



BioTechCircle News®

October 2010

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In this articles section: links to 72 free Web articles in 16 major categories.

The major categories are in alphabetical order and further subdivided to make it easy for you to locate news and developments in technology, the business and the markets in the life science areas of interest to you.

Note: if the links don't connect you directly, please copy and paste the entire URL into your web browser.

Here are the major categories and the page where each category starts:

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For a brief explanation of how we categorize the articles, please see "Express Guide to Monthly Web Articles at: http://www.techmanage.net/expressguide_articles

AGRI-BIOTECH

Subcategory: Animal

Building a Better Goat

Antonio Regalado

Technology Review

20-Oct-10

A slow-moving U.S. project to manufacture anti-diarrhea medicine using the milk of transgenic goats is getting a new start in Brazil, where it is receiving heavy funding from the surging South American power. Opposition in U.S. = opportunity elsewhere.

<http://www.technologyreview.com/biomedicine/26582/?p1=Headlines>

Subcategory: Crops

'Good Neighbor' Corn Fights Borers at Home, Nearby

Steve Karnowski

R&D

08-Oct-10

Corn genetically engineered to resist attacking borers produces a "halo effect" that provides huge benefits to other corn planted nearby. The borers that attack the genetically modified crops die, leaving fewer of them to go after the non-modified corn.

<http://www.rdmag.com/News/2010/10/Environment-Agriculture-Good-neighbor-corn-fights-borers-at-home-nearby/>

BIOBUSINESS MANAGEMENT

Subcategory: Employment/Jobs

Chemical Bonding

Leigh Krietsch Boerner

Chemical & Engineering News

18-Oct-10

Strong ties among employees make for strong companies, according to three standout workplaces profiled in C&EN's annual survey of the best places to work in chemistry: Sigma-Aldrich, DynPort Vaccine Co., and McCormick & Co.

<http://pubs.acs.org/cen/employment/88/8842employment.html>

Subcategory: Government/ Approvals

Hope Rises for Safety Law

Philip Ward

Applied Clinical Trials

01-Oct-10

The new European Union directive on pharmacovigilance is likely to be fully implemented by late 2010 or early 2011, and expectations that it will help to contribute to a much improved climate for drug safety appear to be growing.

<http://appliedclinicaltrialsonline.findpharma.com/appliedclinicaltrials/Regulatory+Articles/Hope-Rises-for-Safety-Law/ArticleStandard/Article/detail/690486>

FDA Seeks to Advance Regulatory Science for Public Health

Haydia Haniff

BioPharm International

14-Oct-10

FDA worries that the range of new drugs is “disturbingly low,” compared to the need for new therapeutics, and that we lack the ability to translate drug discovery and innovation into patient care. Link to FDA’s plan for advancing regulatory science.

<http://biopharminternational.findpharma.com/biopharm/News/FDA-Seeks-to-Advance-Regulatory-Science-for-Public/ArticleStandard/Article/detail/691095>

Subcategory: Miscellaneous

A Spark of Success

Paul Livingstone

R&D Magazine

10-Aug-10

Describes findings of innovation study sampling presence of innovation policies currently in place at laboratories in industry and academia, including software tools, incubators and other technologies and services.

<http://www.rdmag.com/Featured-Articles/2010/08/Manufacturing-Technology-A-Spark-Of-Success/>

CLINICAL TRIALS

Subcategory: Cell Therapy

First Trial of Embryonic Stem Cells in Humans

Michelle Roberts

BBC News

11-Oct-10

Every year ~12,000 people in the US sustain spinal cord injuries. In the trials at a hospital in Atlanta, patients who have sustained such an injury within the last 14 days will be given the experimental stem cell treatment.

<http://www.bbc.co.uk/news/health-11517680>

Subcategory: Geriatrics

New Alzheimer's Definition to Aid in Trial Selection

Drug Discovery & Development

11-Oct-10

New criteria indicate that there is no longer a reason to wait until patients have developed full-blown dementia or to exclude from diagnosis and treatment a large number of patients who lack functional disability yet express the disease.

<http://www.dddmag.com/news-New-Alzheimers-Definition-to-Aid-in-Trial-Selection-101110.aspx>

CONTRACT SERVICES

Subcategory: Government/ Approvals

Is It Safe to Outsource Safety?

Graeme Ladds

Applied Clinical Trials

01-Oct-10

Knowing when to outsource and when to conduct pharmacovigilance in-house is a crucial decision, Ladds writes. Suggests availability of trained safety professionals, checklist of what needs to be performed before determining suitability for 3rd-party role.

<http://appliedclinicaltrialsonline.findpharma.com/appliedclinicaltrials/Articles/Is-It-Safe-to-Outsource-Safely/ArticleStandard/Article/detail/690491>

DRUG DELIVERY

Subcategory: Nanotechnology

Oral Delivery System Developed to Treat Inflammatory Bowel Diseases

Abby Vogel Robinson Georgia Institute of Technology 10-Oct-10

Short pieces of RNA, encapsulated into engineered particles called thioketal nanoparticles, orally deliver the genetic material directly to the inflamed intestines of animals. Signs show that the colon was protected against ulcerative colitis.

<http://www.gatech.edu/newsroom/release.html?nid=62034>

INDUSTRY

Subcategory: Bio Pharma

Biotech Industry Turns Profitable

Keith Darce SignOn San Diego 13-Oct-10

For most of its history, the biotech sector has been a big money loser, largely because a new drug takes 10 or more years to develop and can cost more than \$1 billion. As a group, U.S. biotechnology companies were profitable in 2009 for the first time.

<http://www.signonsandiego.com/news/2010/oct/13/biotech-industry-turns-profitable/>

Subcategory: Collaboration

In the Open

Morgan Bettex MIT News 20-Oct-10

A year after the MIT Libraries began implementing the faculty's open access policy, hundreds of scholarly articles are now freely available online; efforts to democratize access to published research is gaining momentum inside the Institute, beyond.

<http://web.mit.edu/newsoffice/2010/open-access-1020.html>

Subcategory: Education

Can You Analyze Me Now? Cell Phones Bring Spectroscopy to the Classroom

Liz Ahlberg University of Illinois 07-Oct-10

Scientist develops analytical chemistry instrument using a few basic,

inexpensive supplies and a digital camera to build a spectrometer, one that students could see its workings and play with its components.

http://www.news.illinois.edu/news/10/1007scheeline_spectrophotometry.html

Subcategory: Miscellaneous

Losing The Competitive Edge

David J. Hanson

Chemical & Engineering News

04-Oct-10

New assessment lists many areas in which the U.S. has failed to improve its competitive positions relative to other industrialized nations: patent awards; international rankings of science, math education; high-technology exports.

<http://pubs.acs.org/cen/news/88/i40/8840notw4.html>

INVESTMENTS/ GOV. SUPPORT

Subcategory: Energy/ Fuel

Bigger Is Better: DOE JGI Announces 2011 Community Sequencing Program Portfolio

Doe Joint Genome Institute

04-Oct-10

U.S. Dept. of Energy (DOE) Joint Genome Institute (JGI) selects 35 new genomic sequencing projects for 2011 Community Sequencing Program (CSP), a targeted sampling of the planet's biodiversity, to be characterized; bioenergy, environmental applications.

http://www.jgi.doe.gov/News/news_10_10_04.html

Subcategory: Incubators

Bringing Innovation to the World

David L. Chandler

MIT News

18-Oct-10

The U.S. Department of Commerce in September appointed a National Advisory Council on Innovation and Entrepreneurship with the goal of developing innovation centers, similar to MIT's Deshpande Center, around the country.

<http://web.mit.edu/newsoffice/2010/deshpande-1018.html>

Subcategory: Nanotechnology

NHLBI Renews Programs for Nanotechnology Research

NIH News

29-Sep-10

Interdisciplinary teams funded by National Heart, Lung, and Blood Institute (NHLBI), a part of National Institutes of Health (NIH) create nanotechnology solutions for projects such as detecting pulmonary infections and repairing heart tissue damage.

<http://www.nih.gov/news/health/sep2010/nhlbi-29.htm>

NOVEL APPLICATIONS

Subcategory: Energy/ Fuel

Drinking Water, from Sunshine

Morgan Bettex

MIT News

15-Oct-10

Describes solar-powered desalination system that could be rapidly deployed in crisis situations to produce drinking water. Portable system could also be used in remote areas where supplying energy, clean water can be logistically complex and expensive.

<http://web.mit.edu/newsoffice/2010/itw-portable-desalination-1015.html>

Hydrogen-generating Technology Might Power Boats, Store Energy from Wind, Solar Sources

Emil Venere

Purdue News

07-Oct-10

Researchers have developed a method that uses aluminum and a liquid alloy to extract hydrogen from seawater to run engines in boats and ships, representing a potential replacement for gasoline and diesel fuel in marine applications.

<http://www.purdue.edu/newsroom/research/2010/101007WoodallBoats.html>

Subcategory: Microorganisms

Getting Bacteria to Do a Plant's Job

Anne Trafton

MIT News

01-Oct-10

Researchers engineer microbes for low-cost production of precursor of anticancer drug Taxol, originally isolated from the bark of the Pacific yew tree, other pharmaceuticals. Could bring down manufacturing costs, help in drug discovery.

<http://web.mit.edu/newsoffice/2010/cancer-drug-taxol.html>

PATENTS

Subcategory: Government/ Approvals

Patent Reform: High Stakes for Small Biz

John Tozzi and Susan Decker

Bloomberg Businessweek

23-Sep-10

The Patent Office concedes its system is broken, with more than 700,000 applications awaiting ruling, and is proposing changes that would give applicants more control over the timing of the process.

http://www.businessweek.com/smallbiz/content/sep2010/sb20100922_129040.htm?link_position=link8

PEOPLE PROFILES

Subcategory: Immunology/ Infectious Diseases

Innovation and innovators part three – Dr Michael McArthur

BBSRC

19-Oct-10

McArthur co-founded Procarta Biosystems to commercialize a new class of antibiotic to combat drug-resistant infections: transcription factor decoys (TFDs). approach can kill bacteria including E. coli, Pseudomonas, and the hospital superbug MRSA.

<http://www.bbsrc.ac.uk/news/policy/2010/101019-f-innovators-innovation-pt3-macarthur.aspx>

PERSONALIZED MEDICINE

Subcategory: Biomarker

Mayo Researchers Find Biomarkers for Personalizing Radiation Cancer Treatment

Mayo Clinic

04-Oct-10

277 different human lymphoblastoid cell lines investigated to learn more about why some patients respond differently to radiation treatment. Findings may make it possible to one day develop novel therapies aimed at selected subgroups of cancer patients.

<http://www.mayoclinic.org/news2010-rst/5979.html>

Subcategory: Genomics

Why I'm Releasing My Genetic Data Online

Daniel MacArthur

Science Blogs

12-Oct-10

All 12 members of Genomes Unzipped are releasing their own results from a variety of genetic tests, online, for anyone to access. MacArthur summarizes the reasons for the disclosure and discusses the hurdles presented by privacy and consent agreements.

http://scienceblogs.com/geneticfuture/2010/10/why_im_releasing_my_genetic_da.php

The Failed Promise of Genomics

Matt Ridley

The Wall Street Journal

09-Oct-10

DNA is everywhere but in your physician's clinic, Ridley writes. Explains why personalized genomics will struggle to say anything useful at all, for the simple reason that it will be too personal.

<http://online.wsj.com/article/SB10001424052748703843804575534111974117550.html>

PLATFORM TECHNOLOGIES

Subcategory: Cell Therapy

Colorado Researcher Discovers Mechanism for Changing Adult Cells into

Stem-like Cells

Bioscience Technology

07-Oct-10

Caspases could be the key to a kind of cellular reincarnation, taking a cell that, during human development, became a skin cell back to its original state to become any kind of cell.

<http://www.biosciencetechnology.com/News/Feeds/2010/10/products-cell-biology-colorado-researcher-dis-covers-mechanism-for-changi/>

Elasticity Found to Stretch Stem Cell Growth to Higher Levels

Physorg.com

03-Oct-10

By using a unique stretchy surface that allows the cells to pull on it, researchers find they could generate up to 3X more stem cells than using current methods alone. Blood-forming stem cells like to pull on their environment.

<http://www.physorg.com/news205330824.html>

A New Way to Make Stem Cells

Karen Weintraub

Technology Review

01-Oct-10

Scientist develops a way, using messenger RNA instead of DNA, to produce the 4 proteins needed to reprogram the cell. Solves several of the major impediments to using them to treat human diseases.

<http://www.technologyreview.com/biomedicine/26426/>

Subcategory: Disease Prevention

Teasing Out Malaria's Genetic Secret

Anne Trafton

MIT News

18-Oct-10

Plasmodium falciparum, the parasite that causes malaria, has a 48-hour life cycle inside human blood cells. Its genes are turned on and off at specific times, in a sequence that likely guides the parasite's development. May lead to new vaccines or drugs.

<http://web.mit.edu/newsoffice/2010/malaria-niles-1018.html>

Subcategory: Drug Discovery

Scripps Research Study Challenges Conventional Theory of Modern Drug

Mika Ono

Scripps Research Institute

07-Oct-10

As protein receptors change shape, ligands can adapt to that change and bind productively to both active and inactive structures. Suggests an ensemble of ligand binding orientations to consider as a novel approach in drug discovery.

<http://www.scripps.edu/news/press/20101010>

Subcategory: Evolution Research

Internal Body Temperature Turns Back Circadian Clocks

Howard Hughes Medical Institute

15-Oct-10

Sorting out the complex molecular interplay that regulates the body's internal clock is crucially important because broken clocks have been linked to cancer,

psychiatric disorders, and metabolic syndrome.

<http://www.hhmi.org/news/takahashi20101015.html>

Subcategory: Genome Sequence

Scripps Research Team Wins \$5.1 Million to Develop DNA Sequencing

Mika Ono

Scripps Research Institute

16-Sep-10

DNA sequencing costs have fallen dramatically. New funding allows team to further develop an approach they call "nanopore strand sequencing," a rapid real-time technology that doesn't require the time-consuming cyclic addition of reagents.

<http://www.scripps.edu/news/press/20100916>

Subcategory: Genomics

Making a Genome Quickly from Scratch

Katherine Bourzac

Technology Review

12-Oct-10

New technique allows biologists to assemble large pieces of DNA from designs edited on a computer more quickly than before. Could lead to therapies for metabolic diseases. New seed vaccine for influenza in 24 hours or less instead of several months.

<http://www.technologyreview.com/biomedicine/26495/>

Subcategory: Microorganisms

Researchers in BC Studying Vaginal Microbiome

Genome Daily News

14-Oct-10

Vaginal microbial communities vary widely among women, especially between women from different ethnic backgrounds. Research includes bacterial populations associated with preterm birth, a major consequence of abnormal bacterial balance in the vagina.

<http://www.genomeweb.com/sequencing/researchers-bc-studying-vaginal-microbiome>

Subcategory: Nanotechnology

Argonne Scientists Watch the Birth of Nanoparticles for the First Time

Louise Lerner.

Argonne National Laboratory

13-Oct-10

The way that nanoparticles look and behave depends on their architecture: size, shape, texture and surface chemistry. Describes how very high-energy X-rays are used to understand how nanocrystals grow.

http://www.anl.gov/Media_Center/News/2010/news101013a.html

Expanding Nanotechnology

Mike May

Drug Discovery & Development

01-Oct-10

Making drug particles smaller can make them easier to deliver, especially for injected compounds. Incorporating a compound into a nanoparticle also can improve drug targeting. Describes other nanotech value in drug discovery, development progress.

atherosclerosis than statins alone.

<http://www.slu.edu/x39510.xml>

Subcategory: Geriatrics

Computer-Aided MRI Might Help Predict Alzheimer's

Madonna Behen

Healthfinder.gov

05-Oct-10

A combination of specialized MRI scans and an artificial intelligence technique may predict which patients had mild cognitive impairment that was likely to progress to Alzheimer's as opposed to stable mild cognitive impairment.

<http://www.healthfinder.gov/news/newsstory.aspx?docID=643915>

Low Levels of Vitamin B12 Linked to Alzheimer's

Miriam Frankel

New Scientist

21-Oct-10

Finding supports previous research showing large doses of B vitamins might reduce the rate of brain shrinkage by 50%. More evidence is needed before recommending B12 supplements to stave off dementia, researchers say.

<http://www.newscientist.com/article/dn19184-low-levels-of-vitamin-b12-linked-to-alzheimers.html>

Subcategory: Immunology/ Infectious Diseases

Identifying Enzymes to Explode Superbugs

Joe Winters

Georgia Tech

05-Oct-10

One long-considered solution to the rise of antibiotic-resistant superbugs like MRSA is the use of lytic enzymes which attack bacteria by piercing their cell walls. Scientists can now identify lytic enzymes for optimum bacteria killing characteristics.

<http://www.gatech.edu/newsroom/release.html?nid=61483>

An Indirect Route to Taming Flatworm Infection

Howard Hughes Medical Institute

12-Oct-10

Blocking a hormone that helps the flatworm's nervous system communicate with its reproductive system forces flatworms to regress in their sexual development. Targeting such factors could offer important new treatment strategy for curtailing infection.

<http://www.hhmi.org/news/newmark20101012.html>

Iowa State University Researcher Examines Mosquito Genes for New Disease Responses

Lyric Bartholomay

Iowa State University

30-Sep-10

Researcher searched for new genes in the common southern house mosquito (*Culex quinquefasciatus*) that are turned on during infection to see which mosquito genes are activated in response to the infection.

<http://www.news.iastate.edu/news/2010/sep/lyricSci>

Subcategory: Metabolism: Obesity, Diabetes

Too Much Light at Night May Lead to Obesity, Study Finds

Bioscience Technology

11-Oct-10

Researchers find that mice exposed to a relatively dim light at night over eight weeks had a body mass gain that was about 50% more than other mice that lived in a standard light-dark cycle, despite no difference in activity levels or food consumption.

<http://www.biosciencetechnology.com/News/Feeds/2010/10/products-chemicals-and-reagents-too-much-light-at-night-may-lead-to-obesity/>

Subcategory: Microorganisms

Microbial Hair: It's Electric

Carl Marziali

University of Southern California

11-Oct-10

Microbial colonies may survive, communicate and share energy in part through electrically conducting hairs known as bacterial nanowires. First step in finding ways to destroy harmful colonies, such as biofilms on teeth.

http://uscnews.usc.edu/science_technology/microbial_hair_its_electric.html

Subcategory: Miscellaneous

Obscenity, Whale Snot Take Top Honors at Ig Nobels

Mark Pratt

R&D Magazine

01-Oct-10

Describes some of the 2010 Ig Nobel prize winning research findings, the 2010 theme (bacteria). Annals of Improbable Research magazine awards the prizes for silly sounding scientific discoveries that often have surprisingly practical applications.

<http://www.rdmag.com/News/2010/10/Obscenity-whale-snot-take-top-honors-at-Ig-Nobels/>

Study of Planarian Hormones may Aid in Understanding Parasites

Diana Yates

University of Illinois

12-Oct-10

A study of peptide hormones in the brain of a seemingly primitive flatworm reveals surprising complexity of its nervous system, opens up a new approach for combating a major parasitic disease, schistosomiasis.

http://www.news.illinois.edu/news/10/1012planaria_newmark_sweedler.html

Subcategory: Musculoskeletal

First Clinical Trial of Gene Therapy for Muscular Dystrophy Lends Insight into the Disease

Tom Hughes

University of North Carolina

06-Oct-10

A clinical trial designed to replace the genetic defect causing the most common form of muscular dystrophy shows that some patients mount an immune response to the dystrophin protein even before they have received the gene therapy.

<http://news.unchealthcare.org/news/2010/October/first-clinical-trial-of-gene-therapy-for-muscular-dystrophy-lends-insight-into-the-disease>

Subcategory: Neurology

Untangling the Twisted Proteins That Turn Brains Into Sponge

Amber Angelle

Discover

04-Oct-10

New studies lend the strongest support yet to an abnormal form of a protein called a prion as the cause of a fatal brain diseases; studies are also starting to reveal the beneficial natural functions these proteins perform before they go bad.

<http://discovermagazine.com/2010/jun/04-untangling-prions-twisted-proteins-brains-into-sponge>

Chemotherapy Alters Brain Tissue in Breast Cancer Patient

Michael Schu

Indiana University

29-Sep-10

Gray matter changes are most prominent in the areas of the brain that are consistent with cognitive dysfunction during and shortly after chemotherapy. Gray matter density in most women improved a year after chemotherapy ended.

<http://www.cancer.iu.edu/news/article.php?id=3734>

Have Gene Findings Taken the Stigma from ADHD?

Andy Coghlan

New Scientist

30-Sep-10

evidence has emerged of genetic mutations linked to attention-deficit hyperactivity disorder, with 16% of the children with ADHD had abnormally high numbers of CNVs, double the 8% of normal children who had them.

<http://www.newscientist.com/article/dn19528-have-gene-findings-taken-the-stigma-from-adhd.html>

Gene Therapy Proposed to Treat Depression

New Scientist

20-Oct-10

The p11 gene is vital for enabling neurons to respond to the neurotransmitter serotonin. A lack of p11 has been shown to lead to depression in humans, suggesting injecting genes directly into the brain, similar to procedure to treat Parkinson's.

<http://www.newscientist.com/article/mg20827831.900-gene-therapy-proposed-to-treat-depression.html>

Subcategory: Oncology

Surprising Similarities between Human and Zebrafish Tumors

Anne Trafton

MIT News

07-Oct-10

Tumor cells usually have extra copies of some chromosomes. Known as aneuploidy, it appears to give tumor cells a survival edge. Aneuploidy is also seen in zebrafish tumors; may help identify cancer-promoting genes that could become targets for new drugs.

<http://web.mit.edu/newsoffice/2010/zebrafish-1007.html>

Scientists Suggest that Cancer Is Purely Man-Made

University of Manchester

14-Oct-10

Study of remains, literature from ancient Egypt and Greece and earlier includes the first histological diagnosis of cancer in an Egyptian mummy,

indicating cancer was extremely rare in antiquity. Concludes cancer results from pollution, diet, lifestyle.

<http://www.manchester.ac.uk/aboutus/news/display/?id=6243>

Subcategory: Ophthalmology

Leading Cause of Blindness Identified

Jessica Hamzelou

New Scientist

27-Sep-10

The mechanism behind a leading cause of blindness has been discovered, which could result in new treatments for macular degeneration, a disease that causes 50% of all blindness in the western world.

<http://www.newscientist.com/article/dn19502-leading-cause-of-blindness-identified.html>

Subcategory: Pulmonary/ Respiratory Diseases

Powerful Free Radical Causes Lung Damage from Oxygen Therapy

Toni Baker

MCG: Georgia's Health

05-Oct-10

To avoid the dangers of DNA breakdown and protein malfunction resulting from oxygen therapy, health care providers could also monitor peroxynitrite levels as they already monitor blood oxygen long term to ensure sufficient levels.

<http://news.mcg.edu/archives/2561>

Subcategory: Reproduction

Chromosomal Break Gives Scientists a Break in Finding New Puberty Gene

Toni Baker

MCG Georgia's Health

30-Sep-10

The WRD11 gene interacts with a transcription factor that appears to be involved in development of gonadotropin releasing hormones that enable sexual maturation as well as olfactory neurons in the brain, according to a new study.

<http://news.mcg.edu/archives/2545>

RESEARCH TOOLS

Subcategory: Computing Systems

Faster Websites, More Reliable Data

Larry Hardesty

MIT News

14-Oct-10

Web servers that store data locally save time on database searches but sometimes serve up obsolete results. A new "transactional" system solves that problem.

<http://web.mit.edu/newsoffice/2010/fresh-data-1014.html>

Supercomputer Sets Protein-folding Record

Heidi Ledford

Nature

14-Oct-10

A protein's structure largely determines a protein's function. A specially designed supercomputer named Anton has simulated changes in a protein's three-dimensional structure over a period of a millisecond, 100X faster than previous record.

<http://www.nature.com/news/2010/101014/full/news.2010.541.html>

Subcategory: Evolution Research

Why Complex Life Probably Evolved only Once

Michael Le Page

New Scientist

21-Oct-10

Whenever simple cells start to become more complex, they run into problems generating enough energy. If a bacterium grew to the size of a complex cell, it might have space for genes, but it would have barely enough energy to make proteins from them.

<http://www.newscientist.com/article/dn18734-why-complex-life-probably-evolved-only-once.html>

Subcategory: Imaging

Saving Cells: Image Processing for Improved Viability

Paul Jantzen

Bioscience Technology

22-Sep-10

Part I of a 2-part series on viability, resolution improvement, and measurement in fluorescence imaging. Discusses reducing emission wavelength overlap ("bleedthrough") encountered with fluorescent dyes.

<http://www.biosciencetechnology.com/Application-Notes/2010/09/Saving-Cells-Image-Processing-for-Improved-Viability-Olympus/>

Subcategory: Immunology/ Infectious Diseases

Scripps Research Scientists Reveal Structure of Dangerous Bacteria's Powerful Multidrug Resistance Pump

Mika Ono

Scripps Research Institute

20-Sep-10

Structure of NorM, a member of the only remaining class of multidrug resistance transporters left to be described, is now done. Implications for combating dangerous antibiotic resistant strains of bacteria, developing hardy strains of agricultural crops.

<http://www.scripps.edu/news/press/20100922>

Sequencing Tested as Infection Early Warning

Emily Singer

Technology Review

21-Oct-10

Scientists show that it's feasible to collect, sequence, and analyze genomic samples collected from the environment in a single day. Approach used as an environmental sensor for infectious pathogens that can spread through a community.

<http://www.technologyreview.com/biomedicine/26320/>

STRATEGIC RELATIONSHIPS

Subcategory: Collaboration

Virtual Research Institute Needed to Unlock RNA's Promise, Say Scientists

European Science

11-Oct-10

European scientists believe RNA could bring significant advances to the diagnosis, treatment and prevention of many human diseases, recommend creating a network of linked RNA Centers.

[http://www.esf.org/media-centre/press-releases/ext-single-news.html?tx_ttnews\[tt_news\]=629&cHash=601e0426d42663e36e8ee6ddcd96ef84](http://www.esf.org/media-centre/press-releases/ext-single-news.html?tx_ttnews[tt_news]=629&cHash=601e0426d42663e36e8ee6ddcd96ef84)

Subcategory: Environment

Sustainable R&D

Stephen K. Ritter

Chemical & Engineering News

04-Oct-10

The Warner Babcock Institute for Green Chemistry (WBI) is working with industry partners to redefine how scientists solve the technical challenges of developing safer chemical products and greener production processes.

<http://pubs.acs.org/cen/science/88/8840sci1.html>

THERAPEUTIC CATEGORY

Subcategory: Food

Compound in Celery, Peppers Reduces Age-related Memory Deficits

Diana Yates

University of Illinois

13-Oct-10

A diet rich in luteolin (found in carrots, peppers, celery, olive oil, peppermint, rosemary, chamomile) reduces age-related inflammation in the brain and related memory deficits by directly inhibiting the release of inflammatory molecules in the brain.

http://www.news.illinois.edu/news/10/1013memory_rodney_johnson.html

Subcategory: Immunology/ Infectious Diseases

Viral Outbreak : The Science of Emerging Disease

Howard Hughes Medical Institute

01-Oct-10

Announcement of live webcasts to be held Dec 2 and Dec 3, 2010.

On-demand webcast will be available Dec. 6. Leading virus researchers explain how they use both simple and sophisticated technologies to detect and fight infectious agents.

<http://www.hhmi.org/biointeractive/>

Subcategory: Musculoskeletal

Many Orthopedic Surgery Patients Low on Vitamin D

Bloomberg Business Week

08-Oct-10

Nearly half of patients undergoing orthopedic surgery have vitamin D deficiency, which can impair their recovery, researchers say. In these cases, patients' vitamin D levels need to be brought up to normal levels before they undergo surgery.

<http://www.businessweek.com/lifestyle/content/healthday/644070.html>

VIDEO: eLEGS Give Paralyzed New Hope

IMPO

14-Oct-10

Demonstrates eLegs, "an exoskeleton for wheel-chair users who are committed to living life to its fullest." The bionic legs will hopefully allow paraplegics to be mobile even after their accident.

<http://www.impomag.com/scripts/ShowPR~RID~15589.asp>

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