



Systems Biology Initiative Plans Computer-Simulated Skin Model

<http://www.bio-itworld.com/brief/2013/3/25/systems-biology-initiative-plans-computer-simulated-skin-model.html>

March 25, 2013 | Bio-Modeling Systems (BMSystems) of France and Persistent Systems of India are launching a joint systems biology research and development initiative that will marry 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. The announcement follows the European Union's ban on the import and sale of cosmetics containing ingredients tested on animals and offers the industry a highly effective and essential alternative. [Press release \[PDF\]](#)

GEN Genetic Engineering & Biotechnology News

Biotechnology from bench to business

March 22, 2013

<http://www.genengnews.com/gen-news-highlights/systems-biology-aims-to-remove-animals-from-contact-allergy-testing/81248134/>

[Bio-Modeling Systems](#) and [Persistent Systems](#) entered a collaboration that marries non-mathematical heuristic [modeling](#) with mathematical modeling in an effort designed to increase the success rates of drug discovery and formulation development by the 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. The deal follows on the heels of the European Union's ban on the import and sale of cosmetics containing ingredients tested on animals.

Bio-Modeling Systems will combine the outputs of its CADI™ modeling platform with a new software platform, Cell-in-Silico, developed by Persistent, resulting in heuristic model of skin cell interplay mechanisms to be enhanced through mathematical modeling. 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 truly holistic systems-based drug discovery solutions, according to Anand Deshpande, Ph.D., managing director and CEO, Persistent Systems.

"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 he explained. "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](#)."

"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 François Iris, CSO, Bio-Modeling Systems. We look forward to addressing the industry's challenges head-on with this powerful offering."



Bio-Modeling Systems to develop technology to eliminate allergy testing on animals

22 March 2013

<http://www.pharmaceutical-technology.com/news/newsbio-modeling-systems-to-develop-technology-to-eliminate-allergy-testing-on-animals>



A joint initiative to develop a computer-simulated skin model that will help eliminate the need for the pharmaceutical industry to use animals in contact allergy testing has been formed between France-based Bio-Modeling Systems and software developer Persistent Systems.

The move comes less than two weeks after the European Union banned the import and sale of cosmetics containing ingredients tested on animals.

Bio-Modeling Systems will combine the outputs of its computer-assisted deductive integration (CADI) system, a technology that delivers new disease concepts and corresponding treatments, with Persistent's new software platform, Cell-in-Silico, to develop the skin cell interplay mechanisms.

The venture is the first collaborative effort that combines non-mathematical heuristic modelling with mathematical modelling, designed to increase the success rates of drug discovery.

Persistent Systems CEO and managing director Dr Anand Deshpande said; "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 *in silico*."

"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."

Bio-Modeling Systems CSO Dr Francois Iris added; "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."

Image: The European Union has banned the import and sale of cosmetics containing ingredients tested on animals.



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BMSystems and Persistent Systems establish joint biology R&D initiative

[Information Technology](#) | [Specialist Software](#) | [Measurement and Analysis](#) | [Biological Analysis](#) | [Molecular Biology](#) | [R and D](#) |

http://www.manufacturingchemist.com/news/article_page/BMSystems_and_Persistent_Systems_establish_joint_biology_R_and_D_initiative/87051

Bio-Modeling Systems (BMSystems), a French developer of biological *in silico* models validated *in vivo*, has announced a joint systems biology research and development initiative with Indian software specialist Persistent Systems.

The firms aim to develop a predictive computer-simulated skin model that will help eliminate the use of animals in contact allergy testing in the pharmaceutical and cosmetics industries. The announcement follows the European Union's ban on the import and sale of cosmetics containing ingredients tested on animals.

Bio-Modeling Systems will combine its CADI modelling platform with Persistent's new Cell-in-Silico software to provide the first 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 modelling of skin *in silico*,' said Anand Deshpande, Managing Director and CEO of Persistent Systems. 'Bio-Modeling Systems scientists have pioneered heuristic biological modelling with their CADI platform. By coupling this with Persistent Systems' strength in mathematical modelling and IT, we will develop a viable *in silico* alternative to animal testing.'

Francois Iris, CSO of Bio-Modeling Systems, added: 'For the first time ever, mechanistic modelling and dynamics engineering will be merged, bringing a whole new level of understanding to the multi-scale biological space.'

Kind regards,

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