

potentiates recombinational DNA repair by promoting assembly of RAD51 onto single-stranded DNA. [Nature]

## Human BRCA2 Protein Promotes RAD51 Filament Formation on RPA-Covered Single-Stranded DNA

Researchers report the purification of full-length human BRCA2 and show that it binds to ~6 RAD51 molecules and promotes RAD51 binding to single stranded DNA coated by replication protein A, in a manner that is stimulated by DSS1. [*Nat Struct Mol BioI*]

# The Breast Cancer Tumor Suppressor BRCA2 Promotes the Specific Targeting of RAD51 to Single-Stranded DNA

To determine the functions of BRCA2, the human protein was purified. It was found to bind selectively to singlestranded DNA (ssDNA), and to ssDNA in tailed duplexes and replication fork structures. [*Nat Struct Mol Biol*]

### Core Epithelial-to-Mesenchymal Transition Interactome Gene-Expression Signature is Associated with Claudin-Low and Metaplastic Breast Cancer Subtypes

The epithelial-to-mesenchymal transition core signature associates closely with the claudin-low and metaplastic breast cancer subtypes and correlates negatively with pathological complete response. [*Proc Natl Acad Sci USA*]

#### Image-Guided Breast Tumor Therapy Using a siRNA Nanodrug

In this study researchers describe the synthesis and testing of a tumor-targeted nanodrug (MN-EPPT-siBIRC5) that is designed to specifically shuttle siRNA to human breast tumors. [*Cancer Res*]

### ATBF1 Inhibits ER Function by Selectively Competing with AIB1 for Binding to ER in ER-Positive Breast Cancer Cells

Researchers found that ATBF1 inhibited ER-mediated gene transcription, cell growth and proliferation in ERpositive breast cancer cells. [*J Biol Chem*]

## Musashi1 Regulates Breast Tumor Cell Proliferation and is a Prognostic Indicator of Poor Survival

Msi1 is a negative prognostic indicator of breast cancer patient survival, and is indicative of tumor cells with stem cell-like characteristics. [*Mol Cancer*]

# Mammosphere-Forming Cells from Breast Cancer Cell Lines as a Tool for the Identification of CSC-Like and Early Progenitor-Targeting Drugs

Here, researchers show that a subpopulation of MCF-7 breast cancer cells which stains pale to Toluidine Blue, is endowed with features of CSCs. [*Cell Cycle*]

### **CLINICAL RESEARCH**

#### Expanding the Criteria for BRCA Mutation Testing in Breast Cancer Survivors

Testing women with triple negative breast cancers who were younger than 50 years for BRCA mutations is a cost-effective strategy and should be adopted into current guidelines for genetic testing. [J Clin Oncol]

### Factors Associated with Cancer-Related Fatigue in Breast Cancer Patients Undergoing Endocrine Therapy in an Urban Setting: A Cross-Sectional Study

The present findings suggest that fatigue is an important problem in the majority of breast cancer patients during endocrine therapy. Researchers found that BMI, clinical stage, menopausal status, duration of endocrine therapy, physical activity, and diet are associated with fatigue. [*BMC Cancer*]

## **INDUSTRY NEWS**

# Stem Cell Agency Commits \$243 Million, Expands Team Approach to Developing New Therapies

The Governing Board of the California Institute for Regenerative Medicine, the state stem cell agency created by proposition 71, approved the concept for up to \$243 million round of funding to move stem cell-based therapies to clinical trial. [California Institute for Regenerative Medicine Press Release]

## Quark Pharmaceuticals and Major Pharmaceutical Company Enter into Licensing Option Agreement for the p53 Suppressor Drug QPI-1002, the First siRNA Administered Systemically in Human

Quark Pharmaceuticals, Inc. announced that it has granted Novartis an option to obtain an exclusive worldwide license to develop and commercialize its p53 temporary inhibitor siRNA drug QPI-1002, currently the subject of a Phase II clinical trial. [Quark Pharmaceuticals, Inc. Press Release]

#### L'Oreal Fellowship Winner Seeks to Understand Breast Cancer

A desire to understand how breast cancer starts has seen Walter and Eliza Hall Institute researcher Dr Marie-Liesse Asselin-Labat today win one of three 2010 L'Oreal Australia For Women in Science Fellowships. [Walter and Eliza Hall Institute Press Release]

#### **Sanofi Seeks Efficiencies with New Model**

Sanofi-aventis is dividing its vast resources into decentralized disease-based units, each with its own departments for research and development, regulatory affairs, marketing, and sales -- a plan designed to identify promising drugs more quickly and weed out failures before spending billions on unsuccessful clinical trials. [The Boston Globe]

## **POLICY NEWS**

#### FDA, Companies Must Stretch Overseas Supply Oversight

The FDA is trying to stretch its enforcement reach over foreign drug suppliers, potentially through consent decrees, and is asking manufacturers to take bigger steps as well to tighten the pharmaceutical supply chain. [Food and Drug Administration, United States]

#### Lawrence A. Tabak Named Principal Deputy Director NIH

National Institutes of Health Director Francis S. Collins, M.D., Ph.D., announced the appointment of Lawrence A. Tabak, D.D.S., Ph.D., as principal deputy director of the National Institutes of Health. [National Institutes of Health, United States]

Exceptional, Unconventional Research Enabling Knowledge Acceleration (EUREKA) (R01) (RFA-GM-11-003) [National Institutes of Health, United States]

Proposed Collection; Comment Request; STAR METRICS--Science and Technology in America's Reinvestment: Measuring the Effects of Research on Innovation, Competitiveness and Science (FR Doc. 2010-20614) [National Institutes of Health, United States]

Center for Scientific Review; Notice of Closed Meeting (FR Doc. 2010-20287) [National Institutes of Health, United States]

Office of the Director, National Institutes of Health; Notice of Meeting (FR Doc. 2010-20675) [National Institutes of Health, United States]

NIH-RAID Updates on Program Scope and Procedures: Biologics Manufacture, Lead Selection, and Product Development Plans (NOT-RM-10-012) [National Institutes of Health, United States]

Support of National Institute of General Medical Sciences Program Project Grants (P01) (PAR-10-266) [National Institutes of Health, United States]

## EVENTS (Listed by Date)

**Clinical Trials International Summit 2010** September 1-2, 2010 Pudong, China

Stem Cells USA & Regenerative Medicine Congress 2010 September 13-15, 2010 Philadelphia, United States

**15th Congress of the European Society of Surgical Oncology (ESSO)** September 15-17, 2010 Bordeaux, France

**Cellular Therapy of Cancer Symposium - ATTACK Project Meeting** September 24-27, 2010 Montpellier, France

International Society for Cellular Therapy 2nd Annual Symposium on Stem Cell

## **Translation: Best Practices & Regulatory Considerations**

September 27-28, 2010 San Francisco, United States

#### Expert Perspectives: Integrating New Data into Best Practices for Breast Cancer

October 1, 2010 National Harbor, United States

## 2010 Breast Cancer Symposium

October 1-3, 2010 Washington, DC, United States

## 2nd International Inflammatory Breast Cancer Conference

October 6-7, 2010 Marseille, France

## 35th European Society for Medical Oncology (ESMO) Congress

October 8-12, 2010 Milan, Italy

#### **New York Stem Cell Foundation Fifth Annual Translational Stem Cell Research Meeting** October 12-13, 2010 New York, United States

## International Symposium on Breast Cancer Prevention: Nutrition, Communications, Public

Policy

October 18-19, 2010 West Lafayette, United States

## **16th World Congress of the International Society of Senology**

October 20-22, 2010 Valencia, Spain

# The 2010 American Institute for Cancer Research (AICR) Annual Research Conference on Food, Nutrition, Physical Activity & Cancer

October 21-22, 2010 Washington, DC, United States

## MENA Oncology Conference

October 22-23, 2010 Cairo, Egypt

## UAE Cancer Congress 2010

October 28-30, 2010 Dubai, United Arab Emirates

#### 6th National Cancer Research Institute (NCRI) Conference November 7-10, 2010 Liverpool, United Kingdom

22nd EORTC-NCI-AACR Symposium on "Molecular Targets and Cancer Therapeutics" November 16-19, 2010

Berlin, Germany

## 33rd Annual San Antonio Breast Cancer Symposium

December 8-12, 2010 San Antonio, United States

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## JOB OPPORTUNITIES

## Cell Therapy Technologist (Opexa Therapeutics)

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