

# THE 29<sup>TH</sup> ANNUAL SYMPOSIUM OF



THE  
PROTEIN  
SOCIETY

## FINAL PROGRAM

**JULY 22 -25, 2015**  
FIRA DE BARCELONA - MONTJUÏC  
Barcelona - Spain

#PS2015

[PROTEINSOCIETY.ORG/SYMPOSIUM](http://PROTEINSOCIETY.ORG/SYMPOSIUM)



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Dear Colleagues,

As the President of the Protein Society, I would like to encourage your company to participate in the 29th Annual Symposium of The Protein Society. A unique, 3.5 day forum focusing on all aspects of protein science, the meeting will take place in Barcelona, Spain, July 22-25, 2015.

With an outstanding program developed by the 2015 Program Planning Committee, the meeting will be the can't-miss event for scientists seeking to stay on top of the latest advances and developments.

The longstanding significance of the meeting derives from its unique, trans-disciplinary focus on proteins per se, rather than a narrower focus on a particular protein type, biological field, or experimental method. This shared interest in proteins draws thought leaders from around the world who are conducting molecular biological, genetic, biochemical, biophysical and computational experiments at leading institutions in more than 50 nations. Put simply, the Protein Society Symposium is the meeting for learning and presenting the latest results in protein science from all scientific disciplines. And, consequently, it serves as a singular opportunity for vendors and sponsors who offer services and technologies aimed at proteins in the lab. There are numerous sponsorship offerings that are designed to cost-effectively boost your company's visibility, and we work with our exhibitors to drive traffic and ensure your return on investment.

Please take a look at the information below and get in touch if you have any questions or suggestions.

I hope you will be able to make it, and look forward to meeting many of you in Barcelona!

Best Wishes,

James U. Bowie, PhD  
Protein Society President



## COMMITTEES

### PROGRAM PLANNING COMMITTEE

**James Wells** (Chair)

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*Research Group Leader EMBL-European Bioinformatics Institute & Wellcome Trust Sanger Institute*

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*Agnes Scott College*

**Michael Summers, Ph.D.**

*University of Maryland Baltimore County/HHMI*

**Frieda Texter, Ph.D.**

*Albright College*

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**Arash Foroutan**

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*Adimab*

**Sudha Veeraraghavan**

*University of Maryland, Baltimore*

**Ruiying Wu**

*Argonne National Laboratory*

**Serena Zanzoni**

*University of Verona*

**Chao Zhang**

*University of Southern California*









## GENERAL INFORMATION

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### SCIENTIFIC REGISTRATION –HALL

The Registration Area will open at 3:00 PM on Tuesday, July 21st (refer to hours below). Registration includes admission to all scientific and poster sessions, exhibits, one copy of the Final Program and one tote bag. Registration does not include any meals.

### HOURS

**Tuesday, 21st:** 3:00 pm – 6:00 pm

**Wednesday, 22nd:** 7:30 am – 6:30 pm

**Thursday, 23rd:** 6:30 am – 6:30 pm

**Friday, 24th:** 8:00 am – 6:30 pm

**Saturday, 25th:** 8:00 am – 12:00 pm

### REGISTRATION FEES

Full Member Registration:	535€
Emeritus Member Registration:	405€
Staff Member Registration:	420€
Graduate Student Member Registration:	195€
Undergrad Member Registration:	FREE
Early-Career Member Registration:	390€
Regular Non-Member Registration:	775€
Non-Member Student:	270€
Non-Member Lab Staff / Emeritus:	665€
Non-Member Corporate:	1350€
One-day Registration:	270€
Guest Registration (Networking Events):	100€
Guest Registration (Exhibition Hall Only):	390€

### BADGE/ DELEGATE BAG PICKUP – MAIN HALL

All registrants must go to the Symposium Registration Desk in the main hall of the venue. **All attendees are required to wear their badge at all times.** In addition to being a means of identification, the name badge is required for admission to scientific sessions and exhibits. Each registrant will receive one copy of the Final Program and one delegate bag.

### CAMERAS/VIDEO RECORDING

The unauthorized use of cameras/video recording inside session rooms or among the posters is prohibited.

### MOBILE DEVICES

As a courtesy to your fellow attendees, please turn off all cell phones and beepers prior to entering a session room.

## MEAL FUNCTIONS / CAFETERIA OPENING HOURS

Meals are not included with the Symposium registration fee.

There is a Cafeteria inside the venue for attendees to purchase sandwiches and drinks. It will be open from 8.30 am - 04.30 pm and is located in level 2. Nearby restaurants also offer some affordable menus (further information available in the Symposium app).

## COMPLIMENTARY INTERNET ACCESS

There is free wi-fi internet access at the meeting venue. The network name is PS2015 and is open to all attendees.

## TAXIS

Taxis in Barcelona may be ordered by phone, picked up at authorized taxi stands or flagged down in the street. Taxis must usually be paid in cash though some accept credit cards.

**Radio Taxi:** 0034 933 033 033

**Taxi for disabled people:** 0034 935 519 368

## USEFUL TELEPHONES

For emergencies: 112

Municipal Police 092

Airport: 0034 902 404 704

Railway company (Renfe): 0034 902 320 320

Bus station: 0034 934 913 183

## CURRENCY

The currency in Spain is the Euro. All fees and rates are charged in Euros. No other currency will be accepted.

## TOURS FOR ACCOMPANYING PERSONS

Icono Serveis offers a wide variety of tours during the week. Please refer to the Symposium app for further information.



## POSTER SET UP & REMOVAL

Posters can be mounted from 8:30 AM to 11:00 AM on Wednesday, July 22nd. Note that all posters must be no larger than 150 cm height x 90 cm width. No 'landscape' posters will be accepted. Main Hall. Posters can remain mounted until 01:00 PM on Saturday, July 24th. Any posters remaining after that point will be discarded.

## POSTER VIEWING TIMES

Posters are on display from Wednesday morning until Saturday morning. During the following shifts, exhibitors will be on hand and--during the 2 afternoon shifts--a Mix & Mingle networking reception taking place:

### **Wednesday, July 22<sup>nd</sup>**

11:30 AM – 1:30 PM

4:30 PM – 6:30 PM

### **Thursday, July 23<sup>rd</sup>**

11:30 AM – 1:30 PM

4:30 PM – 6:30 PM

### **Friday, July 24<sup>th</sup>**

11:30 AM – 1:30 PM

## POSTER SESSION KEY

CELL ENGINEERING – PA

CHEMICAL BIOLOGY – PB

ENZYME & PATHWAY ENGINEERING - PC

FOLDING - PD

INTEGRATIVE PROTEIN SCIENCE - PE

INTRINSICALLY DISORDERED PROTEINS – PF

OBSERVING DYNAMICS IN SINGLE CELLS – PG

PROTEIN ALLOSTERY & DYNAMICS - PH

PROTEIN ENGINEERING - PI

PROTEOMICS (PPIS, PTMS) - PJ

SYSTEMS BIOLOGY – PK

**Authors will be presenting posters on the following schedule:**

### **Wednesday, July 22<sup>nd</sup>**

4:30 PM – 5:30 PM

Even/Odd numbered posters P-P - TBD

### **Thursday, July 23<sup>rd</sup>**

4:30 PM – 5:30 PM

Even/Odd numbered posters P-P - TBD



The following outstanding students and early-career investigators received travel assistance to attend the 29th Annual Symposium of The Protein Society from The Finn Wold Travel Awards fund and The Protein Science Young Investigator Travel Grants:

### UNDERGRADUATE STUDENTS

**Devika Channaveerappa**, *Clarkson University*  
**Joana M Dantas**, *Universidade Nova de Lisboa*  
**Tania Raquel Berrocal Gama**, *Universidad Nacional Autónoma de México*  
**Angela Faye Harper**, *Wake Forest University*  
**Shrutee Jakhanwal**, *Max Planck Institute for Biophysical Chemistry, Goettingen*  
**Sandy On**, *University of Southern California*  
**Alexis Noelli Peña**, *Syracuse University*  
**Luis Valencia**, *The University of Texas at Austin*  
**Oscar Villarreal**, *University of Texas at Austin*

### GRADUATE STUDENTS

**Yazan Alhadid**, *University of California Los Angeles*  
**Claudia Alvarez**, *University of Toronto*  
**Pawel Dabrowski-Tumanski**, *University of Warsaw*  
**Käthe Dahlström**, *Åbo Akademi University*  
**Martin Dario Stortz**, *Universidad de Buenos Aires*  
**Carole Anne De Carufel**, *University of Quebec in Montreal*  
**Martina A Cristina Elisa**, *University of Liège*  
**Michael Hinrichsen**, *Yale University*  
**Tatsuya Ikenoue**, *Institute for Protein Research, Osaka University*  
**Alyssa Lokits**, *Vanderbilt University*  
**Iratxe Macias Garcia**, *CIC bioGUNE*  
**Sophie M.C. Gobeil**, *University of Montreal*  
**Pooja Malhotra**, *National Centre for Biological Sciences, Bengaluru, India*  
**Shruti Mittal**, *University of Delhi*  
**Blas Moreno-Beltrán**, *Universidad de Sevilla - CSIC*  
**Arnab Nayek**, *The University of Burdwan*  
**Estella Newcombe**, *University of Melbourne*  
**Bartosz Nizynski**, *Nencki Institute of Experimental Biology*  
**Anisha Maria Perez**, *Rice University*  
**V. V. Hemanth Giri Rao**, *National Centre for Biological Sciences, Bengaluru, India*





**Mariana Schulte-Sasse**, *Universidad Nacional Autónoma de México*

**Austin E. Smith**, *University of North Carolina-Chapel Hill*

**Teresa Vitali**, *Università degli Studi di Milano*

**Marina Warepam**, *University of Delhi*

**Heather Wiebe**, *Simon Fraser University*

### EARLY-CAREER RESEARCHERS

**Dr. Deovrat Begde**, *Dr. Ambedkar College*

**Dr. Sinisa Bjelic**, *Linnaeus University*

**Dr. Savita Bhutoria**, *Yeshiva University*

**Dr. Minttu Virkki de Marothy**, *Stockholm University*

**Dr. Nyssa Drinkwater**, *Monash University*

**Dr. Priscila Ferreira**, *Universidade Federal do Rio de Janeiro*

**Dr. Pedro Alberto Valiente Flores**, *University of Havana*

**Dr. Robert Gahl**, *National Institutes of Health*

**Dr. Olivier Julien**, *University of California San Francisco*

**Dr. Tyler Korman**, *University of California Los Angeles*

**Dr. Brett Kroncke**, *Vanderbilt University School of Medicine*

**Dr. Manasi Mishra**, *Academy of Sciences of Czech Republic, Prague*

**Dr. Peter B. Oparin**, *Russian Academy of Sciences*

**Dr. Sebastian Rämisch**, *Lund University*

**Dr. Christina Schroeder**, *Institute for Molecular Bioscience*

**Dr. Arnaldo Serrano**, *University of Wisconsin-Madison*

**Dr. Gyanesh Sharma**, *Lady Davis Institute, McGill University*

**Dr. Christopher Snow**, *Colorado State University*

**Dr. Anna Vangone**, *Utrecht University*

**Dr. Conny Wing-Heng Yu**, *University College London*

**Dr. Lucie Zemanova**, *Charles University in Prague, Czech Republic*



## MEETING AT A GLANCE

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### WEDNESDAY, JULY 22

#### OPENING PLENARY SESSION & THE 2015 HANS NEURATH AWARD TALK

**08:30 - 09:10 am**

**Auditorium**

- 08:30 am**     **Introduction & welcome from Protein Society President**  
**James Bowie**, *University of California Los Angeles. Los Angeles, CA, United States.*
- 08:35 am**     Presentation of the 2015 Hans Neurath Award\* to **Marina Rodnina**
- 08:40 am**     **The Ribosome in Action: Following Protein Synthesis in Real Time.**  
**Marina Rodnina**, *Max Planck Institute for Biophysical Chemistry. Göttingen, Germany.*  
*\*Sponsored by the Hans Neurath Foundation*
- 09:10 am**     **Morning Meet-Up Coffee Break**

#### CONCURRENT MORNING SYMPOSIA ENZYME & PATHWAY ENGINEERING

**09:40 - 11:30 am**

**Room 6 (room 5 - overflow)**

- 09:40 am**     Intro from Chair: **F. Xavier Gomis-Rüth**, *IBMB-CSIC. Barcelona, Spain.*
- 09:45 am**     **New Recipes for Biocatalysis: Expanding the Cytochrome P450 Reaction Landscape for Non-natural Chemistry.**  
**Eric Brustad**, *University of North Carolina Chapel Hill. Chapel Hill, NC, United States.*
- 10:15 am**     **Assembly Line Biosynthesis of Polyketide Antibiotics.**  
**Chaitan Khosla**, *Stanford University. Stanford, CA, United States.*
- 10:45 am**     **Young Investigator Speaker:**  
**Conformation-Specific Antibodies as Enhancers and Inhibitors of Phosphatase Activity of DEP 1.**  
**Malgorzata Nocola-Lugowska**, *University of Chicago, IL, United States.*
- 11:00 am**     **Novel Strategies for Pathway Engineering In Vivo.**  
**Lynne Regan**, *Yale University. New Haven, CT, United States.*





## CONCURRENT MORNING SYMPOSIA

### PROTEOMICS (PTMs, PPIs)

09:40 am - 11:30 pm

#### Auditorium

- 09:40 am** Intro from Chair: **Francesc Xavier Aviles**, *Universitat Autònoma de Barcelona. Barcelona, Spain.*
- 09:45 am** **Chemical Cross-linking/Mass Spectrometry and the Structural Biology Toolbox.**  
**Ruedi Aebersold**, *Eidgenössische Technische Hochschule Zürich. Zürich, Switzerland.*
- 10:15 am** **Integrative Structural Biology.**  
**Andrej Sali**, *University of California. San Francisco, CA, United States.*
- 10:45 am** **Young Investigator Speaker:**  
**Global Kinetic Analysis of Caspase-2 and Caspase-6 Proteolysis in Cellular Extract Reveals Target Specificity Beyond the Substrate Primary Sequence.**  
**Olivier Julien**, *University of California. San Francisco, CA, United States.*
- 11:00 am** **Lipid-protein Networks.**  
**Anne-Claude Gavin-Perrin**, *European Molecular Biology Laboratory. Heidelberg, Germany.*

#### LUNCH

Poster Displays and Exhibits Open – Exhibit Hall

11:30 - 01:30 pm

Workshop: Career Panel

Noon - 01:00 pm

Room 3

Undergraduate Student Research Session

Noon - 01:00 pm

Room 8

Enabling high resolution protein interaction analysis with PEAQ-ITC.

Presented by: **Dr. Natalia Markova**

Noon - 01:00 pm

Room 4



**CONCURRENT AFTERNOON SYMPOSIA**  
**CELL ENGINEERING**  
**01:30 - 04:30 pm**  
**Room 6 (room 5 - overflow)**

- 01:30 pm** Intro from Chair: **Bryan Berger**, *Lehigh University. Bethlehem, PA, United States.*
- 01:35 pm** **Reconstitution of an Intercellular Symmetry Breaking Mechanism Driven by Delta-Notch Signaling.**  
**Miki Ebisuya**, *RIKEN Quantitative Biology Center. Kobe, Japan.*
- 02:05 pm** Young Investigator Speaker:  
**Antigenic Characterization of the HCMV gH/gL/gO and Pentamer Cell Entry Complexes Reveals Binding Sites for Potently Neutralizing Human Antibodies.**  
**Claudio Ciferri**, *Genentech. San Francisco, CA, United States.*
- 02:20 pm** **Engineering Light-Activatable Proteins for Controlling Cell Signaling Pathways.**  
**Brian Kuhlman**, *University of North Carolina. Chapel Hill, NC, United States.*
- 02:50 pm** 25-min Coffee Break
- 03:15 pm** **Phasing and Dephasing Cell Morphogenesis.**  
**Stephen Michnick**, *University of Montreal. Montreal, QC, Canada.*
- 03:45 pm** Young Investigator Speaker:  
**Development and Use of a Molecular Purge Valve to Maintain Reduction/Oxidation Balance in Synthetic Biochemistry Systems.**  
**Taylor Korman**, *University of California. Los Angeles, CA, United States.*
- 04:00 pm** **Engineering Cell-cell Interactions.**  
**Zev Gartner**, *University of California. San Francisco, CA, United States.*

## CONCURRENT AFTERNOON SYMPOSIA

### PROTEIN ENGINEERING

01:30 - 04:30 pm

Auditorium

**01:30 pm** Intro from Chair: **Beatriz Ibarra-Molero**, *Universidad de Granada. Granada, Spain.*

**01:35 pm** **Engineering the Specificity and Delivery of Genome-Editing Proteins.**

**David Liu**, *Harvard University/HHMI. Cambridge, MA, United States.*

**02:05 pm** Young Investigator Speaker

**Parametric Design of Alpha-helical Barrels and Pore-like Assemblies with Very High Thermodynamic Stabilities.**

**Gustav Oberdorfer**, *University of Washington. Seattle, WA, United States.*

**02:20 pm** **Ribonuclease A: From kcat/KM to the Clinic**

**Ronald Raines**, *University of Wisconsin. Madison, WI, United States.*

**02:50 pm** 25-min Coffee Break

**03:15 pm** **Engineering Protein-Protein Interaction for Tunable Assembly and Release of Molecular Cargos from Protein Cages.**

**Sierin Lim**, *Nanyang Technological University. Singapore, Republic of Singapore.*

**03:45 pm** *Protein Science Best Paper Speaker:*

**Folding of Aquaporin 1: How Marginally Hydrophobic Transmembrane Helices Can Shape Membrane Protein Folding**

**Minttu Virkki**, *Stockholm University. Stockholm, Sweden.*

**04:00 pm** **Modifying Biological Function Using Conformational Trapping by Customized Synthetic Antibodies.**

**Anthony Kossiakoff**, *University of Chicago. Chicago, IL, United States.*

**Poster Displays, Exhibits Open**

**04:30 - 06:30 pm**

**Mix & Mingle Reception**

**05:30 pm**

**Happy Hour in Honor of the 2015 Young Investigator Speakers**

**09:00 - 11:00 pm**

## THURSDAY, JULY 23

### New Member Welcome Breakfast / Members Business Meeting

07:00 - 08:30 am

### CONCURRENT MORNING SYMPOSIA

#### CHEMICAL BIOLOGY

08:30 - 11:30 am

Room 6 (room 5 - overflow)

- 08:30 pm** Intro from Chair: **Francisco Blanco**, *CIC bioGUNE. Elexalde Derio, Spain.*
- 08:35 am** **Probing Dynamic Protein Lipidation: From Chemical Proteomics to Drug Discovery.**  
**Edward Tate**, *Imperial College. London, United Kingdom.*
- 09:05 am** Young Investigator Speaker:  
**Ubiquitin-Nanoparticle Interactions by Solution NMR Spectroscopy.**  
**Serena Zanzoni**, *University of Verona. Verona, Italy.*
- 09:20 am** **Protein Methyltransferase Inhibitors as Personalized Cancer Therapeutics.**  
**Robert Copeland**, *Epizyme, Inc. Cambridge, MA, United States.*
- 09:50 am** 25-min Coffee Break
- 10:15 am** **Dynamic Regulation of Metabolic Enzymes and Pathways by O-Glycosylation.**  
**Linda Hsieh-Wilson**, *California Institute of Technology/HHMI. Pasadena, CA, United States.*
- 10:45 am** Young Investigator Speaker:  
**Semi-Chemical Synthesis and Characterization of a Small Heat Shock Protein Bearing a Nonenzymatic Posttranslational Modification Found In Vivo.**  
**Maria Matveenko**, *University of Vienna. Vienna, Austria.*
- 11:00 am** **Peptides and Molecular Recognition at Protein Surfaces.**  
**Ernest Giralt**, *Institut de Recerca Biomèdica. Barcelona, Spain.*

**CONCURRENT MORNING SYMPOSIA**  
**FOLDING**  
**08:30 - 11:30 am**  
**Auditorium**

**08:30 pm** Intro from Chair: **Irene Díaz-Moreno**, *Universidad de Sevilla CSIC. Sevilla, Spain.*

**08:35 am** **Structural Observations of Protein Folding on the Ribosome.**  
**John Christodoulou**, *University College London & Wellcome Trust. London, United Kingdom.*

Young Investigator Speaker:

**09:05 am** **In Vitro Folding Mechanisms Determine the Forces Applied During Co-translational Folding.**  
**Adrian Nickson**, *University of Cambridge. Cambridge, United Kingdom.*

**09:20 am** **Folding to the Rhythm of Translation Rate.**  
**Patricia Clark**, *University of Notre Dame. Notre Dame, IN, United States.*

**09:50 am** 25-min Coffee Break

**10:15 am** **The unfolded N- and C-termini of Tap63a regulate p63's transcriptional activity by locking the protein in an inhibited, dimeric conformation**  
**Volker Dötsch**, *Johann Wolfgang Goethe Universität. Frankfurt am Main, Germany.*

Young Investigator Speaker:

**10:45 am** **Single-molecule Vectorial Folding and Unfolding Through Membrane Pores.**  
**David Rodriguez-Larrea**, *University of the Basque Country. Leioa, Spain.*

**11:00 am** **Structural Insight into the Biogenesis of Beta-Barrel Membrane Proteins.**  
**Susan Buchanan**, *NIDDK, National Institutes of Health. Bethesda, MD, United States.*

**LUNCH**  
**Poster Displays & Exhibits open – Exhibit Hall**  
**11:30 - 01:30 pm**

**Mentoring Committee Workshop: How to Write an Effective Paper.**  
**Noon - 01:00 pm**  
**Room 3**

**Educator's Luncheon - Using Primary Literature in the Classroom  
to Teach Foundational Concepts of Protein Science**

**Noon - 01:00 pm**

**Room 8**

**Molar Mass, Size, Charge and Interactions: the Light Scattering Toolkit for Essential  
Biophysical Characterization and Quality Control.**

Presented by: **Dr. Dan Some.**

**Noon - 01:00 pm**

**Room 4**



**CONCURRENT AFTERNOON SYMPOSIA  
PROTEIN ALLOSTERY & DYNAMICS**

**01:30 - 04:30 pm**

**Auditorium**

- 01:30 pm** Intro from Chair: **Modesto Orozco**, *IRB Barcelona. Barcelona, Spain.*
- 01:35 pm** **Deciphering the 'Ubiquitin Code': Conformations and Molecular Recognition of Polyubiquitin Signals.**  
**David Fushman**, *University of Maryland. College Park, MD, United States.*
- 02:05 pm** Young Investigator Speaker:  
**The Role of the Mg(II) Ion on Integrin-collagen Interactions: Regulating Affinity Through Conformational Fluctuations.**  
**Anna Monica Nunes**, *Rutgers University. Newark, NJ, United States.*
- 02:20 pm** **Multifaceted BAR-domain Proteins to Shape Cell Membranes.**  
**Patricia Bassereau**, *Institut Curie Centre de Recherche. Paris, France.*
- 02:50 pm** 25-min Coffee Break
- 03:15 pm** **Mapping Allosteric Sites Across the Apoptotic Caspases.**  
**Jeanne Hardy**, *University of Massachusetts. Amherst, MA, United States.*
- 03:45 pm** Protein Science Best Paper Speaker:  
**Crystal Structure of the Campylobacter Jejuni CmeC Outer Membrane Channel.**  
**Chih-Chia (Jack) Su**, *Iowa State University. Ames, IA, United States.*
- 04:00 pm** **Allosteric Inhibition of FGF-FGFR-Complex by Small Molecules.**  
**Harald Schwalbe**, *Johann Wolfgang Goethe Universität. Frankfurt am Main, Germany.*



**CONCURRENT AFTERNOON SYMPOSIA  
ENGINEERING & INTERPRETING THE GENOME**

**01:30 - 04:30 pm**

**Room 6 (room 5 - overflow)**

- 01:30 pm** Intro from Chair: **Maria Solà Vilarrubias**, *IBMB. Barcelona, Spain.*
- 01:35 pm** **Structural Basis for RNA-dependent DNA Cleavage and PAM Recognition by CRISPR-Cas9.**  
**Osamu Nureki**, *University of Tokyo. Fukuoka, Japan.*
- Young Investigator Speaker:
- 02:05 pm** **Creating Large Covalently Circularized Nanodiscs and Their Application in Studying Viral Entry and Genome Translocation.**  
**Mahmoud Nasr**, *Harvard Medical School. Boston, MA, United States.*
- 02:20 pm** **CRISPR Tools for Genome Engineering and Cell Reprogramming.**  
**Stanley Qi**, *University of California. San Francisco, CA, United States.*
- 02:50 pm** 25-min Coffee Break
- 03:15 pm** **Defining, Improving, and Altering the Specificities of CRISPR-Cas9 Nucleases.**  
**Keith Joung**, *Massachusetts General Hospital. Charlestown, MA, United States.*
- Young Investigator Speaker:
- 03:45 pm** **Prion-like Proteins Sequester and Suppress the Toxicity of Huntingtin Exon 1.**  
**Can Kayatekin**, *Whitehead Institute. Cambridge, MA, United States.*
- 04:00 pm** **How Nature Evolves New Enzyme Functions.**  
**Patricia Babbitt**, *University of California, San Francisco, CA, United States.*

**Poster Displays, Exhibits Open**

**04:30 - 06:30 pm**

**Mix & Mingle Reception**

**05:30 pm**

## FRIDAY, JULY 24

### CONCURRENT MORNING SYMPOSIA INTRINSICALLY DISORDERED PROTEINS

08:30 - 11:30 am

Auditorium

- 08:30 pm** Intro from Chair: **Xavier Salvatella**, *IRB Barcelona. Barcelona, Spain.*
- 08:35 am** **Fuzzy Interactions and Context Dependence of Proteins.**  
**Monika Fuxreiter**, *Debreceni Egyetem. Debrecen, Hungary.*
- Young Investigator Speaker:
- 09:05 am** **Structuring Disorder: the Case of the Intrinsically Disordered Unique Domain of c-Src.**  
**Mariano Maffei**, *University of Barcelona. Barcelona, Spain.*
- 09:20 am** **Single-Molecule Spectroscopy of Intrinsically Disordered Proteins.**  
**Ben Schuler**, *Universität Zürich. Zürich, Switzerland.*
- 09:50 am** 25-min Coffee Break
- 10:15 am** **Identifying Order in Intrinsically Disordered Proteins.**  
**Robert Konrat**, *University of Vienna. Vienna, Austria.*
- Young Investigator Speaker:
- 10:45 am** **Intrinsically Disordered Proteins Drive Heritable Transformations of Biological Traits.**  
**Daniel Jarosz**, *Stanford University. Stanford, CA, United States.*
- 11:00 am** **The Role of Protein Disorder and Self-Association in the Formation of Cellular Bodies.**  
**Tanja Mittag**, *St. Jude Children's Research Hospital. Memphis, TN, United States.*

### CONCURRENT MORNING SYMPOSIA OBSERVING DYNAMICS IN SINGLE CELLS

08:30 - 11:30 am

Room 6 (room 5 - overflow)

- 08:30 pm** Intro from Chair: **Eva Nogales**, *University of California, Berkeley/HHMI. Berkeley, CA, United States.*
- 08:35 am** **A Single Cell Systems Based View of Immunity and Cancer.**  
**Garry Nolan**, *Stanford School of Medicine. Palo Alto, CA, United States.*

Young Investigator Speaker

- 09:05 am** **In Situ Membrane Protein Structure and Function Analysis using Site-Specific Unnatural Amino Acid Incorporation and Spectroscopy Methods.**  
**Changlin Tian**, *University of Science and Technology of China. Hefei, China.*
- 09:20 am** **ORACLs: Optimized Reporter cell lines for Annotating Compound Libraries Across Diverse Drug Classes Via Imaged Based Phenotypic Screens.**  
**Lani Wu**, *University of Texas, Southwestern Medical Center. Dallas, TX, United States.*
- 09:50 am** 25-min Coffee Break
- 10:15 am** **Does Engineering Functional Enzymes Require Preserving Protein Dynamics?**  
**Joelle Pelletier**, *University of Montreal. Montreal, QC, Canada.*
- Young Investigator Speaker:
- 10:45 am** **Live-cell Measurements of the Conformational Rearrangements in Bax at the Initiation of Apoptosis.**  
**Robert Gahi**, *The National Institutes of Health. Bethesda, MD, United States.*
- 11:00 am** **Imaging the Genome in Living Cells.**  
**Bo Huang**, *University of California. San Francisco, CA, United States.*

**Lunch - Poster Displays and Exhibits Open – Exhibit Hall**

**11:30 - 01:30 pm**

**Mentoring Committee Workshop: How to Give a Great Talk**

**12:00 - 01:00 pm**

**Room 3**

**PLENARY AWARDS SESSION**

**01:30 - 06:00 pm**

**Auditorium**

- 01:30 pm** Intro from Chair: **James Bowie**, *Protein Society President, University of California Los Angeles. Los Angeles, CA, United States*
- 01:35 pm** Presenting The Hans Neurath Outstanding Promise Awards\*
- 01:50 pm** **Claudio Ciferri**, *Genentech* - Presenting the Dorothy Crowfoot Hodgkin Award\*\* to **Eva Nogales**
- 01:55 pm** **Visualizing Molecular Complexity by cryo-EM to Understand Biological Function.**  
**Eva Nogales**, *University of California Berkeley/HHMI. Berkeley, CA, United States.*

- 02:25 pm** Presentation of the *Protein Science* Young Investigator Award to **Nieng Yan**
- 02:30 pm** **Structural and Mechanistic Investigation of Glucose Transporters.**  
**Nieng Yan**, *Tsinghua University/HHMI. Beijing, China.*
- 03:00 pm** Presenting The Emil T. Kaiser Award to **Anna Mapp**
- 03:05 pm** **Anna Mapp**, *University of Michigan. Ann Arbor, MI, United States.*
- 03:35 pm** 30-min Coffee Break-Exhibition and Poster Area
- 04:05 pm** Presenting the Christian B. Anfinsen Award to **Sachdev Sidhu**
- 04:10 pm** **Synthetic Proteins in the Real World.**  
**Sachdev Sidhu**, *University of Toronto. Toronto, ON, Canada.*
- 04:40 pm** Presenting The Carl Brändén Award\*\*\* to **C. Robert Matthews**
- 04:45 pm** **Superoxide Dismutase: From Folding and Stability to Potential Therapeutics for ALS**  
**C. Robert Matthews**, *University of Massachusetts Medical School. Worcester, MA, USA.*
- 05:15 pm** Acknowledgement of the 2015 Neurath Award and Stein & Moore Award recipients
- 05:20 pm** Presentation of the *Protein Science* Best Paper Awards
- 05:30 pm** Presentation of the Protein Society Service Awards
- 05:40 pm** Presentation of the Best Poster Competition Prizes
- \*Sponsored by the Hans Neurath Foundation*  
*\*\*Sponsored by Genentech*  
*\*\*\*Sponsored by Rigaku*
- 07:00 pm** **2015 Members Reception (Catalonia Plaza Hotel)**

## SATURDAY, JULY 25

### CONCURRENT MORNING SYMPOSIA

#### SYSTEMS BIOLOGY

08:30 - 10:20 am

Auditorium

- 08:30 am** Intro from Chair: **Luis Serrano**, *Centre for Genomic Regulation / ICREA. Barcelona, Spain.*
- 08:35 am** **Disease-associated Mutations and Coding Variation in Human Transcription Factors.**  
**Martha Bulyk**, *Brigham & Women's Hospital and Harvard Medical School. Boston, MA, United States.*
- 09:05 am** **Dynamic Heterogeneity in the ERK and AMPK Networks and its Role in Human Disease.**  
**John Albeck**, *University of California. Davis, CA, United States.*
- Young Investigator Speaker:  
**09:35 am** **Proof of Principle for Epitope-focused Vaccine Design.**  
**Bruno Correa**, *École Polytechnique Fédérale de Lausanne. Lausanne, Switzerland.*
- 09:50 am** **Yeast Proteome Dynamics from Single Cell Imaging and Automated Analysis.**  
**Brenda Andrews**, *University of Toronto. Toronto, ON, Canada.*

### CONCURRENT MORNING SYMPOSIA

#### INTEGRATIVE PROTEIN SCIENCE

08:30 - 10:20 am

Room 6 (room 5 - overflow)

- 08:30 am** Intro from Chair: **Miguel Ángel de la Rosa**, *University of Sevilla. Sevilla. Spain.*
- 08:35 am** Lorne Conference on Protein Structure and Function Guest Speaker  
**Targeting the Plasmodium Falciparum Neutral Aminopeptidases for Development of Novel Antimalarial Agents.**  
**Sheena McGowan**, *Monash University. Clayton, VIC, Australia.*  
*Sponsored by the Lorne Conference on Protein Structure and Function.*
- 09:05 am** **NMR Analysis of Protein Structure and Dynamics with Computational and Information Sciences.**  
**Takanori Kigawa**, *RIKEN Quantitative Biology Center. Yokohama, Japan.*

Young Investigator Speaker:

09:35

**Experimental and Computational Studies of the Effects of Highly Concentrated Solutes on Proteins: Insights Into the Causes and Consequences of Quinary Protein Structure and Cytoplasmic Organization.**

**Luciano Abriata**, *École Polytechnique Fédérale de Lausanne. Lausanne, Switzerland.*

Latin American Protein Society Guest Speaker:

09:50

**Debora Foguel**, *Universidade de Federal do Rio de Janeiro. Rio de Janeiro, Brazil.*  
*Sponsored by the Latin American Protein Society.*

**Coffee Break**

**10:20 - 10:50 am**

**CLOSING PLENARY SESSION & THE 2015 STEIN & MOORE AWARD TALK**

**10:50 am**

**Auditorium**

10:50 am

Intro from Chair: **James Bowie**, *Protein Society President, University of California Los Angeles. Los Angeles, CA, United States*

10:55 pm

**De Novo Protein Design.**

**William F. DeGrado**, *University of California. San Francisco, CA, United States.*



## PROGRAM PLANNING COMMITTEE

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### **James Wells (Chair)**

*Professor & Chair, Dept of Pharmaceutical Chemistry University of California San Francisco*

James A. Wells, PhD, focuses on development of enabling technologies for engineering proteins and for identifying small molecules to aid in drug discovery for challenging targets such as allosteric regulation and protein-protein interactions.

He is interested in the discovery and design of small molecules and enzymes that trigger or modulate cellular processes in inflammation and cancer. Using small molecules and engineered proteins, the Wells lab is studying how activation of particular signaling nodes involving protease, kinases, or ubiquitin ligases drives cell biology. The lab has focused much on a set of proteases, known as caspases, responsible for fate determining cellular decisions involved in apoptosis and innate inflammation among others. These enzymes act as cellular remodelers and help us understand the essential protein struts that support life. These targets also provide leads for developing new cancer therapeutics and biomarkers for cancer treatment.

Wells is a professor and chair of the Department of Pharmaceutical Chemistry in the UCSF School of Pharmacy. He holds a combined appointment as professor in the Department of Cellular & Molecular Pharmacology in the School of Medicine. He joined UCSF in 2005 as holder of the Harry Wm. and Diana V. Hind Distinguished Professorship in Pharmaceutical Sciences. Wells also founded and directs the Small Molecule Discovery Center (SMDC) located at UCSF's Mission Bay campus. He earned a PhD degree in biochemistry from Washington State University with Professor Ralph Yount in 1979 and completed postdoctoral work at Stanford University School of Medicine with Professor George Stark in 1982. Before joining UCSF, Wells was a founding scientist in Genentech's Protein Engineering Department and in 1998 co-founded Sunesis Pharmaceuticals.

Wells is a recipient of the Hans Neurath Award by the Protein Society, the Pfizer Award and Smissman Award given by the American Chemical Society, the Perlman Lecture Award given by the ACS Biotechnology Division, the du Vigneaud Award given by the American Peptide Society, the Merck Award from the ASBMB and in 1999 a member of the National Academy of Sciences and in 2015 a member of the American Academy of Arts and Sciences.



### **Sarah Teichmann**

*Research Group Leader EMBL-European Bioinformatics Institute & Wellcome Trust Sanger Institute.*

Dr Sarah Teichmann is a research group leader at EMBL-EBI and senior group leader at the Wellcome Trust Sanger Institute. She is also a Principle Research Associate in the Dept Physics/Cavendish Laboratory, and a fellow of Trinity College, Cambridge.

She is a leader in systems biology, which aims to explain how individual molecules within a cell co-operate to produce the cell's overall behaviour. Previously, she was a Programme Leader at the MRC Laboratory of Molecular Biology, from 2001 to 2012. Dr Teichmann gained her PhD in 2000 at the University of Cambridge and MRC Laboratory of Molecular Biology, and was a Beit Memorial Fellow for Biomedical Research, University College London, in 2000/01. Dr Teichmann is an EMBO member and a Fellow of the Academy of Medical Sciences, and has just been awarded the EMBO Gold Medal (2015).



### **Mark Lemmon**

*Professor & Chair, Dept of Biochemistry & Biophysics University of Pennsylvania  
Perelman School of Medicine*

Mark Lemmon is the George W. Raiziss Professor and Chair of Biochemistry and Biophysics at the University of Pennsylvania Perelman School of Medicine, and an Investigator in the Abramson Family Cancer Research Institute.

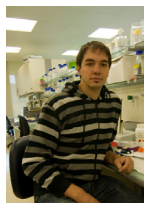
He received his BA (Hons) in Biochemistry from the University of Oxford (Hertford College), England in 1988, and then completed his Ph.D. with Don Engelman in Yale University's Department of Molecular Biophysics and Biochemistry in 1993. During a postdoc with Joseph Schlessinger at New York University Medical Center (Pharmacology) in Manhattan, as a Damon Runyon Fellow, he worked on mechanisms of receptor tyrosine kinase signaling and Pleckstrin Homology domains, among other things. In 1996, Mark took a position as Assistant Professor in the Department of Biochemistry and Biophysics (and Johnson Foundation) at the University of Pennsylvania Perelman School of Medicine in Philadelphia. At Penn, Mark's laboratory has focused on mechanistic and structural aspects of signaling by growth factor receptors (especially the EGF receptor) and through phosphoinositides. He was promoted to Associate Professor in 2001, to full Professor in 2004, and was appointed Chair of Biochemistry and Biophysics at Penn in 2010. He serves on the Editorial Boards of Cell and Molecular Cell, as well as being a Deputy Chair (and Vice Chair for the Americas) for the Biochemical Journal. Mark received the Protein Society's 2012 Dorothy Crowfoot Hodgkin Award. In 2015, he will move to Yale University as Sackler Professor of Cancer Biology and co-director of the new Cancer Biology Institute.



### **Miquel Pons**

*Professor, Dept of Organic Chemistry University of Barcelona*

Miquel Pons studied simultaneously biology and chemistry at the University of Barcelona. Obtained his PhD at the University of London under the supervision of Prof. Dennis Chapman. He is full professor and the scientific director of the Large Scale NMR facility at the University of Barcelona. He is interested in dynamics proteins, including intrinsically disordered proteins, supramolecular systems, lipid-protein interactions and NMR methodology.



### **Oscar Millet**

*Structural Biology Unit CIC BioGUNE*

Degree in Chemistry (Univ. Ramon Llull, 1994) and Chemical Engineering (IQS, 1995). Ph D in Organic Chemistry (University of Barcelona, 1999) and post-doctoral fellow the group of Lewis Kay (University of Toronto, 2000-2004). Ramon y Cajal fellow at the Parc Científic de Barcelona (2004-2006), currently group leader at the Structural Biology Unit of the CIC bioGUNE.

My research line focuses on the use of nuclear magnetic resonance (NMR) to the study of biologically relevant proteins and enzymes, paying special attention to the delicate balance existing between protein stability and dynamics. Prize of the Real Sociedad Española de Química (2004) and the Spanish NMR group prize (2005).





### **Gary Pielak**

*Distinguished Term Professor of Chemistry, University of North Carolina, Chapel Hill*

Gary J. Pielak earned a B.A. in Chemistry from Bradley University in Peoria, Illinois and a Ph.D. in Biochemistry from Washington State University in Pullman, Washington. He was a postdoctoral fellow in the laboratory of Michael Smith at the University of British Columbia in Vancouver, Canada and in the laboratory of Robert J.P. Williams at the University of Oxford in England.

Gary is Kenan Distinguished Term Professor of Chemistry, Biochemistry and Biophysics at the University of North Carolina-Chapel Hill. His research focuses on understanding protein chemistry in cells and undecrowded conditions in vitro.



## EXHIBITOR WORKSHOPS

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### WORKSHOP - MALVERN

**Wednesday, July 22<sup>nd</sup>. Noon - 01:00pm. Room 4**

#### **ENABLING HIGH RESOLUTION PROTEIN INTERACTION ANALYSIS WITH MICROCAL PEAQ-ITC.**

*Dr. Natalia Markova, Principal Scientist - MicroCal, Malvern Instruments*

Dynamic interactions involving biomolecules drive and regulate all biological processes. Studies of biomolecular interactions are fundamentally important in all areas of life sciences. Data provided by Isothermal Titration Calorimetry (ITC) enables scientists in academia and industry to directly and quantitatively characterize these interactions in solution.

This workshop is aimed at addressing the current bottlenecks in interaction analysis. We will start with a Q&A panel session with calorimetry users and continue with the presentation of the new MicroCal PEAQ-ITC system.

MicroCal PEAQ-ITC, the latest generation of MicroCal ITC instrumentation, offers a whole range of solutions for addressing current pains associated with interaction analysis. Among the most recognized challenges are the needs to adequately address a broad range of binding affinities and to reliably interpret binding data complicated by the presence of inactive protein fraction or inherent uncertainty in the concentration of a ligand.

MicroCal PEAQ-ITC is designed to improve signal stability, mixing, and signal-to-noise characteristics. The improved performance along with an advanced experimental design feature of the easy-to-use all new data analysis software facilitate optimization of experiments for the studies of interactions.

Consistently high performance of MicroCal PEAQ-ITC enables increased confidence and data resolution when measuring low heats at low or uncertain sample concentrations and complex binding modes.

The new MicroCal PEAQ-ITC analysis software allows for automated data analysis, minimizing analysis time and user subjectivity in assessing data quality. Data quality is determined and advanced fitting performed in a few seconds per experiment allowing for analysis of large data sets of 50 or more experiments in a matter of seconds.

Come, join us for lunch and find out more!

### WORKSHOP - WYATT

**Thursday, July 23<sup>rd</sup>. Noon - 01:00pm. Room 4**

#### **MOLAR MASS, SIZE, CHARGE AND INTERACTIONS: THE LIGHT SCATTERING TOOLKIT FOR ESSENTIAL BIOPHYSICAL CHARACTERIZATION AND QUALITY CONTROL**

*Dr. Dan Some, Principal Scientist & Director of Marketing, Wyatt*

Biophysical characterization and protein quality assessments are central capabilities in any laboratory that seeks qualified, reproducible results in biomolecular or biochemical research. This seminar describes a comprehensive suite of tools based on static and dynamic light scattering that provides biophysical characterization and quality screening from first-principles.

Common uses of the light scattering toolkit include determination of molecular weight and size, native oligomeric or aggregation state, protein-protein binding parameters, and the composition of glycoproteins or other conjugated macromolecules. All measurements are performed entirely in solution and without any form of labeling, offering valuable alternatives to less general methods.



### **AVIV BioMEDICAL, Inc.**

**Booth 29**

750 Vassar Avenue, Suite 2  
Lakewood NJ, 08701 – 6929  
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Fax: +1 732 370 1303  
Email: [flo@avivbiomedical.com](mailto:flo@avivbiomedical.com)  
Web: <http://www.avivbiomedical.com/>

Aviv Biomedical Inc. manufactures scientific and clinical instruments. Products include a fluorescence accessory (AU-FDS) for the Beckman Analytical Ultracentrifuge, model XLA/XLI. Sales, service and support of Aviv Spectrometers, Aviv Spectrophotometers and Aviv Fluorometers.

### **Malvern Instruments**

**Booth 27**

30 Rue Jean Rostand  
91893 Orsay cedex  
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Phone: +33 (0) 169 351 808  
Fax: +33 (0) 160 191 326  
Email: [contact@malvern.com](mailto:contact@malvern.com)  
Web: <http://www.malvern.com>

After buying MicroCal in July 2014, Malvern Instruments launches new PEAQ-ITC in April 2015 and the workshop organized on Wednesday 22th of July will be the first official presentation in Europe. Malvern offers also 4 new devices for characterizing proteins: Viscosizer using the Taylor dispersion to study viscosity and size of proteins and peptides solutions at high concentration, Archimedes to characterize protein aggregates, Helix, combining Raman DLS to identify chemical bonds and study secondary and tertiary structure and finally Nanosight for counting nanoparticles in complex media like serums.

### **Molecular Dimensions**

**Booth 3**

Unit 6, Goodwin Business Park, Willie Snaith Road, Newmarket  
CB8 7SQ Suffolk  
United Kingdom  
Phone: +44 (0) 778 722 9495 or +44 (0) 163 856 1051  
Fax: +44 (0) 163 866 0674  
Email: [Jessica@moleculardimensions.com](mailto:Jessica@moleculardimensions.com)  
Web: [www.moleculardimensions.com](http://www.moleculardimensions.com)

At Molecular Dimensions, our love for all things crystallography drives who we are and what we do, every hour of every day. Our vision is to simply provide all our customers with the best products and intelligent solutions out there for crystallography.

### **NanoTemper Technologies GmbH**

**Booth 26**

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81369 Munich  
Germany  
Phone: +49 176 110 366 00  
Email: Francois.ogi@nanotemper.de  
Web: www.nanotemper.de

NanoTemper Technologies stands for strong commitment to quality and high precision instrumentation made in Germany.

The deeply experienced and globally operating team of experts strongly focuses on the user's benefits by ensuring maximum efficiency for research in Pharmaceutical, Biotech industries and academic basic research setting.

NanoTemper Technologies - the PLUS for your research!

### **Occhio Biotech**

**Booth 20**

4 rue des Chasseurs Ardennais  
4031 Angleur  
Belgium  
Phone: +32 424 300 14  
Fax: +32 424 300 15  
Email: info@occhio.be  
Web: www.occhio-biotech.com

OCCHIO Biotech is manufacturing analyzers for Biotech applications: Protein aggregates counting, vaccines checking, stability analyzer, Pharmascan (Vaccines control in production), FC200S-IPAC (Imaging protein aggregates counting), particle size, particle morphology, particle counting

### **PhyNexus**

**Booth 16**

3670 Charter Park Drive, Suite A  
San Jose, CA 95136  
United States  
Phone: +1 408 267 7214  
Fax: +1 408 267 7346  
Email: chuynh@phynexus.com  
Web: www.phynexus.com

PhyNexus applies analytical principles to biological problems. The PhyNexus team offers validated, accurate, and rugged sample preparation technology. The technology can be scaled as needed.

### **Reichert Technologies - Life Sciences**

**Booth 17**

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United States  
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Fax: +1 716 686 4554  
Email: [reichertspr.lifesciences@ametek.com](mailto:reichertspr.lifesciences@ametek.com)  
Web: [www.reichertspr.com](http://www.reichertspr.com)

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### **Sigma-Aldrich International GmbH**

**Booth 14**

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9000 St. Gallen  
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Email: [ukorders@sial.com](mailto:ukorders@sial.com)  
Web: [www.sigmaaldrich.com](http://www.sigmaaldrich.com)

Sigma-Aldrich, a leading Life Science and High Technology company focused on enhancing human health and safety, manufactures and distributes more than 230,000 chemicals, biochemicals and other essential products to more than 1.4 million customers globally in research and applied labs as well as in industrial and commercial markets. With three distinct business units – Research, Applied and SAFC Commercial – Sigma-Aldrich is committed to enabling science to improve the quality of life. The Company operates in 37 countries, has more than 9,000 employees worldwide and had sales of \$2.7 billion in 2013.

### **St. Jude Children's Research Hospital**

**Booth 28**

262 Danny Thomas Place  
Memphis, TN 38105,  
United States  
Phone: +1 901 595 2750  
Fax: +1 901 595 5376  
Email: [postdoc@stjude.org](mailto:postdoc@stjude.org)  
Web: [www.stjude.org/postdoc](http://www.stjude.org/postdoc)

St. Jude is a non-profit biomedical research institution in Memphis, Tennessee where researchers study the molecular basis of both normal and diseased cellular processes. Over 100 faculty investigators perform basic research in close association with 90 clinical faculty, creating an excellent environment for translational research. Visit our booth to discuss postdoctoral fellowship opportunities.

## **TA Instruments**

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United States  
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Fax: +1 302 427 4001  
Email: [info@tainstruments.com](mailto:info@tainstruments.com)  
Web: [www.tainstruments.com](http://www.tainstruments.com)

**Booth 30**

TA Instruments is the world leader in protein characterization by microcalorimetry. Our Nano ITC and Nano DSC with Autosampler are powerful tools for label-free measurements of protein interactions, drug-target binding, and biomolecular structure and stability. Visit to see the latest in ITC: complete automation with enhanced mixing and injection technology.

## **The Protein Society**

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United States  
Phone: +1 443 543 5450  
Fax: +1 443 543 5453  
Email: [staff@proteinsociety.org](mailto:staff@proteinsociety.org)  
Web: [www.proteinsociety.org](http://www.proteinsociety.org)

**Booth 1**

## **Wiley**

The Atrium  
PO19 8SQ Chichester  
United Kingdom  
Phone: +44 (0) 124 377 9777  
Fax: +44 (0) 124 377 5878  
Email: [customer@wiley.com](mailto:customer@wiley.com)  
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**Booth 2**

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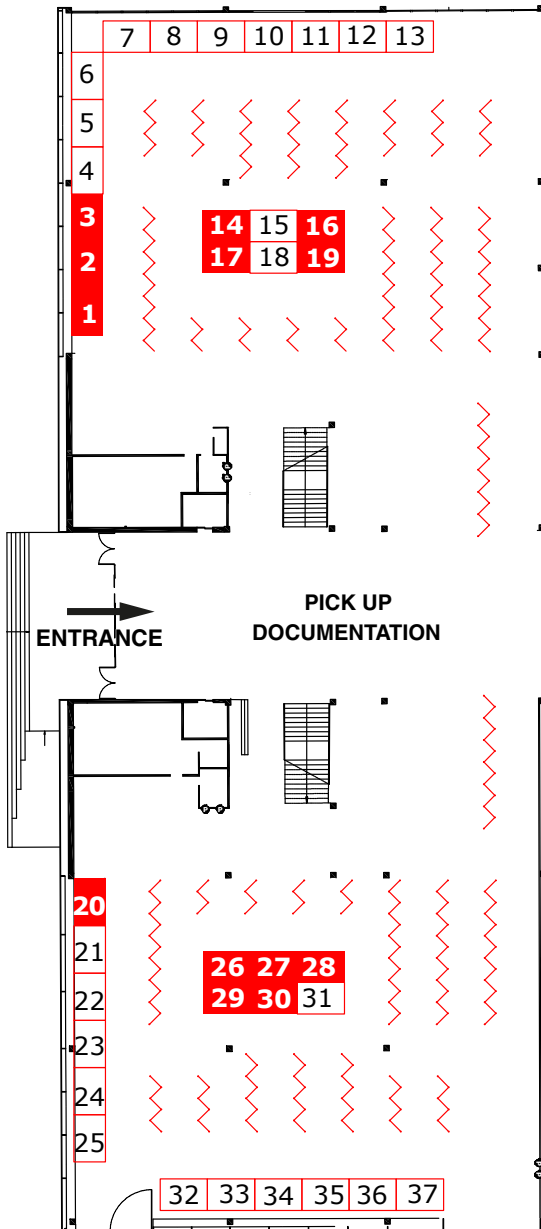
6300 Hollister Avenue  
Santa Barbara, CA 93117  
United States  
Phone: +1 805 681 9009  
Fax: +1 805 681 0123  
Email: [info@wyatt.com](mailto:info@wyatt.com)  
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**Booth 19**

Wyatt Technology is the recognized leader in instrumentation for determining the absolute molar mass, size, charge and interactions of macromolecules and nanoparticles in solution. These tools include: in-line multi-angle static light scattering, high-throughput dynamic light scattering, differential refractometry, electrophoretic mobility, differential viscosity, field flow fractionation and automated composition gradient.



## EXHIBITION FLOOR PLAN





## EXHIBITORS

### Booth 1:



### Booth 2:



### Booth 3:



### Booth 14:



### Booth 16:



### Booth 17:



### Booth 19:



### Booth 20:



### Booth 26:



### Booth 27:



### Booth 28:



### Booth 29:



### Booth 30:





**Barceló**  
CONGRESOS

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