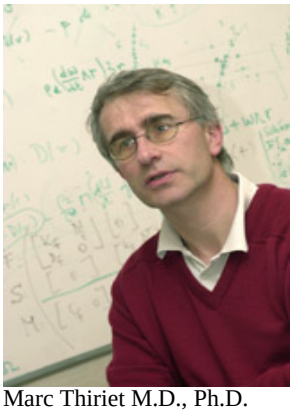
Editorial

A peer reviewed journal with structured data



Marc Thiriet M.D., Ph.D.
is a CNRS researcher of the INRIA- UPMC-CNRS "REO" team from both Laboratory Jacques-Louis Lions, CNRS 7598, University Pierre and Marie Curie and INRIA Paris-Rocquencourt Research Center.
E-mail: thiriet@ann.jussieu.fr

The Molecule Pages from UCSD Signaling Gateway have been regularly published online since one decade and are now printed biannually. As a researcher involved in biomathematical and biomechanical modeling and simulation, I found these pages very informative, either when dealing with biological processes happening at the nano- and microscopic scales, or incorporating these events in a meso- and macroscopic scale modeling to enhance reductionist models when necessary. UCSD Molecule Pages indeed yield information that enables interdisciplinary research and I have cited the Molecule Pages over 130 times in my recent book 'Intracellular Signaling Mediators in the Circulatory and Ventilatory Systems' (Springer New York, 2013).

Any paper published in a journal specialized in molecular biology focuses on specific aspects of the signaling protein in a given context. On the other hand, any UCSD Molecule Page provides a full description of the protein and its structure-function relationship. Associated historical section explains different names, old ones being still used by some authors nowadays. A major aspect, which a non-specialist generally confronts, is the large number of names assigned to a single protein. Furthermore, a given protein alias can define many different types of proteins. In addition, the meaning of a protein alias is often very difficult to obtain in the literature. UCSD Molecule Pages should be always targeted for such disambiguation.

Each Molecule Page describes a cell signaling mediator. It starts with a summary with alternative names and aliases as well as a network map. The latter is accessible directly from the left menu. The full text contains a series of items that include the protein structure and function, regulation of activity, binding partners, regulation of concentration in physiological and pathological conditions, subcellular localization, major sites of expression, phenotypes, alternatively spliced variants, and antibodies to end with a list of references. Therefore, UCSD Molecule Pages are indispensable tools for any biologist and bioinformatician who wants to have an overview on the state of the art and find a precise molecule feature. They can be used with success by any researcher working in other scientific fields with applications to biology to get an overall knowledge of a given molecule.

UCSD Molecule Pages that are beneficial for a large fraction of the entire community of researchers should be maintained and regularly updated. The Molecule Pages which will be published in this issue are: p38 beta MAP kinase (*A001718*), Mannose/mannan-binding lectin (*A004276*), Leukocyte antigen CD47 (*A005186*), L-ficolin (*A004266*) and TSH receptor (*A002333*).

-Marc Thiriet