the NAC protein (non-amyloid component) thought to be important in Alzheimer's disease. A Ph.D. and protein purification skills are required, experience in protein crystallography would be extremely valuable but not essential.

Salary will be at the appropriate point on the RA1A scale, i.e., £14317 - £21519 per annum for Research staff.

Informal enquiries to [naismith@st-and.ac.uk](mailto:naismith@st-and.ac.uk), information on the group is available at <http://speedy.st-andrews.ac.uk>

Application forms and further details from **Personnel Services, University of St. Andrews, College Gate, North Street, St. Andrews, Fife KY16 9AJ (tel: 01334 462571; fax: 01334 462570; e-mail: [jobline@st-andrews.ac.uk](mailto:jobline@st-andrews.ac.uk)).**

*Applications cannot be made by e-mail.*  
Please quote reference **ML141/ACHO**.  
Closing Date: **Monday 27 January 1997**.  
*The University operates Equal Opportunities and No Smoking Policies.*

## The Science of Agricultural Genetics

### RESEARCH ASSOCIATE, Plant Transformation Enabling Technologies - Male Sterility (Job #ET-705)

An individual is needed to conduct experiments necessary to address male sterility and fertility issues through the generation of high-quality transgenic corn. Primary responsibilities entail planning for and conducting transformation experiments including plant and progeny analysis. This person will be responsible for management of transgenic cultures, plants and the associated analytical data, as well as interacting with greenhouse and nursery staff to ensure timely planting and maintenance of specialized transformation stocks. Plant tissue culture experience is required and a working knowledge of molecular techniques used in support of plant transformation and analysis is preferred. Good technical and interpersonal communication skills are required. An M.S. degree in biology, plant biology/physiology, cell biology or related field, or similar B.S. degree with a minimum of 2 years relevant laboratory experience is required.

### RESEARCH ASSOCIATE, Protein Biochemistry Grain Traits - Industrial Products (Job #GT-708)

We seek an individual to assist in the development of experimental strategies to optimize conditions for the expression, targeting, and analysis of proteins and polymers in seeds. Skills required include experience in protein analysis (1- and 2-D gel electrophoresis and Western blotting) and purification methods (HPLC and FLPC). Experience in recombinant DNA techniques (cloning, optimization of codon preference for plant expression, DNA/RNA isolation, Northern and Southern blotting, PCR, and expression of eukaryotic proteins in heterologous systems) is also important. Familiarity with the application of molecular biology techniques necessary for understanding protein structure and function is desired. Excellent communication skills are necessary. A BS or MS in biochemistry, molecular biology or related field with a minimum of 3 years relevant experience is required.

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Pioneer Hi-Bred International, Inc., is the world leader in agricultural genetics. Founded in 1926, we are a publicly held company that invests more than \$115 million in research and product development. Pioneer® brand products are grown in almost every crop-producing continent in the world. At our headquarters in Des Moines, Iowa, we're adding to our Research team.



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## GLOBAL CAREER OPPORTUNITIES



THE UNIVERSITY OF SHEFFIELD

### DEPARTMENT OF BIOMEDICAL SCIENCE

#### POSTDOCTORAL RESEARCH SCIENTIST

(Human Neural Stem Cell Differentiation)

Applications are invited for the above three year post, tenable immediately, to work on a project to develop human neural stem cell lines and to investigate the mechanisms that control their differentiation into terminal neurones. The successful applicant will join a research group with wide experience in the use of cell culture systems to study the factors that regulate stem cell differentiation along alternative lineages. Excellent facilities for cell and molecular biology are available, and include state-of-the-art flow cytometry and confocal microscopy units. The project is sponsored by a leading US pharmaceutical company, and will involve opportunities to collaborate with that company's scientists and to have access to its research facilities and expertise.

*Closing date for applications: 15 February 1997.*  
(Ref: R1055)

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Further particulars from the Director of Human Resource Management, The University of Sheffield, Western Bank, Sheffield S10 2TN,  
Tel: 0114-279 9800 (24hr) or e-mail: [jobs@sheffield.ac.uk](mailto:jobs@sheffield.ac.uk)  
Web site at: <http://www.shef.ac.uk/jobs/>

# MRC

MEDICAL RESEARCH COUNCIL

Laboratory of Molecular Biology, Cambridge

Tenure Track Position in Neurobiology

Applications are invited from scientists at an early stage in their career to develop an independent program of basic research in the Division of Neurobiology.

Current topics of particular interest are mechanisms of synaptic transmission, electrophysiological studies of neuronal function, gene regulation, and molecular processes underlying learning, memory and neurodegeneration.

The initial appointment will be for up to five years and will include no teaching responsibilities. Research funding and excellent central facilities are provided.

Further information can be obtained from Dr. Nigel Unwin: Tel 01223 402492. Starting salary will be between £19,000 and £25,000 depending on experience.

Applications, including 2 copies of a full curriculum vitae, a brief description of research interests and the names and addresses of two professional referees should be sent, quoting reference TT/NU, by 21 February 1997 to:

**Mr. Bob Tillson, Personnel Manager, MRC Centre, Hills Road, Cambridge, CB2 2QH UK.**

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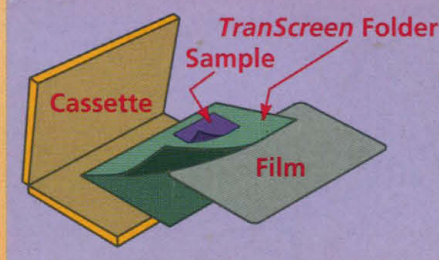
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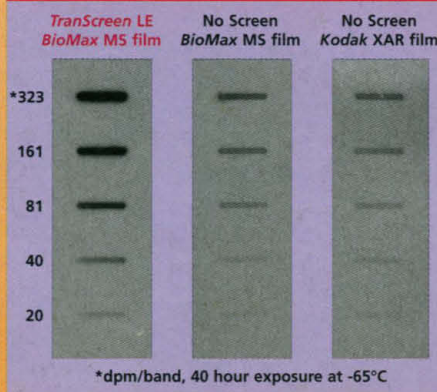
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