



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 825033

H2020-AUTISM: Publication of the world's first integrative model of ASD development outlining the mechanisms and dynamics of ASD pathogenesis from pregnancy to child early life.

PRESS RELEASE Paris November 15, 2022: BMSYSTEMS is proud to announce the publication of the world's first integrative neurodevelopmental model describing the mechanisms and dynamics of ASD pathogenesis from pregnancy to child early life : "[Autism Spectrum Disorders pathogenesis: Toward a comprehensive model based on neuroanatomic and neurodevelopment considerations](#)"([download pdf open access](#)), the latest contribution of BMSystems to the "[GEMMA \(Autism & microbiota\) H2020 program](#)" launched in 2019.

This is the 2nd in a series of 4 publications with Harvard Medical School. The first presented a novel mechanistic hypothesis on the interaction between the microbiome and the host in ASD affected individuals (This article belongs to the Special Issue Microbiome, Probiotics and Autism). "[Autonomic Nervous System Neuroanatomical Alterations Could Provoke and Maintain Gastrointestinal Dysbiosis in Autism Spectrum Disorder \(ASD\): A Novel Microbiome-Host Interaction Mechanistic Hypothesis](#)" ([download pdf open access](#)). The third will further explain the relative weight of epigenetics and RNA editing mechanisms in the development of ASD, while the fourth will conclude the overall neurodevelopmental model. **We are open to talk about the therapy CADI-T2011 for Autism/ASD core symptoms attenuation ready for validation.**

Furthermore, BIO-MODELING SYSTEMS, at the forefront of the necessary digital transformation of R&D processes since 2004, is invited to the Biofit Event in Strasbourg to participate to the round table "[How is the digital era shaping new forms of early-stage collaborations in biopharma](#)". This will be a great opportunity to explain how BMSYSTEMS created CADI Discovery in 2004, successfully combining human and artificial intelligence, to generate unique heuristic non-mathematical models with the help of its Integrative biologists, ever since.

With a world's first in the field of neurodegenerative diseases, [1 therapeutic start-up](#), and [the launch of Telesphore-Pharma](#), BMSystems' 2nd therapeutic start-up project in 2022, this announcement confirms the excellence of BMSystems in delivering value to patients and shareholders.

Created in 2004, profitable since 2006, thanks to our recurrent clients, BMSystems addresses two complementary business targets:

- For R&D, Translational Medicine & Digital Health Executives, we offer *robust alternative decision-making to de-risk, save time and costs* of R&D and Digital Health programs,
- For Business Developers, Patients Groups & Investors, we discover *novel low-risk, highly effective and cost-effective* diagnostic, therapy, nutrition, cosmetic, bioprocess solutions for spin-offs or out-licensing.

We warmly invite you to attend the [Biofit event](#) (November 29-30, 2022 in Strasbourg and December 7-8, 2022 (through the web) to meet us and [visit our new website](#) to discover our achievements in diagnostics, therapeutics, cosmetics, digital-Health and bio-processes.



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 825033

Do not hesitate to contact us for more information or any business request. [Download our latest presentation.](#)

About Bio-Modeling Systems (BMSystems):

Bio-Modeling Systems, founded in 2004 and profitable since 2006, is with its operational “**Augmented Intelligence**” CADI™ Discovery” platform the first and, to date, only company to successfully create in-silico heuristic models validated in-vivo that successfully create in-silico heuristic models validated in-vivo. BMSystems’ models have been built by its biologists using an integrated IT solution called CADI™ (Computer Assisted Deductive Integration) and have led to discoveries and patents in the fields of infectious diseases, oncology, neurology, psychiatry, dermatology, immunology, metabolic disorders, innovative bioprocesses for industrial biotech and the creation of new companies exploiting these patents. BMSystems’ models describe the biological phenomena involved in pathological states and provide novel mechanistic integrations to explain the cause of certain diseases, identify and select predictive biomarkers, offer new combinations of molecules and new therapeutic strategies, thereby contributing to the development of Mechanism-Based Medicine.

Bio-Modeling Systems, the world’s first Mechanisms-Based Medicine Company, generated 14 successes independently validated by our clients/partners of which: 1 therapeutic spin-off in antibiotic resistance and 1 exclusive out-license in CNS, 4 issued patents, 10 publications.

Two new therapeutic programs in CFS-Low-grade inflammation and Parkinson’s disease are ready for clinic validation.

For more information and access to presentations & publications, please visit <http://www.bmsystems.net>.

Press Contacts

BMSystems

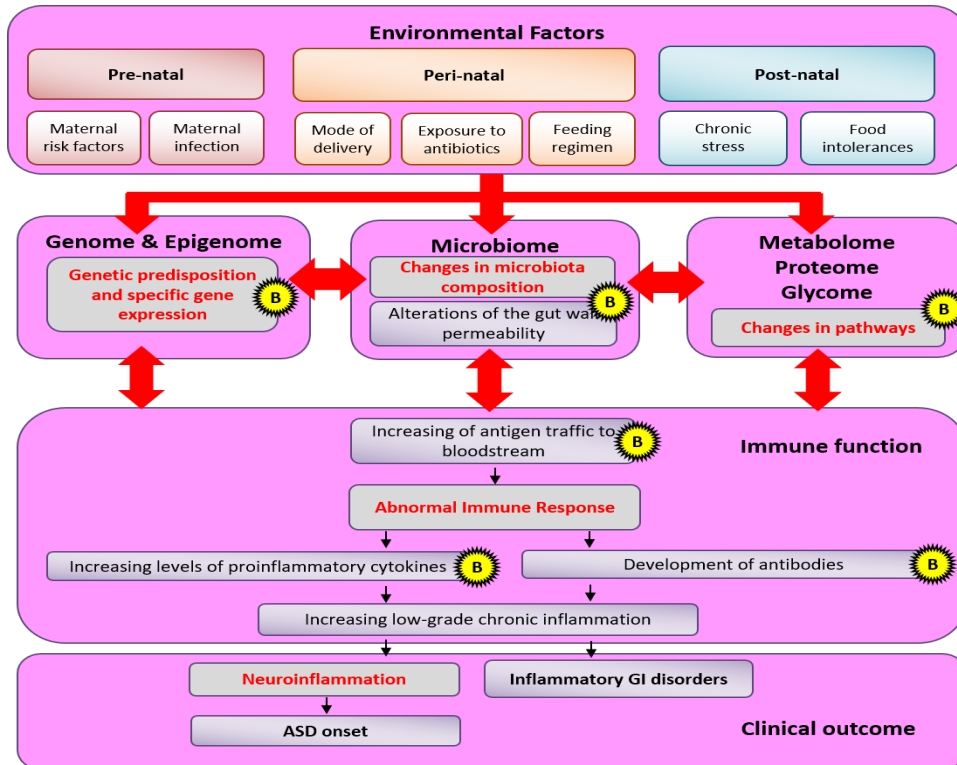
Manuel Gea ; CEO & VP R&D IT

Phone: +336 83 06 12 72

manuel.gea@bmsystems.net Media contact: Manuel GEA manuel.gea@bmsystems.net

GEMMA PROGRAM

This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 825033



↔
Interplay between environment, genome, epigenome, microbiome, metabolome, proteome, glycome and immune function

B
Biomarkers targeted by the pre-clinical and clinical studies