



**The 17th Biennial Meeting of the
International Society for Molecular Recognition**
Sunday July 8th - Thursday July 12th, 2007
New York University
New York, NY, USA

Program

Sunday, July 8, 2007 Affinity 2007 Welcoming Reception (5 pm)	
Introduction 6:30 pm to 6:45 pm	George Ehrlich , Hoffmann - La Roche, Nutley, NJ
Keynote Lecture 6:45 pm to 7:45 pm	A Human Protein Atlas Based on Affinity Proteomics Mathias Uhlén Department of Biotechnology, AlbaNova University Center, Royal Institute of Technology, Stockholm, Sweden
Monday, July 9, 2007	
Opening Ceremonies 8:45 am to 9:00 am	Richard Willson , University of Houston, Houston, TX
Chairman Introduction 9:00 am to 9:15 am	Session 1: Affinity: Past, Present and Future Mathias Uhlén , Royal Institute of Technology, Stockholm, Sweden
101 9:15 am - 10:00 am	My Life with Affinity: Essentials of Biorecognition and its Application Meir Wilchek Department of Biological Chemistry, Weizmann Institute of Science, Rehovot, Israel
102 10:00 am to 10:30 am	Monolith Supports with Affinity and Pseudo Affinity Ligands for Superfast Purification of Biomolecules M. A. Vijayalakshmi ^{1,2} ¹ Laboratoire d'Interactions Moléculaires et de Technologie de Séparation (LIMTech.S), Centre de Recherche de Royallieu, BP 20.529, 60205 Compiègne Cedex, France ² Center for BioSeparations Technology, VIT University, Vellore, 632014, India
Break 10:30 am to 10:50 am	Coffee/Posters/Exhibits
103 10:50 am to 11:20 am	Immunodepletion - What's Beneath the Tip of the Plasma Proteome Iceberg? Mark S. Baker ^{1,2} , Alamgir Khan ¹ , Wai-Kei Shum ² , Sock-Hwee Tan ² , Veronika Polaskova ² and Amit Kapur ² ¹ Australian Proteome Analysis Facility Ltd (APAF), ² Dept. of Chemistry and Biomolecular Sciences, Macquarie University, 2109. Sydney, AUSTRALIA
104 11:20 am to 12:00 pm	The NCI's Clinical Proteomic Technology Initiative for Cancer - The Reagent Resource Core Adam Michael Clark National Cancer Institute, Office of Technology and Industrial Relations, Bethesda MD
Lunch/Workshop 12:00 pm to 1:30 pm	Flexible Formats for Characterizing and Screening Protein-Protein Interactions using Bio Layer Interferometry on the Octet System

Matthew Kirtley
ForteBio, Inc. Menlo Park, CA USA

Chairman Introduction 1:30 pm to 1:45 pm	Session 2: Advances in Affinity Technologies Lars Hagel , GE Healthcare, Uppsala, Sweden
201 1:45 pm to 2:30 pm	Evolution of Industrial Affinity in Biopharmaceutical Production Duncan Low Process Development, Amgen, Inc., Thousand Oaks, California
202 2:30 pm to 3:00 pm	Efficiency Improvements in the Discovery and Development of Novel Antibody Format and Protein-Based Biotherapeutics Using CaptureSelect® Affinity Ligands and Yeast Display Discovery Tools Hendrik Adams and Pim Hermans BAC bv (The BioAffinity Company), Huizerstraatweg 28, 1411 GP Naarden, Naarden, The Netherlands
Break 3:00 pm to 3:20 pm	Coffee/Posters/Exhibits
203 3:20 pm to 3:50 pm	Generation of Fully Human Antibodies Derived from Fab-on-phage Display Libraries. Rapid Kinetic-based Screening of Fab Fragments for Lead Identification Marc Vanhove Dyax s.a., Boulevard du Rectorat 27B, Building 22, B-4000 Liege (Sart-Tilman), Belgium
204 3:50 pm to 4:20 pm	Novel Approaches to Affinity Screening Enrique Carredano , Katarina Öberg, Tryggve Bergander, Lena Kärf, Charlotte Brink, Kristina Nilsson-Valimaa, Katarina Stenklo, Jan Bergström, Carina Engstrand, Åsa Dahlstedt-Hagman, Niklas Pettersson, Mats Nilsson, Nils Stafström, Karol Lacki, Bo-Lennart Johansson, Jean-Luc Maloisel GE Healthcare Biosciences AB, Uppsala, Sweden
Award Program 4:30 pm to 6:00 pm	Roche Younger Investigators A. Cecilia A. Roque , Universidade Nova de Lisboa, Caparica, Portugal (chair) Development of HIC Media Useful for Isolation of Proteins Carrying Single Amino Acid Substitutions Kristian Becker* , Elisabeth Hallgren**, Enrique Carredano**, Ronnie Palmgren** and Leif Bülow** *Department of Pure and Applied Biochemistry, Centre for Chemistry and Chemical Engineering, Lund University Lund, Sweden **GE Healthcare Bio-Sciences AB, Uppsala, Sweden Development of New OMNiMIPs (One Monomer Molecularly Imprinted Polymers) Jason LeJeune and David Spivak Department of Chemistry, Louisiana State University, Baton Rouge, LA Novel Affinity Ligands for the Purification of Antibody Fragments Jonathan M. Haigh , Christopher R. Lowe Institute of Biotechnology, University of Cambridge, Cambridge, UK Conformational Flexibility and Kinetic Complexity in Antigen-antibody Interactions Katerina Kourentzi , Mohan Srinivasan, Sandra J. Smith-Gill and Richard C. Willson Department of Chemical and Biomolecular Engineering, University of Houston, Houston, TX Molecular Imprinted Polymers for Selective Protein Adsorption by Miniemulsion Polymerization

	Marc Herold , Klaus Niedergall, Melanie Dettling, Yunxiao Wang, Guenter Tovar Fraunhofer-Institute for Interfacial Engineering and Biotechnology & Institute for Interfacial Engineering, University of Stuttgart, Stuttgart, Germany
Day Break 6:00 pm to 8:00 pm	ISMR Council Meeting/Posters/Exhibits

Tuesday, July 10, 2007	
Chairman Introduction 8:45 am to 9:00 am	Session 3: New Developments in Chromatography Juan A. Asenjo , University of Chile, Santiago, Chile
301 9:00 am to 9:45 am	Mathematical Modeling of Elution Curves for a Protein Mixture in Chromatography Applied to the Optimal Selection of Operating Conditions J.A. Asenjo and B.A. Andrews Centre for Biochemical Engineering and Biotechnology, Department of Chemical Engineering and Biotechnology, University of Chile, Beauchef 861, Santiago, Chile
302 9:45 - 10:15 am	Affinity Interaction under Chaotropic Conditions Rainer Hahn ^{1,2} , Waltraud Kaar ² , Barbara Kanatschnig ¹ , Sabine Geinstetter ¹ , Karin Ahrer ^{1,2} and Alois Jungbauer ^{1,2} ¹ Austrian Center of Biopharmaceutical Technology, Muthgasse 18, 1190 Vienna, Austria ² Department of Biotechnology, University of Natural Resources and Applied Life Sciences, Vienna, Muthgasse 18, 1190 Vienna, Austria
Break 10:15 am to 10:35 am	Coffee/Posters/Exhibits
303 10:35 am to 11:05 am	Immunoaffinity Capillary Electrophoresis for the Identification and Characterization of Toxic Biomarkers Norberto A. Guzman Johnson and Johnson Pharmaceutical Research and Development – Global Preclinical Division, Raritan, New Jersey
304 11:05 am to 11:35 am	Biacore Applications for Effective Bio-therapeutic Development Brian Lang ¹ and Fredrik Sundberg ² ¹ Biacore, Inc. part of GE Healthcare, 800 Centennial Ave., Piscataway, NJ 08854 ² GE Healthcare Life Sciences, Rapskatan 7, 75450 Uppsala, Sweden
Lunch/Workshop 11:45 am to 1:15 pm	Success Story of MabSelect Victor Bornsztejn GE Healthcare Bioprocess, 800 Centennial Ave., Piscataway, NJ 08854
Poster/Exhibitor Session 1:15 pm to 2:15 pm	Please stand by your poster/exhibit
Chairman Introduction 2:15 pm to 2:30 pm	Session 4: Nano/Bio/Materials Richard Willson , University of Houston, Houston Texas
Pierce Award Lecture 2:30 pm to 3:15 pm	Molecular Recognition of Proteins on Surfaces and the Development of Critical Hydrophobicity HIC Herbert P. Jennissen Institut für physiologische Chemie, Universität-Duisburg-Essen, Hufelandstr. 55, D-45122 Essen, Germany
401 3:15 pm to 3:45 pm	Analyte-Responsive Retro-reflectors for Biochemical Assays and Diagnostics Steven M. Kemper ¹ , Tim Sherlock ² , Kaajal D. Shah ¹ , Paul Ruchhoeft ² , Robert L. Atmar ³ , and Richard C. Willson ¹ ¹ Department of Chemical and Biomolecular Engineering, ² Department of Electrical and Computer Engineering, University of Houston, Houston, TX 77204

	³ Department of Molecular Virology and Microbiology, Baylor College of Medicine, Houston, TX 77030
Break 3:45 pm to 4:05 pm	Coffee/Posters/Exhibits
402 4:05 pm to 4:35 pm	Gold Nanorod Substrates for Localized Surface Plasmon Resonance Sensing Jason H. Hafner , Kathryn M. Mayer, Seunghyun Lee, Hongwei Liao, Betty C. Rostro, Peter T. Scully Department of Physics & Astronomy, Department of Chemistry, Rice University, Houston, TX, USA 77005
403 4:35 pm to 5:05 pm	Discovery and Development of OMNiMIPs: One MoNomer Molecularly Imprinted Polymers David Spivak Department of Chemistry, Louisiana State University, Baton Rouge, LA
Panel Discussion 5:05 pm to 6:00 pm	Trends in Label-free Interaction Analysis - Ashique Rafique (Regeneron) Mathew Kirtley (ForteBio), Brian Lang (GE Healthcare), Voula Kodoyianni (GWC Technologies)
Day Break 6:00 pm to 8:00 pm	Posters/Exhibits/Dinner on your own

Wednesday, July 11, 2007	
Chairman Introduction 8:45 am to 9:00 am	Session 5: Insights into Intra- and Inter- Molecular Recognition M.A. Vijayalakshmi , CBST, VIT University, TamilNadu, India
501 9:00 am to 9:45 am	Self-Assembly of Soft Molecular Networks: Crystal Design and Curvature Michael Ward Molecular Design Institute, Dept. of Chemistry, New York University, New York, NY
502 9:45 - 10:15 am	Molecular Recognition of Foreign Sequences in Engineered 5S Ribosomal RNA Xing Zhang ¹ , Ajish S. R. Potty ² , George W. Jackson ² , George E. Fox ¹ , and Richard C. Willson ^{1,2} Department of Biology and Biochemistry ¹ and Department of Chemical Engineering ² , University of Houston
Break 10:15 am to 10:35 am	Coffee/Posters/Exhibits
503 10:35 am to 11:05 am	Small-molecule-mediated Rescue of Protein Function by an Inducible Proteolytic Shunt Matthew Pratt and Tom Muir Laboratory of Synthetic Protein Chemistry, The Rockefeller University, 1230 York Avenue, New York, NY 10021
Social Event 11:05 am to 1:30 pm	Walking Tour of the Village featuring Arthur Marks Posters/Exhibits/Lunch on your own
Chairman Introduction 1:30 pm to 1:45 pm	Session 6: Protein Interactions In and On Cells Irwin Chaiken , Drexel University, Philadelphia, PA
601 1:45 pm to 2:30 pm	Dynamic Visualization of Signaling Activities in Living Cells Jin Zhang Depts. Pharmacology/Molecular Sciences and Neuroscience, Johns Hopkins University School of Medicine, Baltimore, MD
Break 2:30 pm to 2:50 pm	Coffee/Posters/Exhibits

602 2:50 pm to 3:20 pm	Structure and Function of Eukaryotic RNA Exosomes C.D. Lima, Q. Liu, J.C. Greimann Program in Structural Biology, Sloan-Kettering Institute, New York, NY 10021 USA
603 3:20 pm to 3:50 pm	Electrophoretic Fingerprinting of HIV-1 Cell Interaction: a Novel Tool for Development of Charge-Based Strategies Fairhurst, D.¹, Rowell, R.², Monahan, I.³, Stieh, D.³, McNeil-Watson, F.⁴, Morfesis, A.⁴, Romano, J.¹, Shattock, R.J.³ and M. Mitchnick⁵ ¹ International Partnership for Microbicides, Silver Spring, USA, ² University of Massachusetts, Amherst, USA, ³ St. Georges Hospital Medical School, London, UK, ⁴ Malvern Instruments Ltd., Malvern, UK, ⁵ Particle Sciences Inc., Bethlehem, USA
Overview 3:50 pm to 4:20 pm	Irwin Chaiken , Drexel University, Philadelphia, PA
Poster/Exhibit Session 4:20 pm to 5:20 pm	Please stand by your poster/exhibit
Social Event 6:15 pm	Gala Dinner Cruise on New York Harbor

Thursday, July 12, 2007	
Chairman Introduction 8:45 am to 9:00 am	Session 7: Viruses and Vaccines Daniel Malamud , New York University Dental Center, New York, NY
701 9:00 am to 9:45 am	Ligand Recognition and Plasticity in HIV Envelope Glycoprotein gp120 Wayne A. Hendrickson^{1,2}, Hui Xie^{2,3}, Anil Korkut², Danny Ng⁴ and Amos B. Smith, III⁴ ¹ Howard Hughes Medical Institute, ² Department of Biochemistry and Molecular Biophysics, and ³ Department of Pharmacology, Columbia University, New York, NY 10032 USA ⁴ Department of Chemistry, University of Pennsylvania, Philadelphia, PA 19104 USA
702 9:45 - 10:30 am	The Role of Antibodies in Preventing and Treating HIV Infection Susan Zolla-Pazner New York VA and NYU Medical Centers, New York, NY
Break 10:30 am to 10:50 am	Coffee/Posters/Exhibits
703 10:50 am to 11:20 am	Biomolecule Recognition in Piezoelectric Immunosensors: Application of Piezoimmunosensors for Detection of HIV1 Virion Infectivity Factor Guilherme N.M. Ferreira^{1*}, João M. Encarnação¹, Luis Rosa¹, Rogério Rodrigues¹, Luisa Pedro¹, Frederico Aires da Silva², João Gonçalves² ¹ IBB-Institute for Biotechnology and Bioengineering, Centro de Biomedicina Molecular e Estrutural, Universidade do Algarve, 8000 Faro, Portugal. ² URIA-Centro de Patógenese Molecular, Faculdade de Farmácia, Universidade de Lisboa, Lisbon, Portugal
704 11:20 am to 11:50 am	Interaction of gp340, a Glycoprotein in the Innate Immune System, with HIV-1 env Daniel Malamud New York University Dental Center, New York, NY
ISMR Meeting 11:50 am to 12:15 pm	ISMR Presidential Announcements
Lunch Break 12:15 am to 1:15 pm	Posters/Exhibits/Lunch on your own

Chairman Introduction 1:15 pm to 1:30 pm	Session 8: Drug Discovery and Diagnostics Waseem Malick , Hoffmann - La Roche, Nutley, NJ
801 1:30 pm to 2:15 pm	The Economics of Personalized Medicine: Optimizing Incentives for Innovation M. J. Finley Austin Hoffmann - La Roche, Nutley, NJ
802 2:15 pm to 2:45 pm	Biomimetic and Supramolecular Scaffolds for Multivalent Display Kent Kirshenbaum Department of Chemistry, New York University New York, NY 10003
803 2:45 pm to 3:15 pm	Designing for Success: The Generation of Useful Leads with Small Molecule Libraries Robert A. Goodnow Jr. Discovery Chemistry, Hoffmann-La Roche, Inc., Nutley, NJ
804 3:15 pm to 4:00 pm	Cancer Chemotherapy with an FDA Approved Transition State Analog Enzyme Binder Ronald Breslow Department of Chemistry, Columbia University, New York, NY 10027 USA
Closing Remarks 4:00 pm to 4:30 pm	Announcement of Affinity 2009 (Iceland), Hordur Filippusson