Department of Chemistry & Biomolecular Sciences Seminar **Semester 1 2008** **Macquarie University, Sydney, Australia**	**Thursday, 8 May** **12 Noon** **F7B Room 322**

Prof. Marc Wilkins
School of Biotechnology and Biomolecular Sciences
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The Dynamics of the Interactome

Interactome research has shown that proteins participate in a wide number and variety of interactions. Together, these form networks of great complexity. We have particular interests in what controls the dynamics of protein-protein interaction networks. We define three effects: quantitative interaction effects, qualitative interation effects and conditional interaction effects. This seminar will discuss research we have done in understanding these effects and the implications of this for the control of cellular function.

About the Speaker

In 1994, Marc developed the concept of the proteome and coined the term. He co-wrote and co-edited the first book on proteomics, and has recently followed this with a new book "Proteome Research: concepts, technology and practice.". He has published 87 research and review manuscripts in the areas of proteomics and bioinformatics for proteomics. He is a co-founder of the biotechnology company Proteome Systems, which is now listed on the Australian Stock Exchange. Marc's current research interests are in the dynamics of protein-protein interaction networks. He is also a participant in international efforts seeking to standardize data formats for proteomics.

Five Recent Related Publications

1. Wilkins MR, Kummerfeld SK (2008) Sticking together? Falling Apart? Exploring the dynamics of the interactome. Trends in Biochemical Sciences, in press
2. Ho E, Webber R, Wilkins MR (2008) Interactive three-dimensional visualization and contextual analysis of protein interaction networks. Journal of Proteome Research, 7: 104-12.
3. Pang CNI, Chen A, Hayen A, Wilkins MR (2008) Are protein complexes composed of core, module and attachment proteins? Proteomics, 3: 425-434
4. Wilkins MR, Appel RD, Williams KL, Hochstrasser DF (Eds) (2007). Proteome Research: concepts, technology and practice. Springer (book).
5. Taylor CF, Paton NW, Lilley KS, Binz PA, Julian RK, Jones AR, Zhu W, Apweiler R, Aebersold R, Deutsch EW, Macht M, Mann M, Neubert TA, Patterson SD, Seymour SL, Tsugita A, Wilkins MR, Xenarios I, Hermjakob H. (2007) The Minimum Information About a Proteomics Experiment (MIAPE). Nature Biotechnology, 25: 887-893.

To meet the speaker, please contact

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