



## Bio-Modeling Systems and Persistent Systems Launch Joint Strategic Systems Biology Initiative

R&D Program to Accelerate Mechanism-Based Drug Discovery, Help Eliminate Use of Animals in Contact Allergy Testing

Paris, FRANCE and Pune, INDIA – March 22, 2013: [Bio-Modeling Systems](#) (BMSystems), a leading integrative systems biology company and, [Persistent Systems](#) (BSE & NSE: PERSISTENT), the global leader in software product and technology services, today announced a joint systems biology research and development initiative. The strategic initiative is the world's first collaborative effort that marries non-mathematical heuristic modeling with mathematical modeling designed to increase the success rates of drug discovery and formulation development by pharmaceutical and cosmetic industries. A key deliverable of this joint initiative is the development of a predictive *in silico* or computer simulated skin model that will help eliminate the need to use animals in contact allergy testing. Today's announcement follows on the heels of the European Union's ban on the import and sale of cosmetics containing ingredients tested on animals, offering the industry a highly effective and essential alternative.

Bio-Modeling Systems' team of highly skilled biologists will combine the outputs of its CADI\*™ proprietary heuristic modeling platform with a powerful new software platform, Cell-in-Silico, developed by Persistent, resulting in the first heuristic model of skin cell interplay mechanisms to be enhanced through mathematical modelling. This strategic collaboration harnesses the scientific and bioinformatics capabilities of Bio-Modeling Systems and the information technology and scientific capabilities of Persistent Systems to provide the first ever truly holistic systems-based drug discovery solutions.

"Bio-Modeling Systems and Persistent Systems have come together to develop a much needed solution that will address the pharma and cosmetic industries' need for predictive modeling of skin *in silico*," said Dr. Anand Deshpande, Managing Director and CEO, Persistent Systems. "Bio-Modeling Systems scientists have pioneered heuristic biological modeling with their CADI\*™ platform. By coupling this with Persistent Systems' strength in mathematical modeling and IT, we will develop a viable *in silico* alternative to animal testing."

"We are delighted to partner with Persistent Systems' life sciences experts, as together we can bridge the gap and powerfully link complementary heuristic and mathematical modeling," said Manuel Gea, CEO, Bio-Modeling Systems.

"For the first time ever, mechanistic modeling and dynamics engineering will be merged, bringing a whole new level of understanding to the multi-scale biological space, enabling us to develop a fully integrated, outstanding set of solutions to previously intractable biotechnological problems," said Dr. François Iris, CSO, Bio-Modeling Systems. We look forward to addressing the industry's challenges head-on with this powerful offering."

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About Bio-Modeling Systems (BMSystems):

[Bio-Modeling Systems](#), an innovative company founded in 2004, is the first and, to date, only company to successfully create in-silico heuristic models validated in-vivo. BMSystems' heuristic models, built by its biologists using an integrated IT solution called CADI™ (Computer Assisted Deductive Integration) have led to discoveries, patents, and operational businesses in the fields of infectious diseases, immunology, neurology, psychiatry, oncology, dermatology and innovative bioprocesses for industrial biotech. BMSystems' models describe the biological phenomena involved in pathological states and provide new mechanisms to explain the cause of certain diseases, identify and select predictive biomarkers, offer new combinations of molecules and new therapeutic strategies contributing to the development of Mechanism-Based Medicine. For more information, please visit <http://www.bmsystems.net>.

About Persistent Systems:

Established in 1990, [Persistent Systems](#) (BSE & NSE: PERSISTENT) is a global company specializing in software products and technology services. For more than two decades, Persistent has been an innovation partner for the world's largest technology brands, leading enterprises and pioneering start-ups. With a global team of more than 6,000 employees, Persistent has 300 customers spread across North America, Europe, and Asia. Today, Persistent focuses on developing best-in-class solutions in four key next-generation technology areas: Cloud Computing, Mobility, Analytics and Collaboration, for telecommunications, life sciences, consumer packaged goods, banking & financial services and healthcare verticals. For more information, please visit: <http://www.persistentsys.com>.

Forward-looking and Cautionary Statements: For risks and uncertainties relating to forward-looking statements, please visit: [www.persistentsys.com/Portals/0/forward\\_looking\\_cautionary\\_statement.shtml](http://www.persistentsys.com/Portals/0/forward_looking_cautionary_statement.shtml).

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