

JOINT EVENT

9th International Conference and Expo on

Proteomics and Molecular Medicine

9th International Conference on

&

Bioinformatics

November 13-15, 2017 Paris, France



Manuel Gea

Bio-Modeling Systems, France

The future of systems medicine: Everything you always wanted to know about the “reality” of big data and AI “big mirages” but were afraid to ask

Statement of the Problem: With a 95% failure rate, the Big Pharma R&D model focused on testing new patentable compounds for novel targets based on KOL concepts is not more pertinent for at least 3 reasons: 1) Despite decades of investments in Omics technologies and Systems Biology programs produced few relevant results due to 3 “side effects” and a conceptual mistake: Life mechanisms are complex not complicated! 2) The “mirage” of Artificial Intelligence (AI) that MUST follow rules in a world where humans massively do not. 3) The unreliability of scientific and clinical publications is increasing and the valuable negative results are not published. Why the transfer of the digital tools and methods does from the internet world to the life sciences R&D world does not work properly. One reason is that the founding basements of the two worlds do not obey the same rules. The challenge is not a question of technologies only, its needs to redefine discovery concepts.

The Future of Systems Medicine: 1) Understanding and validating the mechanisms of a disease/disorder becomes the first objective. 2) Finding the most adapted solutions is a necessary consequence. The Mechanisms-Based Medicine Concept gives the basements to apply CADI™ (Computer Augmented Deductive Intelligence) Discovery that addresses life mechanisms complexity and the unreliability of scientific and clinical publications by combining the strengths of human and artificial intelligences in the right order.

The 5 CADI™ Discovery Principles: 1) Mechanisms-Based Medicine Concept; 2) Architectural Principle; 3) Negative Selection Principle; 4) Steps Validation Principle; 5) Integrated Solutions Principles.

Conclusions: CADI Discovery already led to a world's first in neurodegenerative diseases, 1 therapeutic spin-off and 1 exclusive our license, 4 issued patents, 10 publications and 39 CADI™ programs among completed or open for collaboration..

Recent Publications

- Iris F, D Filiou, Ch W Turck (2014) Differential proteomics analyses reveal anxiety-associated molecular and cellular mechanisms in cingulate cortex synapses. *American Journal of Psychiatry and Neuroscience* 2(3): 25-42.
- Iris F (2012) Psychiatric systems medicine: Closer at hand than anticipated but not with the expected portrait. *Pharmacopsychiatry* 45 (Suppl. 1): S12-S2.
- Turck CW, Iris F (2011) Proteome-based pathway modelling of psychiatric disorders. *Pharmacopsychiatry* 44 (Suppl 1): S54-61.
- Iris F, Gea M, Lampe PH and Santamaria P (2009) Production and implementation of predictive biological models. *Med Sci.* 25: 608-16.
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Biography

Manuel Gea is a Serial Entrepreneur, Co-Founder of the world's first Mechanisms-Based Medicine Company, thinking & doing out of the box applying "general semantics" principles and Augmented Intelligence vs. Artificial Intelligence. He is a Keynote Speaker, independent board member, expert & business angel developing disruptive innovations (technologies, novel therapies & business models) in the life sciences, IT, pharma, healthcare & cosmetic sectors. He is graduated from Ecole Centrale Paris in operational research and data integration and has Sociology of Organizations degree from Paris IX Dauphine University. He is also Chairman of the Independent trans-discipline biotech Think Tank Adebiotech and the Co-founder and Chairman of Centrale-Santé, the French Health Think-Tank gathering 2500 members, professional involved in sector innovations and creating value for patients. He is Co-founder, CEO & VP R&D IT of BMSystems, dedicated to the discovery of cost-effective new therapeutic, diagnostic & preventive solutions.

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