

Spirit of INNOVATION

Research, Creativity and Commercialization News

OFFICE OF RESEARCH ADMINISTRATION NEWSLETTER January 2007 (Volume VI, No. 7)

The **Office of Research Administration** supports and advocates research and technology transfer by faculty, graduate students and staff. The ORA provides services in conjunction with external and internal sources of funding for research, along with services related to commercializing discoveries through technology transfer. The goal of this newsletter is to inform the campus community of grants received, to highlight the accomplishments of our faculty, graduate students and staff, and to share with you a calendar of important events and deadlines. Please direct any comments or questions regarding the newsletter to Tamara Wilgers (wilgerst@umsl.edu).

RECENT AWARDS

EXTERNALLY FUNDED AWARDS, November 2006

Judith Cochran, Educational Leadership & Policy, awarded \$40,000 for "St. Louis Public Schools Avid Tutors" by the St. Louis Board of Education.

Alexei Demchenko, Chemistry and Biochemistry, awarded \$420,000 for "CAREER: Stereocontrolled synthesis of 1,2-cis glycosides" by the National Science Foundation.

November 2006 External Funding Where it Comes From	
Association	\$12,500
Corporation	\$0
Federal	\$524,982
MO Local Government	\$28,310
Other University	\$38,730
State of Missouri	\$315,824
TOTAL	\$960,347

Sandra Diamond, Educational Psychology, awarded \$18,310 for "Kids Voting Missouri program" by the St. Louis County Missouri.

Sandra Diamond, Educational Psychology, awarded \$10,000 for "Kids Voting Missouri program" by the City of St. Louis Missouri.

Jerry Dunn, Children Advocacy Center, awarded \$53,089 for "Trauma Focused Group Treatment for Child Victims of Interpersonal Crime" by the Missouri Department of Public Safety.

Jerry Dunn, Children Advocacy Center, awarded \$121,161 for "Child Assessment Centers - West Pine" by the Missouri Department of Social Services.

November 2006 External Funding Where it Goes	
Research	\$538,108
Other Sponsored Activity	\$397,238
Instruction	\$25,000
Student Financial Aid	\$0
TOTAL	\$960,347

Jerry Dunn, Children Advocacy Center, awarded \$121,161 for "Child Assessment Centers - Weinman Building" by the Missouri Department of Social Services.

Deborah Henry, Continuing Education & Outreach, awarded \$1,500 for "28th Annual St. Louis Storytelling Festival" by the Arts and Education Council of Greater St. Louis.

Patricia Johnson, Student Support Services, awarded \$1,913 for "Accumulated Material: Contemporary Altars and Ofrendas" by the Missouri Arts Council.

Robert Marquis and Nicholas Barber, Biology, awarded \$10,604 for "Effects of avian predation on canopy and understory leaf-chewing arthropods on mature White Oak *Quercus alba*" by the Environmental Protection Agency.

Lori Newcomer, Teaching & Learning, awarded \$94,378 for "An Investigation of Reliability and Treatment and Validity of Functional Assessment Procedures and Generalization & Maintenance of Function Based Behavior Intervention Plans within the Context of Pro-Active School Wide Systems of Positive Behavior Support" by the US Department of Education - Non Student Aid.

Robert Paul, Psychology, awarded \$13,730 for "Cognitive Effects of Bariatric Surgery" by the Kent State University.

Joseph Pickard and **Lois Pierce**, Social Work, awarded \$25,000 for "The New York Academy of Medicine, Geriatric Social Work Initiative, The Practicum Partnership Program (Funded by The Harford Foundation)" by the New York Academy of Medicine.

Thomas Schnell II, Educational Leadership & Policy, awarded \$2,500 for "Regional Professional Development Center Compliance Consultant Supplement" by the Missouri Department of Elementary and Secondary Education.

Mark Tranel, Public Policy Research Centers, awarded \$10,000 for "City of St. Louis Weed and Seed Program" by the Operation Weed & Seed St. Louis.

Mark Tranel, Timothy Baumann and **Andrew Hurley**, Public Policy Research Centers, Anthropology and History, awarded \$16,000 for "Community Analysis of the Scott Joplin House and Surrounding area" by the Missouri Department of Natural Resources.

Mel Watkin, Public Policy Research Centers, awarded \$1,000 for "Arts and Education Council Photography Project" by the Arts and Education Council of Greater St. Louis.

Total Awarded: \$960,347

UM SYSTEM RESEARCH BOARD AWARDS, Fall 2006

Barbara Bacur, Psychology, awarded \$20,570 for "Investigating False Memory in Older Adults."

Adrian Clinger, Mathematics and Computer Science, awarded \$13,134 for "Geometrical Aspects of the F-Theory/Heterotic Duality."

Frank Grady, English, awarded \$20,000 for "Fifteenth-Century English Literacies."

Colin MacDiarmid, Biology, awarded \$30,600 for "Mechanism of Alr1 Regulation by Mg Availability."

Michael Ohnersorgen, Anthropology, awarded \$26,500 for "Archaeological Investigations in Nayarit, Mexico."

Total Awarded: \$110,804

FUNDING OPPORTUNITIES

Opportunities listed are a sampling only. For additional opportunities, visit [Grants.gov](http://www.grants.gov) (<http://www.grants.gov>), [Grant Advisor Plus](http://www.grantadvisor.com/tgaplus/) (<http://www.grantadvisor.com/tgaplus/>), [InfoEd](http://www.infoed.org/new_spin/spinmain.asp) (http://www.infoed.org/new_spin/spinmain.asp) and the RFP Bulletin of the [Foundation Center](http://www.fdncenter.org/pnd/rfp/index.jhtml) (<http://www.fdncenter.org/pnd/rfp/index.jhtml>), or contact [Tamara Kratochvil](mailto:kratochvil@umsl.edu) (kratochvil@umsl.edu) for a customized database search.

INTERNAL FUNDING OPPORTUNITIES

University of Missouri Research Board Proposals

>>>**NEW DEADLINE**<<< DUE: Monday, Feb. 5, 2007 by 5 p.m.

341 Woods Hall - UMSL Campus

More information:

<http://www.umssystem.edu/ums/departments/aa/research/>,

or contact Shannon Nichols at nicholss@umsl.edu or 516-5899

WHEN PREPARING A GRANT PROPOSAL, YOU MUST SUBMIT YOUR BUDGET TO GINNY SCHODROSKI AT LEAST 2 WEEKS BEFORE THE PROPOSAL SUBMISSION DEADLINE. ANY EXCEPTION MUST BE APPROVED BY VICE PROVOST NASSER ARSHADI.
ginny@umsl.edu or x.5284

UM-St. Louis Research Award Proposals

>>>**NEW DEADLINE**<<< **DUE: Monday, Feb. 12, 2007, by 5 p.m.**

341 Woods Hall - UMSL Campus

More information: http://www.umsl.edu/services/ora/docs/FY07_Research_Award_guide.doc

or contact Shannon Nichols at nicholss@umsl.edu or 516-5899

UM-St. Louis Small Grants

DUE: Monday, March 5, 2007, by 5 p.m.

341 Woods Hall - UMSL Campus

More information: http://www.umsl.edu/services/ora/docs/FY07_Research_Award_guide.doc

or contact Shannon Nichols at nicholss@umsl.edu or 516-5899

NEW ANNOUNCEMENTS: GOVERNMENT AGENCIES

Agency for International Development (USAID)

- Governance Capability and Interest Request for Information
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12059>
- Partnership for Health and Development Communication Leader with Associate Cooperative Agreement (PHDC) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12050>

Department of Agriculture (USDA)

- Integrated Research, Education, and Extension Competitive Grants Program - Integrated Pest Management Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11806>
- Special Research Grants Program - Citrus tristeza Research Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11772>
- Special Research Grants Program - Pest Management Alternatives Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11931>
- Wood Education and Resource Center Competitive Grants Program for Fiscal Year 2007 Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11875>

Department of Commerce (DOC)

- Precision Measurement Grants Program Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12001>
- Social Science Fellowship in National Estuarine Research Reserve System Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12017>

Department of Defense (DOD)

Air Force – Research Lab

- Call 0001 for Space Components Technology Open 5 yr BAA
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11767>
- Simulation and Technology Assessment Open 5-yr BAA
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11799>
- Advanced Composite Cargo Aircraft Flight Demonstrator Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11947>
- Call 0001 for Simulation and Technology Assessment Open 5 yr Broad Agency Announcement
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12109>

DARPA

- Information Processing Technology Office Integrated Crisis Early Warning System (ICEWS) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12116>
- Microsystems Technology Office Hemispherical Array Detectors for Imaging (HARDI) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12108>

Office of Naval Research

- High Energy Laser Multidisciplinary Research Initiative (HEL MRI) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12056>

Department of Energy (DOE)

- Ethical, Legal, and Societal Implications (ELSI) of Research on Alternative Bioenergy Technologies, Synthetic Genomics, or Nanotechnologies Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12057>

Department of Health and Human Services (HHS)

Administration for Children and Families

- Head Start University Partnership Research Grants: English Language Learners (ELLs) in Head Start and Early Head Start Programs Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12120>

- University Centers for Excellence in Developmental Disabilities Education, Research, and Service (UCEDD) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11923>

Agency for Healthcare Research and Quality

- Ambulatory Care Patient Safety Proactive Risk Assessment (P20) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11747>
- Ambulatory Safety and Quality Program: Enabling Quality Measurement through Health IT (R18) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11768>
- Ambulatory Safety and Quality Program: Improving Quality through Clinician Use of Health IT (R18) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11754>
- Ambulatory Safety and Quality: Enabling Patient-Centered Care through Health IT (R18) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11756>

Food & Drug Administration

- Clinical Studies of Safety and Effectiveness of Orphan Products <http://www.grants.gov/search/search.do?mode=VIEW&oppld=7437>

Health Resources & Services Administration

- Advanced Education Nursing Traineeship <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11953>
- Enhancing Linkages to HIV Primary Care in Jail Settings (Sites) <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11927>
- Graduate Psychology Education Programs Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11954>
- Knowledge to Practice Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11827>
- Leadership Education in Adolescent Health Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11815>
- MCH Distance Learning <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11814>
- Nurse Anesthetist Traineeships <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11955>
- Scholarships for Disadvantaged Students <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11739>

National Institutes of Health

- Ancillary Studies in Clinical Trials (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12042>
- Ancillary Studies to the AD Neuroimaging Initiative (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11903>
- Axonal Damage in Multiple Sclerosis: Strategies for Protection and Repair (R01) <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11973>
- Basic and Clinical Research on Rett Syndrome and MECP2 (R01) <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11971>
- Behavioral and Integrative Treatment Development Program (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11784>
- Building Translational Research in Integrative Behavioral Science (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11906>
- Cancer Surveillance Using Health Claims-Based Data (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12022>
- Cardiovascular Research Network (CVRN) in Community-Based Care (U19) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11948>
- Cell Lineage and Developmental Studies in Hearing and Balance (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11813>
- Clinical Research on Mental Illnesses in Older Adults (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11907>
- Clinical Studies of Bisphosphonate Therapy and Osteonecrosis of the Jaws (R01) <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11977>
- Collaborations with National Centers for Biomedical Computing (R01) <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12036>
- Collaborative Awards in Epilepsy Research for Junior Investigators (R01) <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11962>
- Collaborative Interdisciplinary Research Program in Diabetes, Endocrinology and Metabolic Diseases (R24) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11986>
- Complementary and Alternative Medicine for Substance and Alcohol Related Disorders (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11803>

- Co-Occurring Mental Illness, Alcohol and/or Drug Abuse and Medical Conditions (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11744>
- Correlative Studies with Specimens from Multi-Site Trials (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11939>
- Cross-Disciplinary Translational Research at NIH (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11781>
- Decision Making in Cancer: Single-Event Decisions (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11987>
- Decision Making in Health: Behavior Maintenance (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11989>
- Deep Sequencing and Haplotype Profiling of Mental Disorders (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12009>
- Diet, Epigenetic Events, and Cancer Prevention (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11936>
- Disaster Mental Health Research Center (P60) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11929>
- Drug Abuse as a Cause, Correlate, or Consequence of Criminal Justice Related Health Disparities among African Americans (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11792>
- Drug Abuse Prevention Intervention Research (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11782>
- Early Identification and Treatment of Mental Disorders in Children and Adolescents (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11895>
- Economics of Prevention and Treatment Services for Drug and Alcohol Abuse (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11805>
- Epidemiological and Behavioral Research in Oral Health (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11913>
- Epidemiological Research on Disorders of Hearing, Balance, Smell, Taste, Voice, Speech, and Language (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12014>
- Epidemiology of Drug Abuse (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11801>
- Etiology, Prevention, and Treatment of Hepatocellular Carcinoma (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12041>
- Evolution of Infectious Diseases (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11818>
- Exfoliated Cells, Bioactive Food Components, and Cancer (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12000>
- Exploratory Collaborations with National Centers for Biomedical Computing (R21) <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12035>
- Functional Assessment of People with Mental Disorders (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12002>
- Functional Genetics And Genomics Of Drug Addiction (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11915>
- Functional Genetics And Genomics Of Drug Addiction: (R03) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11910>; (R21) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11911>
- Health Behavior Change in People with Mental Disorders (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12010>
- Health Disparities Among Minority and Underserved Women (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11905>
- Health Disparities in HIV/AIDS: Focus on African Americans (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11795>
- Health Services Research on Practice Improvement Utilizing Community Treatment Programs within the National Drug Abuse Clinical Trials Network (CTN) (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11789>
- Health Services Research on the Prevention and Treatment of Drug and Alcohol Abuse (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11802>
- Hearing Impairment and Other Communication Disorders Associated with HIV/AIDS (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11812>
- Immunoregulation of Gastrointestinal Carcinogenesis (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12038>
- Impact of Adolescent Drinking on the Developing Brain (R21) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12110>

- Improving Diet and Physical Activity Assessment (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12044>
- In Utero Exposure to Bioactive Food Components and Mammary Cancer Risk (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11942>
- Inhalant Abuse: Supporting Broad-Based Research Approaches (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11800>
- Innovative Therapies and Clinical Studies for Screenable Disorders (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11928>
- Joint NIDA-NIJ Initiative for Research on Retail Drug Markets (R21) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11746>
- MCH Distance Learning Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11814>
- MDMA: Research Areas Needing More Emphasis (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11786>
- Mechanism for Time-Sensitive Research Opportunities (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11901>
- Medical Countermeasures to Restore Gastrointestinal Function after Radiation Exposure: Project Bioshield (RC1) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12111>
- Memory T Lymphocytes in Cancer Immunology (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12021>
- Metagenomic Analyses of the Oral Microbiome (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11919>
- Molecular Approaches to Diet and Pancreatic Cancer Prevention (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12037>
- Nanoscience and Nanotechnology in Biology and Medicine (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12101>
- Nanoscience and Nanotechnology in Biology and Medicine (R21) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12105>
- National Cooperative Drug Discovery Groups for the Treatment of Mental Disorders, Drug or Alcohol Addiction (U19) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11908>
- Neurodevelopment and Neuroendocrine Signaling in Adolescence: Relevance to Mental Health (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11997>
- Neurovascular Mechanisms of Brain Function and Disease (R01)
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11967>
- NIDCD Translational Research Grants (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11816>
- Non-injection Drug Abuse and HIV/AIDS (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11794>
- Non-Injection Drug Abuse and HIV/AIDS (R03) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12048>
- Non-Injection Drug Abuse and HIV/AIDS (R21) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12055>
- Novel Approaches To Study Polymicrobial Diseases (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11918>
- Obesity Nutrition Research Centers (P30) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12054>
- Pathogenesis And Treatment Of Lymphedema And Lymphatic Diseases (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11916>
- Pathophysiology of Bisphosphonates-associated Osteonecrosis of the Jaw (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11793>
- Prescription Drug Abuse (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11808>
- Protein Biomarkers of Infection-Associated Cancers (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11946>
- Proteomics in Auditory Developmental and Disease Processes (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12016>
- Psychopharmacology of Widely Available Psychoactive Natural Products (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11777>
- Reducing Mental Illness Stigma And Discrimination (Collaborative R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11896>
- Research on Co-Morbid Mental and Other Physical Disorders (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12013>
- Research on Malignancies in AIDS and Acquired Immune Suppression (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11933>

- Research on Mental Health Economics (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12012>
- Research on Psychopathology In Intellectual Disabilities (Mental Retardation) (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11909>
- Research on Rural Mental Health and Drug Abuse Disorders (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11743>
- Research on the Cognitive Sequelae of Parkinson's Disease (R01)
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11965>
- Research on the Economics of Diet, Activity, and Energy Balance (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11994>
- Research Opportunities in Stuttering (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11809>
- Ruth L. Kirschstein National Research Service Awards (NRSA) for Individual Senior Fellows (F33) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11945>
- School-based Interventions to Prevent Obesity (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11943>
- Secondary Data Analyses Based on the NICHD Study of Early Child Care and Youth Development (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11930>
- Shared Instrumentation Grant Program (S10) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11774>
- Stem Cells and Cancer (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11985>
- Structural Analyses of the Ligand-Binding Properties of Taste and Smell Receptors (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11811>
- Structural Biology of Membrane Proteins (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12018>
- Studies of Energy Balance and Cancer in Humans (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11938>
- Temporomandibular Joint and Muscle Disorders: Pathophysiological Mechanisms Linking Comorbid Conditions (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11904>
- Testing Tobacco Products Promoted to Reduce Harm (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11932>
- The Development Of Frontal Cortex And Limbic System And Their Roles In Drug Abuse Or Mental Health (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11804>
- The Effect of Racial and Ethnic Discrimination/Bias on Healthcare Delivery (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11993>
- The Genes, Environment, and Development Initiative (U01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11741>
- The Influence of Religiosity and Spirituality on Health Risk Behaviors in Children and Adolescents (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11941>
- The Science And Ecology Of Early Development (SEED) [R01] Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11881>
- Tools for Zebrafish Research (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11900>
- Understanding and Preventing Brain Tumor Dispersal (R01)
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11968>
- Understanding and Treating Tuberous Sclerosis Complex (R01)
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11961>
- Understanding the Effects of Emerging Cellular, Molecular, and Genomic Technologies on Cancer Health Care Delivery (R01) Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12046>
- Vulvodynia - Systematic Epidemiologic, Etiologic Or Therapeutic Studies (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11940>
- Women's Mental Health and Sex/Gender Differences Research (R01) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11914>

Substance Abuse & Mental Health Services Administration

- Recovery Community Services Program – RCSP Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12007>
- Targeted Capacity Expansion Program for Substance Abuse Treatment and HIV/AIDS Services Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12100>

Department of Justice (USDOJ)

- 2007 Census of Public Defender Offices Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11920>

- 2007 Law Enforcement Management and Administrative Statistics (LEMAS) Survey Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12112>
- Criminal Intelligence System Operating Policies (28 CFR Part 23) Training and Technical Assistance Program
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11807>
- Gang Member Reentry Assistance Project Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11995>
- Gang Training and Technical Assistance Program Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11917>
- OVC FY 07 2008 NCVRW Resource Guide Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12027>
- Transition from Jail to the Community (TJC)
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12026>
- Tribal Community Methamphetamine Enforcement Training and Technical Assistance Program
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11877>

Department of State (DOS)

Bureau of Democracy, Human Rights and Labor

- Promoting Internet Freedom and Monitoring Standards Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11912>

Bureau of Educational and Cultural Affairs

- Fusion Arts Exchange Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11823>
- Near East Asia - South Asia Undergraduate Exchange Program Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12117>
- Study of the United States Institutes for Student Leaders Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=12118>

Bureau of Near Eastern Affairs

- Democracy Initiatives Program Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11990>

Department of the Interior (DOI)

Bureau of Land Management

- Joint Fire Science Program Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11790>

Department of Transportation (DOT)

- DOT/Federal Motor Carrier Safety Administration Commercial Motor Vehicle Operator Safety Training Grant Opportunity Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=11924>
- RECYCLED MATERIALS RESOURCE CENTER
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11897>

Environmental Protection Agency (EPA)

- AN INTERDISCIPLINARY APPROACH TO EXAMINING THE LINKS BETWEEN SOCIAL STRESSORS, BIODIVERSITY AND HUMAN HEALTH Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11988>
- Facilitation and Management of the Forum on State and Tribal Toxics Action (FOSTTA) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11778>

Institute of Museum and Library Services (IMLS)

- National Leadership Grants for Museums and Libraries
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=9326>

National Aeronautics and Space Administration (NASA)

- NASA Johnson Space Center GROUND-BASED STUDIES IN SPACE RADIATION Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11838>
- ROSES 2006: Astrobiology: Exobiology and Evolutionary Biology
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11937>
- ROSES 2006: Making Earth System data records for Use in Research Environments (formerly REASoN) Grant
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=11796>

National Archives and Records Administration (NARA)

- Electronic Records Projects Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppld=12045>

National Endowment for the Humanities (NEH)

- Advancing Knowledge: The IMLS/NEH Digital Partnership Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11751>
- Challenge Grants <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11670>
- Consultation Grants <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11758>
- Interpreting America's Historic Places: Consultation Grants <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11759>
- Interpreting America's Historic Places: Planning Grants <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11760>
- Planning Grants <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11757>
- Television Grants: Planning Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11762>
- Television Grants: Production Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11761>
- Television Grants: Scripting Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11763>

National Science Foundation (NSF)

- Advanced Technological Education Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11749>
- Assembling the Tree of Life Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=12052>
- Bering Ecosystem Study Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11832>
- Industry/University Cooperative Research Centers Program Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=12062>
- International Polar Year, 2007 Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=12053>
- Mathematical Sciences: Innovations at the Interface with Computer Sciences Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11899>
- Microbial Genome Sequencing Program Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11788>
- National Science, Technology, Engineering, and Mathematics Education Digital Library Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=12061>
- Robert Noyce Scholarship Program Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11748>
- Western Arctic Shelf-Basin Interactions III Grant <http://www.grants.gov/search/search.do?mode=VIEW&oppId=11833>

NEW ANNOUNCEMENTS: FOUNDATIONS & OTHER

<http://www.grantadvisor.com/tgaplus/sound.pdf>

APPLICATION DEADLINES

http://www.umsl.edu/services/ora/about/documents/DeadlineMemo_Jan07.pdf

GRANT SUBMISSION POLICY

PeopleSoft Signature Routing Sheet (PSRS)

Must be delivered to the Office of Research BEFORE the grant will be submitted. Applies to any grant being submitted to any agency. Must include ALL signatures (all PIs Co-PIs, Dept. Chairs, Deans of each person, dept, and/or school who has time/resources committed through direct costs or cost sharing/match).

Budgets: SUBMIT YOUR BUDGET TO GINNY SCHODROSKI TWO WEEKS PRIOR TO SUBMISSION DEADLINE. Large or complex budgets should be finalized a week before submission so that the PSRS can be prepared and routed for ALL required signatures. Proposal review time must be allowed before asking someone to commit their unit.

Note: If you are going to be away from the University at the time of submission, you must arrange before leaving to sign the PSRS signature page.

Questions? Contact Ginny Schodroski at 516-5284 or ginny@umsl.edu.

RESEARCH AND COMMERCIALIZATION NEWS

- 9th Annual Regional SBIR Conference to be Held at CET
- Changes in NIH Peer Review
- NIH 2007 Fiscal Operations Plan Announced
- New Leader of the FDA is Confirmed by the Senate
- Top Five Nanotech Breakthroughs of 2006
- FY2006: A Record-Breaking Year for the USPTO
- Diabetes Breakthrough: Toronto Scientists Cure Disease in Mice
- Research Article Withdrawn from Journal *Cell*
- Best Places to Work 2007: Google and Genentech Top *Fortune's* List with Unconventional Cultures

9th Annual Regional SBIR Conference to be Held at CET

Topics Will Include STTR, Industry Partnering and Tech Transfer

Learn more about the \$2 billion SBIR/STTR federal grant program and the secrets of success with federal grant programs. Meet local service providers and experts who can help you succeed as a start-up company. Meet officials from large companies, including Boeing and Caterpillar; and universities, eager to partner for R&D, technology transfer and commercialization, including UM-St. Louis, Saint Louis University and Washington University. Schedule one-on-one sessions with program managers from the Department of Energy, US Air Force, NASA, the NSF, the SBA and more.

The Conference is sponsored by the Center for Emerging Technologies and UM-St. Louis. ●

DATE: Thursday and Friday, January 25-26, 2007

LOCATION: Center for Emerging Technologies, 4041 Forest Park Ave., St. Louis, MO 63108

MORE INFORMATION/REGISTRATION:

<http://www.umsl.edu/services/ora/about/documents/SBIRConf07.pdf> (PDF)

Changes in NIH Peer Review

From NIH Extramural Nexus
January 2007

A dramatic rise in applications and growing difficulty in recruiting qualified reviewers are challenging NIH peer review. At the same time, the pace of science has increased and NIH needs a review system that can keep up with it. After a year of listening to leaders of the scientific community and colleagues here at NIH, Dr. Antonio Scarpa, Director, Center for Scientific Review (CSR) in collaboration with other NIH senior officials, has developed a collective vision for NIH peer review. In fall 2006, Dr. Scarpa and his colleagues presented this [vision](#) to the NIH Peer Review Advisory Committee (PRAC), which enthusiastically endorsed it. PRAC's support for the key recommended changes, listed below, was particularly strong:

- **Shorten the Grant Application:** Our applicants and reviewers bear heavy burdens writing and reviewing NIH applications, which run about 25 pages, not counting budgets, bibliographies and appendices. Shorter applications could greatly improve our reviews: each reviewer could read more applications, our study sections could be smaller, and we could be more successful in recruiting reviewers. A trans-NIH Committee to Shorten the Application has been established to advance this objective, and will soon conduct analysis of responses to a recently issued Request for Information (RFI) for a Possible Page Limit Reduction for the Research Plan Section of the Research Project Grant (R01) Application. Additionally, a recent change limiting grant application appendix materials will encourage applicants to be as concise as possible focusing on the information needed for expert scientific review.
- **Identify more significant, innovative and high-impact research:** Keith Yamamoto, Executive Vice Dean, University of California, San Francisco School of Medicine, told PRAC that the current review process favors predictable research, experimental detail, extensive preliminary data, and the paradigms of established "experts." He called for NIH to develop a new review and funding mechanism that fosters both innovative and transformative research that can lead to rapid progress and quantum leaps in science.

- **Shorten the review cycle:** Data is being collected and analyzed on the pilot started in February 2006, when 631 New Investigators were offered shortened review cycles in 40 CSR study sections. Fourteen percent of those researchers took advantage of the shortened cycles to reapply in the next round, saving four months. Since summary statements and scores are posted one to two months earlier, applicants increasingly are resubmitting applications in the next round.

The NIH Leadership Forum subsequently endorsed efforts to explore ways to achieve these goals.

Other efforts to improve peer review by reducing burdens on reviewers and improving internal efficiencies are focused on:

- more consistent and efficient reviews
- shorter meetings
- electronic referral of applications to review groups

CSR also announced a series of open house workshops with community and NIH leaders to discuss the organization of review groups and initiatives for 2007. Information on these activities is provided in the fall issue of the Peer Review Notes. ●

NIH 2007 Fiscal Operations Plan Announced

Excerpted from NIH Extramural Nexus
January 2007

The National Institutes of Health is currently operating under a continuing resolution (CR) at fiscal year 2006 budget levels. The CR will be in effect until February 15, 2007 and possibly longer. Under this resolution, NIH will continue to make non-competing awards at 80 percent of previously committed levels. When NIH receives its appropriation for fiscal year 2007, these awards will be adjusted.

If you have specific questions about your award, please contact the grants management specialist identified in your Notice of Grant Award. For all other questions please write to us at DDER@NIH.gov. ●

Additional Information: NIH Fiscal Policy for Grant Awards—Fiscal Year 2007 (<http://grants.nih.gov/grants/guide/notice-files/NOT-OD-07-030.html>)

New Leader of the FDA is Confirmed by the Senate

Excerpted from The New York Times, nytimes.com
December 8, 2006
By STEPHANIE SAUL

The Senate confirmed Dr. Andrew C. von Eschenbach as commissioner of the Food and Drug Administration (Dec. 7, 2006), with some lawmakers expressing hope that his leadership would bring stability to an agency hobbled by turnover and accused of poor oversight of the nation's drug supply.

Dr. von Eschenbach, 65, a surgeon, became acting commissioner in September 2005 after the abrupt resignation of Dr. Lester Crawford. Previously, he had served as chief academic officer at the M. D. Anderson Cancer Center in Houston and had led the National Cancer Institute.

In the past 10 years, no commissioner has served more than two years. A report released in September by the Institute of Medicine, part of the National Academies, deplored a "lack of stable leadership" at the agency. The report said that turnover at the helm would compromise efforts to improve the effectiveness of the agency, which the report criticized as rife with internal squabbles, poor management and outdated rules.

Dr. von Eschenbach was formally nominated to the position of commissioner in March, but his confirmation was delayed by a series of objections in the form of "holds" by senators from both parties who said they were protesting everything from the agency's delay of Plan B emergency contraceptives to the administration's stance on drug reimportation, or the purchase of prescription drugs in countries where they are cheaper.

Senator Michael B. Enzi, a Wyoming Republican who heads the Health, Education, Labor and Pensions Committee, urged Dr. von Eschenbach's confirmation, citing the need for a permanent leader. "The FDA has been without a confirmed commissioner for all but 18 months of the last five and a half years," Mr. Enzi said. "Ever see a business that could run for five and a half years without a boss except for 18 months?"

Dr. von Eschenbach, a urologic surgeon who has been treated for melanoma and prostate cancer, has said he believes that new drugs should be made available as quickly as possible, particularly those for life-threatening illnesses.

As acting commissioner, Dr. von Eschenbach moved this year to make Plan B, the emergency contraceptive, available to adults without a prescription. This silenced some administration critics who had complained that conservative political interference at the agency had previously blocked the drug's broader availability. ●

Top Five Nanotech Breakthroughs of 2006

Excerpted from the December issue of Forbes/Wolfe Nanotech Report
John Wolfe

This year saw a slew of remarkable nanotech breakthroughs, and narrowing down the top five was no easy task. One major theme of 2006 was the intersection of computing and biology--integrated circuits were used to study everything from neural activity to tissue dynamics, and disposable bio labs-on-a-chip became a reality.

One Harvard research team, led by Robert Westervelt, created a hybrid chip that can control the motion of biological cells; with the chip, researchers can assemble cells one by one into artificial tissue, which can then be used to test the efficacy of various drugs.

This year also brought us several steps closer to nanotube computing, as many research groups developed new ways to custom design nanotubes. Researchers at Stanford University and at Northwestern University came up with two novel ways to sort nanotubes by their electrical properties. In addition, a group led by James Tour at Rice University developed a revolutionary method first envisioned by the legendary Richard Smalley for growing mass quantities of nanotubes from nanotube "seeds." These methods will find near-term applications in innovative materials, high-definition displays and solar cells, among others.

While many breakthroughs came out of academia, the corporate sector held its own. For instance, **Motorola's** carbon nanotube TVs are ready to leave the lab and hit the market, outperforming today's flat panel displays and IBM is leading the way to nanoscale computing. From biotech to electronics, it's been an exciting year, and the following breakthroughs are the cream of the crop. So without further ado, we give you the top five nanotech breakthroughs of 2006.

1) DNA ORIGAMI

Researcher: Paul W. K. Rothemund (Caltech)

The sheer simplicity and versatility of Dr. Rothemund's "DNA origami" renders it a revolution in nanoscale architecture. Rothemund developed a technique to fold a single long strand of DNA into any 2D shape held together by a few shorter DNA pieces. He created software to quickly determine what short sequences will fold the main strand into the desired shape, such as the DNA smiley face he built, which is a mere 100nm across and 2nm thick, or his nanoscale map of the Americas.

They sound silly, but these creations are proof of concept: here is a method for building scaffolding that can be used to hold quantum dots in a quantum computer or proteins in a multi-enzyme factory, to name just a few potential applications.

2) NANOMAGNETS TO CLEAN UP DRINKING WATER

Researchers: Vicki Colvin, Amy Kan, William Yu, J.T.Mayo, Arjun Prakash, Joshua Falkner, Sujin Yean, Lili Cong and Heather Shipley (Rice University)

According to the World Bank, nearly 65 million people are at risk from arsenic-related health problems due to millions of contaminated wells, especially in developing nations like India and Bangladesh. Now,

a research team led by Vicki Colvin at Rice University has developed a simple and inexpensive way to solve the problem.

Rust nanoparticles, which have magnetic properties, bind to arsenic; the rust and arsenic can then be lifted out of the water by nothing more than a handheld magnet. The breakthrough was the realization that the manipulation of nanoscale rust would not require huge magnetic fields, as was expected. The unique properties at the nanoscale cause the rust nanoparticles to act as one large magnet that can be easily drawn out of the water, leaving behind drinking water pure enough to meet Environmental Protection Agency standards. The method, which requires no electricity or extensive hardware, will have a global impact.

3) ARRAYS CONNECT NANOWIRE TRANSISTORS WITH NEURONS

Researchers: Charles Lieber, Fernando Patolsky, Brian Timko, Guihua Yu, Ying Fang, Andrew Greytak, and Gengfeng Zheng (Harvard University)

In the first ever two-way interface between nanoelectronics and living neurons, Dr. Lieber and his team have created a revolutionary way to study brain activity. Silicon nanowires link up with the axons and dendrites of live mammalian neurons, creating artificial synapses between the two and allowing scientists to study and manipulate signal propagation in neural networks.

The device can measure the brain's electric signals with unprecedented sensitivity, amplifying signals from up to 50 places on a single neuron. It will allow researchers to accurately model complex brain activity, pave the way for powerful neural prosthetics, and open the possibility for hybrid nanoelectronic and biological information processing.

4) SINGLE NANOTUBE ELECTRICAL CIRCUITS

Researchers: Phaedon Avouris, Zhihong Chen, Joerg Appenzeller, Yu-Ming Lin, Paul Solomon (IBM's T.J.Watson Research Center); Jennifer Sippel-Oakley and Andrew Rinzler (University of Florida); Jinyao Tang and Shalom Wind (Columbia University)

This year, IBM unveiled the most complex and highest performance electrical circuit based on a single nanotube, demonstrating the applicability of CMOS technology and paving the way for the future of computing.

The integrated logic circuit consists of 12 transistors made of palladium and aluminum tracing the length of a single carbon nanotube. The circuit is hundreds of times slower than today's silicon processors, but it is 100,000 times faster than any previous carbon nanotube device and has the potential to be much faster. Unlike silicon, it doesn't require doping, which scatters electron flow and is far more heat efficient. Expect to first see these nanotube circuits in hybrid nanotube-silicon computers.

5) NANOPARTICLES DESTROY PROSTATE CANCER

Researchers: Robert Langer (MIT); Omid Farokhzad, Benjamin Teply, Ines Sherifi, Jerome Richie (BWH and Harvard); Jianjun Cheng (U.of Illinois); Sangyong Jon (Gwangju Institute of Science and Technology, South Korea); Philip Kantoff (Dana Farber Cancer Institute)

Here's one battle with cancer where cancer is losing dramatically--researchers at MIT and Harvard have custom-designed nanoparticles that hone in on prostate cancer cells and deliver doses of targeted chemotherapy.

In trials with mice, which were given human prostate cancer, a single injection of these nanoparticles completely eradicated tumors in five out of seven animals, significantly reducing tumor size in the other two. The work may be replicable for treatments of breast and pancreatic cancer, as well. Look forward to seeing these cancer-killers in human clinical trials.

Looking Ahead To 2007:

What do we have to look forward to in the coming year? We are sure to see more groundbreaking developments in the emerging interface of nanoelectronics and biology. The number of novel nanoparticles for biomedical applications is poised for accelerated growth, and there will be a special emphasis on combination products that can be used for medical imaging and targeted drug delivery, especially for cancer.

As the corporate world continues to go green, environmental nanotech will come to the forefront, with applications in fuel cells, solar energy and hydrogen storage, to name a few. There's a lot looming on the horizon and we will keep you several steps ahead of the game on the pages of this newsletter. Here's to another great year of thinking big about thinking small! ●

FY2006: A Record-Breaking Year for the USPTO

Patent and Trademark Quality Best on Record in Over 20 Years

Excerpted from United States Patent and Trademark Office online news

December 22 , 2006

Online at: <http://www.uspto.gov/main/homepagenews/bak2006dec22.htm>

In Fiscal Year 2006, the Department of Commerce's United States Patent and Trademark Office (USPTO) set new Agency records in goals related to quality, production, electronic filing, telework, electronic processing and hiring.

"The USPTO has spent the last four years concentrating on meeting or exceeding objective measures, as required by the Government Performance and Results Act of 1993 ("The Results Act"), continuing to make system-wide process improvements, and using related metrics and measures for gauging progress," noted Under Secretary of Commerce for Intellectual Property Jon Dudas. "I am proud that fiscal year 2006 was a record-breaking year for the USPTO. "These records reflect the hard work and sound decisions of more than 8,000 USPTO employees."

(NOTE: ONLY PATENT STATISTICS INCLUDED BELOW. TRADEMARK INFORMATION AVAILABLE ONLINE.)

>>Quality and Production

- 332,000 patent applications examined in 2006 -- largest number ever
- 3.5% patent allowance error rate -- lowest rate in over 20 years
- 54% patent allowance rate -- lowest rate on record (*Patent allowance rate is the percentage of applications reviewed by examiners that are approved.*)

>>Hiring and Training

- More than 440,000 patent applications received in 2006 -- a record number
- A record 1,218 patent examiners hired, exceeding USPTO goal by more than 200 people
- USPTO replaced its one-on-one training model with a university approach for new hires. This allowed the agency to deliver comprehensive training to new examiners, while more experienced examiners and supervisors focused on quality examination.
- More than 1,000 patent examiners will be hired each year for the next five years. Even so, the volume of applications will continue to outpace the agency's capacity to examine them. USPTO continues to look for ways, beyond hiring, to reduce the backlog, while maintaining examination quality.

>>Electronic Filing and Processing

- Electronic Filing System-Web (EFS-Web), a user-friendly, Internet-based patent application and document submission solution implemented, increasing electronic filing of patent applications from 1.5 percent per month to 33 percent per month.

>>Telework

- 500 patent examiners began working from home four days a week, using a hoteling program to book office space the one day a week they are in the office.
- An additional 500 examiners will be added to those already working from home each year for at least the next five years.

>>International Relations and Enforcement

- Worked with other U.S. Government agencies to fight piracy and counterfeiting around the world and continued a communications campaign to educate small businesses about protecting their intellectual property.
- Conducted more than 200 intellectual property rights training and outreach activities in over 100 countries.
- Placed intellectual property experts in Brazil, China, Egypt, India and Thailand to advocate improved IP protection for American businesses and to coordinate training to help stop piracy and counterfeiting abroad.

Charts detailing goals met, patent quality results, and the patent allowance rate can be found below. Full results of the agency's progress can be found in USPTO's FY 2006 Performance and Accountability

Report at <http://www.uspto.gov/web/offices/com/annual/2006/2006annualreport.pdf>. [download PDF viewer] ●

Diabetes Breakthrough: Toronto Scientists Cure Disease in Mice

Excerpted from the National Post (Toronto, Ontario)

December 15, 2006

By TOM BLACKWELL

In a discovery that has stunned even those behind it, scientists at a Toronto hospital say they have proof the body's nervous system helps trigger diabetes, opening the door to a potential near-cure of the disease...

Diabetic mice became healthy virtually overnight after researchers injected a substance to counteract the effect of malfunctioning pain neurons in the pancreas.

"I couldn't believe it," said Dr. Michael Salter, a pain expert at the Hospital for Sick Children and one of the scientists. "Mice with diabetes suddenly didn't have diabetes any more."

Their conclusions upset conventional wisdom that Type 1 diabetes, the most serious form of the illness that typically first appears in childhood, was solely caused by auto-immune responses -- the body's immune system turning on itself.

They also conclude that there are far more similarities than previously thought between Type 1 and Type 2 diabetes, and that nerves likely play a role in other chronic inflammatory conditions, such as asthma and Crohn's disease.

Insulin replacement therapy is the only treatment of Type 1, and cannot prevent many of the side effects, from heart attacks to kidney failure.

In Type 1 diabetes, the pancreas does not produce enough insulin to shift glucose into the cells that need it. In Type 2 diabetes, the insulin that is produced is not used effectively -- something called insulin resistance -- also resulting in poor absorption of glucose.

The problems stem partly from inflammation -- and eventual death -- of insulin-producing islet cells in the pancreas.

Dr. Dosch had concluded in a 1999 paper that there were surprising similarities between diabetes and multiple sclerosis, a central nervous system disease. His interest was also piqued by the presence around the insulin-producing islets of an "enormous" number of nerves, pain neurons primarily used to signal the brain that tissue has been damaged.

Suspecting a link between the nerves and diabetes, he and Dr. Salter used an old experimental trick -- injecting capsaicin, the active ingredient in hot chili peppers, to kill the pancreatic sensory nerves in mice that had an equivalent of Type 1 diabetes.

"Then we had the biggest shock of our lives," Dr. Dosch said. Almost immediately, the islets began producing insulin normally "It was a shock - really out of left field, because nothing in the literature was saying anything about this."

It turns out the nerves secrete neuropeptides that are instrumental in the proper functioning of the islets. Further study by the team, which also involved the University of Calgary and the Jackson Laboratory in Maine, found that the nerves in diabetic mice were releasing too little of the neuropeptides, resulting in a "vicious cycle" of stress on the islets.

So next they injected the neuropeptide "substance P" in the pancreases of diabetic mice, a demanding task given the tiny size of the rodent organs. The results were dramatic.

The islet inflammation cleared up and the diabetes was gone. Some have remained in that state for as long as four months, with just one injection.

They also discovered that their treatments curbed the insulin resistance that is the hallmark of Type 2 diabetes, and that insulin resistance is a major factor in Type 1 diabetes, suggesting the two illnesses are quite similar.

While pain scientists have been receptive to the research, immunologists have voiced skepticism at the idea of the nervous system playing such a major role in the disease. Editors of *Cell* put the Toronto researchers through vigorous review to prove the validity of their conclusions, though an editorial in the publication gives a positive review of the work.

The researchers are now setting out to confirm that the connection between sensory nerves and diabetes holds true in humans. If it does, they will see if their treatments have the same effects on people as they did on mice. ●

NOTE: 14.6 million Americans and 2 million Canadians have been diagnosed with diabetes, 10% of which have Type 1. An estimated additional 6.2 million Americans have undiagnosed Type 2 diabetes.

Research Article Withdrawn from Journal *Cell*

Excerpted from Reuters

January 2, 2007

By RALPH JENNINGS

TAIPEI (Reuters) - A Taiwan research team has formally retracted its microbiology article published in a leading global journal on biological research because of inflated figures, an official from the university in charge said on (January 2).

The retraction follows a similar, higher profile scandal involving stem-cell research in South Korea and threatens to soil Taiwan's reputation for scientific study.

A National Chung Hsing University doctoral degree holder last month asked *Cell*, a U.S.-based journal, to withdraw an October article based on his research challenging common notions about bacteria and DNA, said Yeh Shyi-dong, vice chancellor of the university.

The four-person team, which was based at the university in the city of Taichung at the time of its research, inflated numbers on illustrations with the article, Yeh said.

National Chung Hsing University, home to one of Taiwan's oldest life sciences schools, formed an investigative committee with scholars from another Taiwan university when mainland Chinese scholars began to suspect flaws in the research following questions raised on a Chinese Internet site, Yeh said.

In a separate investigation, the university is checking the overall accuracy of the research team's findings, Yeh said. ●

Best Places to Work 2007: Google and Genentech Top *Fortune's* List with Unconventional Cultures

In a recent survey, *Fortune* magazine has ranked Google as the best employer of the year for 2007 followed by Genentech. Here are excerpts from *Fortune's* magazine's website (<http://money.cnn.com/magazines/fortune/bestcompanies/2007/>) on how unconventional working environments at both Google and Genentech build strong employee loyalty and promote innovative, productive workers.

Google

"In a now famous founders' letter Larry Page and Sergey Brin distributed to prospective Google shareholders before the company's 2004 IPO: "Google is not a conventional company. We do not intend to become one." Mission accomplished.

"Google's employment roster is now pushing 10,000, and, in addition to the Mountain View headquarters, the company has burgeoning offices in Bangalore, New York City and Irvine, Calif., among many other cities. In its earliest days Google was more or less a postdoctoral extension of the Stanford computer science department, from which founders Larry Page, Sergey Brin and a goodly number of their pals sprang.

"Teamwork is the norm, especially for big projects. Keith Coleman, a 26-year-old product manager who works on Gmail, oversees a ten-person secret project whose team members have taken over

their own conference room. "They've given up their big space to be crammed into this room to get things done," says Coleman.

The hideaway happens to be where Gmail's chat function was created. Lounge music is usually playing, engineers wander in and out, and there's no formal daily meeting, though the team tends to congregate between five and seven in the evening. "If I could capture anything that's great about Google," says Coleman, "it's that room." "

"Hours are long - typical for Silicon Valley - and it's not unusual for engineers to be seen in the hallways at 3 a.m. debating some esoteric algorithmic conundrum.

But Google keeps staff energized with plenty of free food and entertainment. "

"Judging by the vibe at Google's weekly user-interface design meeting, which Fortune sat in on one recent Monday, these people have no problem getting down to business. Just before the proceedings begin, a dozen Googlers sit around a conference room, fiddling with their laptops. Their affect is studiously casual, but the giant digital clock on the wall gives another impression: This is a no-bumbling zone.

Life for Google employees at the Mountain View campus is like college. It feels like the brainiest university imaginable - one in which every kid can afford a sports car (though geeky hybrids are cooler here than hot rods).

Here the shabbily dressed engineers always will be the big men (and, yes, women) on campus. "Hard-core geeks are here because there's no place they'd rather be," says Dennis Hwang, a Google Webmaster.

The people at Google, it should be stated, almost universally see themselves as the most interesting people on the planet. Googlers tend to be happy-go-lucky on the outside, but Type A at their core.

Ask one what he or she is doing, and it's never "selling ads" or "writing code." No, they're on a quest "to organize the world's information and make it universally accessible and useful." That's from the actual mission statement, by the way, which employees can and do cite with cloying frequency.

Googlers can play beach volleyball on campus. Other fun activities at Google include Foosball, videogames, pool tables, ping pong and roller hockey twice a week in the parking lot.

Google's founders have sought out a role model for building their culture, and it's not a tech company or an ad giant. It's Genentech, the biotech company that is No. 2 on our Best Companies list (and was No. 1 last year).

Genentech

Work that really matters -- it's what makes Genentech one the top two best companies to work for. But there's plenty else to like about this low-key, high-tech biotech located just north of San Francisco International Airport. For starters, 29-year-old Genentech is not just the very first biotech; it's the brightest star in a promising industry that has chronically under-delivered.

Genentech's secret, anybody here will tell you, is its culture. And that is what has propelled the company to the top of this year's list. With its storybook view of San Francisco Bay, the place feels more like a college campus than a pillar of the FORTUNE 500. Employees don't get assignments, they get "appointments." They traverse the grounds by shuttle bus and bicycles provided by the company. Every Friday night there's at least one "ho-ho" -- Genentechese for kegger -- a tradition that began in the '70s when the workforce was mostly a handful of rowdy post-docs barely out of grad school. All this would be way too dot-com to make business sense if it weren't for another performer who took the stage that day -- and who got about as much applause as the bands. That would be Art Levinson, Genentech's impish, brilliant scientist CEO, dressed for the occasion in tennis shoes and a black CLONE OR DIE T-shirt. The 55-year-old Levinson, who once bet his colleagues that five of them could fit inside an ice machine (they did), has made mostly right bets for the company ever since he took the helm in 1995 -- championing its science, creating a stream of new drugs, and winning over employees by making clear to all that there would be no butt-covering culture at Genentech.

In fact, Genentech's culture has a whole lot in common with those of two other Bay Area superstars: Google and Apple. All three imbue employees with idealism. Apple keeps a laser like focus on the customer. Google's motto is DO NO EVIL. Genentech's: IN BUSINESS FOR LIFE.

All three companies flout conventional wisdom and take a damn-the-torpedoes approach to nay-sayers. All three know one another well. Levinson is on the boards of Google and Apple; he and Steve Jobs are often seen hanging out at Genentech, deep in discussion. And all three put huge emphasis on attracting the best and the brightest. Genentech awards sabbaticals to stave off burnout. To keep creativity alive, both it and Google encourage their scientists and engineers to spend fully 20 percent of each workweek pursuing pet projects. Many corporations think it's terribly cutting-edge to maintain an arm's-length relationship with employees. These guys want you to move in.

Since the day the company was founded in 1976, Genentech's culture has been its competitive advantage. Founders Bob Swanson, a 29-year-old venture capitalist who studied the power of teams at MIT, and Herb Boyer, a pioneer gene splicer from the University of California at San Francisco, knew the success of their venture depended on luring and keeping big-brain bioscience talent. Within two years Genentech had concocted human insulin, which in 1982 became the first biotech drug to go to market. The company turned its first profit in 1979, the year before it went public, and has remained profitable ever since -- despite a close call in the late 1980s, when it lost focus and stopped introducing new drugs, and the stock price flagged badly enough to make the company a takeover target. (Swiss drug giant Roche took a majority stake in 1990 and has let Genentech run independently ever since.) When Levinson was tapped to become CEO in 1995, Wall Street was skeptical but insiders cheered. Levinson was head of research, a top scientist, and astute at making calls on people and R&D.

During his first two years as CEO, Levinson persuaded the board to plow 50 percent of revenues back into research. (You read that number right. It's why, he believes, four of the company's 13 drugs are less than three years old, 30 more drugs are in the pipeline, and all eight of its clinical trials last year were successful.) He also decided to focus the company's science on "significant unmet needs" in the fields of oncology, immunology, and tissue growth and repair. He got rid of projects (and people) that didn't fit the program and forced fiefdoms like product development and basic research to work closely together. To head drug development, he tapped Susan Desmond-Hellmann, who had begun her career as an oncologist and has never forgotten what it's like to tell a young mother with breast cancer that she has run out of options. (Desmond-Hellmann is now president.)

Genentech pours tremendous energy into hiring people with that kind of passion. In fact, it can take five or six visits and 20 interviews to snag a job. The process is meant partly to screen out the free agents -- people preoccupied with salary, title, and personal advancement. If candidates ask too many such questions, "Boom, wrong profile," says Levinson.

The gantlet is also designed to let job candidates know exactly what they're getting themselves into. "We're extremely nonhierarchical," Levinson says. "We're not wearing ties. People don't call us doctor. We don't have special dining rooms." (They aren't even assigned parking spaces, and it's hell in the morning to find a spot.) Executive job seekers from Big Pharma, especially, find that a jolt, he says. "A lot of them say, 'But I like being different! I like being special!' Well, you're not going to be special here. If that's important to you, that's fine. But you won't be happy here."

Here status is conveyed not by snagging the fanciest title or the biggest office (CEO Levinson's measures about 9 feet by 12 feet and is done up with low-end metal office furniture). It's defined by matching wits and taking chances. Or seeing who can take the dare. At Genentech nobody dresses up, except on Halloween. This past Halloween, Desmond-Hellmann spent the day as Snow White, and Levinson and the rest of the management team dressed as the Six Dwarfs (minus Dopey). They were en route to hand out candy at another office across town when their SUV convoy drove by archrival Amgen. Levinson hailed the driver to stop and told the group he wanted to have their picture taken on the Amgen front lawn, posed around the Amgen sign. They did, but Levinson was not entirely satisfied. What he really wanted, he told them, was a picture of Snow White and the Dwarfs inside the Amgen lobby.

Once or twice a year, staff scientists and researchers must defend their work before the Research Review Committee, the group of 13 Ph.D.s that decides how to allot the research budget. Some find the experience nerve-wracking, and that's okay, says Levinson. "I don't want people terrified, but it should not be a cakewalk either."

True innovation takes guts. Industry-wide, new drugs on average cost about \$800 million and take up to 12 years to develop. More than 90 percent of the drugs in clinical development never reach the market, including half of those that make it to late-stage clinical trials. That's why so many big drug companies are running out of new drugs. For a long time it was easier and lucrative enough to pursue

what Vishva Dixit, vice president of research, calls the "detergent" strategy -- creating me-too drugs in big established markets as if they were laundry soap, and then spending big bucks on marketing to steal share from rival pharmas.

It is the kind of long-term, high-risk research that makes Genentech employees proud -- and glad, they say, that they aren't at Big Pharma. Scoffing at Big Pharma may be both great sport and an effective rallying cry, but everybody here is painfully aware that Genentech also runs the risk of getting too large. By the end of this year, 40 percent of the workforce will have spent less than three years at Genentech; another 40 percent of its managers will be new to their positions. So the company is working furiously to acculturate the rookies.

When Levinson sees signs of culture atrophy, he pounces, as he did in an e-mail to senior managers in December about "the spread of unintelligible, gibberish-laden PowerPoint presentations.... I have recently sat through several presentations that were simply incomprehensible -- mind-numbing, bloated discourses that were full of buzzwords and otherwise devoid of meaningful content. This is a serious problem, and the worst part is that it's spreading like the disease it is." (His abhorrence of corporate-speak helps explain why Levinson loathes consultants. "They suck you dry," he says.) ●

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