

**Media Contacts:**

**Global Enterprise Innovation**

Seema Kumar  
908-405-1144  
[Skumar10@its.jnj.com](mailto:Skumar10@its.jnj.com)

**California Innovation Center**

Meghan Marschall  
201-323-0578  
[mmarscha@its.jnj.com](mailto:mmarscha@its.jnj.com)

**Boston Innovation Center**

John Lacey  
781-392-5514  
[jlacey1@its.jnj.com](mailto:jlacey1@its.jnj.com)

**London Innovation Center**

Ellen Rose  
+44 (0) 7767 267493  
[erose89@ITS.JNJ.COM](mailto:erose89@ITS.JNJ.COM)

**Johnson & Johnson Innovation Catalyzes New and Exciting Science and Technology in Pharmaceutical, Medical Device, Diagnostic and Consumer Healthcare Spaces**

-- Deals span new approaches for cancer, diabetes, autoimmune disease and Alzheimer's, exciting technologies such as 3-D printing for trauma use, sedation monitoring, cardiac remodeling, probiotics for skin infections --

**NEW BRUNSWICK (June 19, 2014)** – Johnson & Johnson Innovation, LLC today announced 12 new alliances with life science companies and research institutions around the globe to explore early-stage innovation in a broad range of therapeutic areas and across pharmaceuticals, medical device and diagnostics and consumer healthcare.

“The future of healthcare will be defined by companies, academic institutions and governments that collaborate to leverage existing strengths, while at the same time think outside current paradigms and experiment with new ways of innovating,” said **Paul Stoffels**, M.D., Chief Scientific Officer, Johnson & Johnson and Worldwide Chairman, Pharmaceuticals. “By being where these new frontiers in science and technology are being forged, our goal is to translate these insights into promising treatments for the future.”

Launched more than a year ago, the Johnson & Johnson Innovation centers are working globally with life science researchers and entrepreneurs to identify exciting early-stage technologies and translate them into solutions for patients.

The early-stage collaborations announced today represent recent research and development alliances facilitated by the Boston, California and London innovation centers and include exciting technologies like 3-D printing for orthopaedic trauma, creating new brown fat for metabolic diseases and advancing novel science in areas of significant unmet medical need such as lymphoma, rheumatoid arthritis, prostate cancer, dementia, Alzheimer's, diabetes and insomnia.

“The broad variety of the collaborations we are announcing today, and the unique ways in which we are working with our collaborators, illustrates our strong commitment to being flexible and creative in our deal making in order to maximize the potential of each individual technology,” added Dr. Stoffels. “Our goal is to enrich the life science ecosystem on a global scale by redefining the R&D paradigm.”

The collaborations include:

**Promising New Ways to Treat Cancer**

- **Targeting Lymphoma** – Janssen Biotech, Inc. and Johnson & Johnson Innovation have formed a research collaboration with **Weill Cornell Medical College** aimed at developing compounds for targeting the function of a lymphoma causing protein. Through the collaboration, investigators at Weill Cornell and Janssen drug development researchers will collaborate to discover, validate and characterize inhibitors of the protein and further elucidate novel targeting methods.
- **Novel Immunotherapies for Prostate Cancer** – Janssen Biotech, Inc. and Johnson & Johnson Innovation have obtained an exclusive, worldwide license from **Aduro BioTech** to certain product candidates specifically engineered for the treatment of prostate cancer. In a separate transaction, Johnson & Johnson Development Corporation participated in a Series C equity round raised by Aduro.

### Patient-Specific 3D Printing for Orthopedic Needs

- **3-D Printing Resorbable Implant** – DePuy Synthes Products, LLC and Johnson & Johnson Innovation have formed a strategic collaboration with the medical device company **Tissue Regeneration Systems, Inc.** (TRS) to help develop patient-specific, resorbable implants for large bone segmental defect treatment in trauma and orthopaedic oncology. The collaboration matches DePuy Synthes' expertise and market leadership with TRS's 3-D printing technologies and development expertise. The collaboration also includes potential future development opportunities in a range of additional applications within DePuy Synthes' areas of strategic interest.

### Advancing Progress on Alzheimer's Disease and Neuroscience

- **Accelerating Progress on Dementia Research** – Through an agreement facilitated by Johnson & Johnson Innovation, the neuroscience therapeutic area of Janssen Research & Development, LLC will participate in the [U.K. Dementias Research Platform](#). The Platform is a major initiative of the Medical Research Council that seeks to accelerate progress in dementias research through a coordinated public-private partnership with six industry and eight leading academic institutions.
- **Sensing Sedation Levels** – Ethicon Endo-Surgery Inc., a member of the Johnson & Johnson Family of Companies, has entered into a research collaboration and option agreement with **BrainStem Biometrics Inc.** through a deal facilitated by Johnson & Johnson Innovation. As part of the collaboration, Ethicon will co-fund studies to confirm the clinical and operational utility of BrainStem Biometrics' Tremor Monitor Unit, a small, non-invasive medical device biosensor that is used to detect minute eye movements in patients undergoing anesthesia. As a likely marker of basic brainstem function, this technology has the potential to distinguish between safe and unsafe levels of sedation for patients around the world.
- **Putting Insomnia to Rest** – Janssen Pharmaceutica N.V., Johnson & Johnson Innovation and the Janssen neuroscience therapeutic area have established a research collaboration with **Minerva Neurosciences**, subject to certain conditions, around the development of an orexin-2 antagonist, MIN-202. The program will focus on the treatment of patients with primary and secondary insomnia and potentially other related neuropsychiatric disorders.
- **Epigenetic Modulators in the CNS** – Johnson & Johnson Development Corporation participated in the Series A equity investment of **Rodin Therapeutics** in collaboration with Johnson & Johnson Innovation. Rodin is dedicated to finding epigenetic modulators for the treatment of cognitive disorders, including Alzheimer's disease.

### Seeking Novel Approaches to Treat Diabetes and Cardiovascular Disease

- **Creating New Brown Fat** – Janssen Pharmaceuticals, Inc. and Johnson & Johnson Innovation have established a collaboration with the biotechnology company **Energesis Pharmaceuticals**, which is identifying biological compounds that stimulate the formation of brown fat (BAT) for use in treating metabolic diseases. The company's approach is a novel strategy leveraging recent scientific insights in BAT biology to increase the body's ability to burn stored fat and lower insulin resistance.

- **Taking On the Nutrient-Sensing Pathway** – Johnson & Johnson Development Corporation has made an equity investment in **Navitor Pharmaceuticals** in collaboration with Johnson & Johnson Innovation. Navitor is developing highly specific modulators of mTORC1, the pathway primarily responsible for cells' response to nutrient availability including cell growth and function. Navitor is leveraging the central importance of the mTORC1 pathway to develop new therapies for metabolic diseases, like diabetes, as well as autoimmune, musculoskeletal and other disease areas.
- **Cardiac Remodeling** – Johnson & Johnson Development Corporation has made an equity investment in **Ascelegen Therapeutics** in collaboration with Johnson & Johnson Innovation. Ascelegen is working on developing novel growth factor related therapies for cardiovascular diseases, including heart failure. Ascelegen's work builds on GDF-11 research conducted at the Harvard Stem Cell Institute and the Brigham and Women's Hospital.

### Targeting Autoimmune Disease

- **Halting Autoantigen Production in Rheumatoid Arthritis and Other Autoimmune Diseases** – Johnson & Johnson Development Corporation participated in a Series A equity investment in **Padlock Therapeutics** in collaboration with Johnson & Johnson Innovation. Padlock is a company that is developing new therapies targeting the protein arginine deiminases, a class of enzymes that mediate protein citrullination. Protein citrullination leads to the creation of potent autoantigens implicated in the very earliest events that lead to rheumatoid arthritis and drives inflammation and immune complex formation in active autoimmune disease.

### New Strategies for Skin, Oral and Respiratory Conditions

- **Exploring the Microbiome's Impact on Health and Disease** – Johnson & Johnson Consumer Companies, Inc. and Johnson & Johnson Innovation have established a collaboration with scientists from **The University of Manchester** to explore potential applications of probiotic extracts for prevention and treatment of skin, oral and respiratory conditions. The agreement underscores the approach Johnson & Johnson Innovation is taking to establish scientific collaborations in areas that span its pharmaceutical, medical device and diagnostics and consumer businesses.

Johnson & Johnson Innovation launched the innovation centers last year, establishing four regional hubs to identify scientific opportunities with the potential to advance the development of new healthcare solutions. Through the innovation centers, external innovators have access to a broad range of resources within Johnson & Johnson, including funding, R&D expertise and incubation at one of the company's four Janssen Labs facilities. Today, there are fully operational offices in Boston, London and California, and a fourth location in Shanghai now houses a small, growing scientific team and will officially open this year to develop collaborations across the Asia Pacific region.

### **About Johnson & Johnson Innovation**

Johnson & Johnson Innovation, LLC focuses on accelerating early-stage innovation worldwide and forming collaborations between entrepreneurs and Johnson & Johnson's global healthcare businesses. Johnson & Johnson Innovation provides scientists, entrepreneurs and emerging companies one-stop access to science and technology experts who can facilitate collaborations across the pharmaceutical, medical device and diagnostics and consumer companies of Johnson & Johnson. Johnson & Johnson Innovation includes local deal-making capabilities with the flexibility to adapt deal structures to match early-stage opportunities and establish novel collaborations that speed development of innovations to solve unmet needs in patients.

Johnson & Johnson Innovation facilitates early stage collaborations across the Johnson & Johnson Family of Companies. For more information please visit: [www.jnjinnovation.com](http://www.jnjinnovation.com)

*(This press release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. The reader is cautioned not to rely on these forward-looking statements. These statements are based on current expectations of future events. If underlying assumptions prove inaccurate or unknown risks*

*or uncertainties materialize, actual results could vary materially from the expectations and projections of Johnson & Johnson Innovation, LLC and/or Johnson & Johnson. Risks and uncertainties include, but are not limited to: economic factors, such as interest rate and currency exchange rate fluctuations; competition, including technological advances, new products and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approvals; challenges to patents; changes in behavior and spending patterns or financial distress of purchasers of health care products and services; changes to governmental laws and regulations and domestic and foreign health care reforms; general industry conditions including trends toward health care cost containment; and increased scrutiny of the health care industry by government agencies. A further list and description of these risks, uncertainties and other factors can be found in Johnson & Johnson's Annual Report on Form 10-K for the fiscal year ended December 29, 2013, including in Exhibit 99 thereto, and our subsequent filings with the Securities and Exchange Commission. Copies of these filings are available online at [www.sec.gov](http://www.sec.gov), [www.jnj.com](http://www.jnj.com) or on request from Johnson & Johnson. Neither Johnson & Johnson Innovation LLC nor Johnson & Johnson undertakes to update any forward-looking statement as a result of new information or future events or developments.)*

###