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GORDON RESEARCH CONFERENCES *frontiers of science*
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Nancy Ryan Gray, Ph.D.
Director

**2010 GORDON RESEARCH CONFERENCE
on DIFFRACTION METHODS IN STRUCTURAL BIOLOGY**

FINAL PROGRESS REPORT

DEPARTMENT OF ENERGY
GRANT NO. DE-SC0004504

The Gordon Research Conference on DIFFRACTION METHODS IN STRUCTURAL BIOLOGY was held at Bates College, Lewiston, ME July 18-23, 2010. The Conference was well-attended with 128 participants (attendees list attached). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both U.S. and foreign scientists, senior researchers, young investigators, and students. Of the 128 attendees, 57 voluntarily responded to a general inquiry regarding ethnicity which appears on our registration forms. Of the 57 respondents, 22% were Minorities – 4% Hispanic, 16% Asian, and 2% African American. Approximately 20% of the participants at the 2010 meeting were women.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. Attached is a copy of the formal schedule and speaker program and the poster program. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field.

Thank you for your support of this Conference. As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings. If you wish any further details, please feel free to contact me. Thank you.

Sincerely,
Andrew Lewis, Conference Chairperson
MRC LABORATORY OF MOLECULAR BIOLOGY

DIFFRACTION METHODS IN STRUCTURAL BIOLOGY

July 18-23, 2010
Bates College
Lewiston, ME

Chair:
Andrew Lewis

Vice Chair:
Ana Gonzales

Advances in basic methodologies have played a major role in the dramatic progress in macromolecular crystallography over the past decade, both in terms of overall productivity and in the increasing complexity of the systems being successfully tackled.

The 2010 Gordon Research Conference on Diffraction Methods in Structural Biology will, as in the past, focus on the most recent developments in methodology, covering all aspects of the process from crystallization to model building and refinement, complemented by examples of structural highlights and complementary methods. Extensive discussion will be encouraged and it is hoped that all attendees will participate by giving oral or poster presentations, the latter using the excellent poster display area available at Bates College.

The relatively small size and informal atmosphere of the meeting provides an excellent opportunity for all participants, especially younger scientists, to meet and exchange ideas with leading methods developers.

Contributors





SUNDAY

- 2:00 pm - 9:00 pm Arrival and Check-in (Office Closed 6:00 pm - 7:00 pm)
- 6:00 pm Dinner
- 7:30 pm - 7:35 pm Welcome / Introductory Comments by GRC Site Staff
- 7:35 pm - 9:30 pm **MACROMOLECULAR STRUCTURES: PUSHING THE BOUNDARIES**
- 7:35 pm - 7:40 pm Discussion Leader: **Michael Rossmann** (Purdue University, USA)
- 7:40 pm - 8:25 pm **Doug Rees** (Caltech/HHMI, USA)
"Adventures in membrane protein crystallography"
- 8:25 pm - 8:35 pm Discussion
- 8:35 pm - 9:20 pm **Kiyoshi Nagai** (MRC -LMB, Cambridge, England)
"Architecture of the spliceosomal snRNPs: Interpreting a low resolution map using heavy atom markers"
- 9:20 pm - 9:30 pm Discussion

MONDAY

- 7:30 am - 8:30 am Breakfast
- 9:00 am - 12:30 pm **CRYSTALLISATION AND THE DIFFRACTION EXPERIMENT**
- 9:00 am - 9:05 am Discussion Leader: **Bob Sweet** (Brookhaven National Laboratory, USA)
- 9:05 am - 9:40 am **Seth Harris** (Genentech, San Francisco, USA)
"Acoustic Liquid Transfer: Applications in small volume crystallization"
- 9:40 am - 9:50 am Discussion
- 9:50 am - 10:15am Coffee Break / Group Photo
- 10:15 am - 10:50 am **Todd Yeates** (University of California at Los Angeles, USA)
"Identifying and overcoming lattice translocation disorders"
- 10:50 am - 11:00 am Discussion
- 11:00 am - 11:35 am **James Holton** (University of California at San Francisco / Lawrence Berkeley National Laboratory, USA)
"MLFSOM: simulating the diffraction experiment from first principles"
- 11:35 am - 11:45 am Discussion
- 11:45 am - 12:20 pm **Gwyndaf Evans** (Diamond Light Source, UK)
"Microcrystallography: Choosing your weapon"
- 12:20 pm - 12:30 pm Discussion

12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session
6:00 pm	Dinner
7:30 pm - 9:30 pm	RADIATION DAMAGE AND DATA COLLECTION STRATEGIES
7:30 pm - 7:35 pm	Discussion Leader: Vivian Stojanoff (Brookhaven National Laboratory, USA)
7:35 pm - 8:05 pm	Martin Weik (Institut de Biologie Structurale, Grenoble, France) "Radiation damage in MX: what's new?"
8:05 pm - 8:15 pm	Discussion
8:15 pm - 8:45 pm	Y. Zou Finfrock (Physics department, University of Washington, USA) "Spatial dependence and mitigation of MX radiation damage by focusing"
8:45 pm - 8:55 pm	Discussion
8:55 pm - 9:25 pm	Marcus Mueller (Swiss Light Source, Paul Scherer Institut, Switzerland) "Data collection strategies for single photon counting pixel detectors"
9:25 pm - 9:30 pm	Discussion

TUESDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	SYNCHROTRON DEVELOPMENTS AND AUTOMATED DATA PROCESSING
9:00 am - 9:05 am	Discussion Leader: Thomas Schneider (EMBL Hamburg, Germany)
9:05 am - 9:40 am	Sean McSweeney (ESRF, Grenoble, France) "Advanced sample evaluation and experiment planning"
9:40 am - 9:50 am	Discussion
9:50 am - 10:25 am	Janet Smith (University of Michigan / GM/CA CAT, USA) "Small and smaller beams for ordinary and extraordinary experiments at GM/CA CAT"
10:25 am - 10:35 am	Discussion
10:35 am - 11:00 am	Coffee Break
11:00 am - 11:35 am	Graeme Winter (Diamond Light Source, UK) "Automated data reduction: Xia2 and Chef"
11:35 am - 11:45 am	Discussion
11:45 am - 12:20 pm	Clemens Vornhein (Global Phasing Ltd, UK) "Automated (and non-automated) data processing with autoPROC"
12:20 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time

4:00 pm - 6:00 pm	Poster Session
6:00 pm	Dinner
7:30 pm - 9:30 pm	COMPLEMENTARY TECHNIQUES
7:30 pm - 7:35 pm	Discussion Leader: Ana Gonzalez (Stanford Synchrotron Radiation Lightsource, USA)
7:35 pm - 8:05 pm	Sriram Subramaniam (National Cancer Institute, USA) "Visualizing cells and viruses at molecular resolution with 3D electron microscopy: Progress and challenges"
8:05 pm - 8:15 pm	Discussion
8:15 pm - 8:45 pm	Tsutomu Matsui (Stanford Synchrotron Radiation Lightsource, USA) "Recent advances in bio-SAXS: bringing back atomic-resolution structures into life"
8:45 pm - 8:55 pm	Discussion
8:55 pm - 9:25 pm	Carrie Wilmot (University of Minnesota, USA) "Linking single crystal spectroscopy to structure"
9:25 pm - 9:30 pm	Discussion

WEDNESDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	STRUCTURE SOLUTION AND REFINEMENT
9:00 am - 9:05 am	Discussion Leader: Paul Adams (Lawrence Berkeley Laboratory, USA)
9:05 am - 9:40 am	Randy Read (Cambridge Institute for Medical Research, University of Cambridge, UK) "Using SAD data in Phaser"
9:40 am - 9:50 am	Discussion
9:50 am - 10:25 am	Garib Murshudov (University of York, UK)
10:25 am - 10:35 am	Discussion
10:35 am - 11:00 am	Coffee Break
11:00 am - 11:35 am	Tom Terwilliger (Los Alamos National Laboratory, USA) "Automated structure determination with PHENIX"
11:35 am - 11:45 am	Discussion
11:45 am - 12:20 pm	Ethan Merritt (University of Washington School of Medicine, USA) "TLS models: There's more to this than just a nice R-factor"
12:20 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session
6:00 pm	Dinner
7:00 pm - 7:30 pm	<u>Business Meeting</u>

(Nominations for the next Vice Chair; Fill out Conference Evaluation Forms; Discuss future Site & Scheduling preferences; Election of the next Vice Chair)

7:30 pm - 9:30 pm

CHALLENGING PROBLEMS/MEMBRANE PROTEINS

7:30 pm - 7:35 pm

Discussion Leader: **Michael C. Wiener** (Department of Molecular Physiology and Biological Physics, University of Virginia, USA)

7:35 pm - 8:05 pm

Martin Caffrey (Membrane Structural and Functional Biology Groups, Trinity College, Dublin, Ireland)

"Membrane protein structure determination using crystallography and lipidic mesophases - Recent advances and successes"

8:05 pm - 8:15 pm

Discussion

8:15 pm - 8:45 pm

Stephen White (University of California at Irvine, USA)

"Exploring membranes by neutron diffraction"

8:45 pm - 8:55 pm

Discussion

8:55 pm - 9:25 pm

Hao Wu (Weill Cornell Medical College, USA)

"Heterogeneity, low solubility and low resolution: structural pursuit on the ternary Myddosome complex in Toll-like receptor signaling"

9:25 pm - 9:30 pm

Discussion

THURSDAY

7:30 am - 8:30 am

Breakfast

9:00 am - 10:25 am

TALKS SELECTED FROM POSTERS

9:00 am - 9:05 am

Discussion Leader: **Anastassis Perrakis** (Netherlands Cancer Institute, The Netherlands)

9:05 am - 9:20 am

TBA (to be selected from posters)

9:20 am - 9:25 am

Discussion

9:25 am - 9:40 am

TBA (to be selected from posters)

9:40 am - 9:45 am

Discussion

9:45 am - 10:00 am

TBA (to be selected from posters)

10:00 am - 10:05 am

Discussion

10:05 am - 10:20 am

TBA (to be selected from posters)

10:20 am - 10:25 am

Discussion

10:25 am - 10:55 am

Coffee Break

10:55 am - 12:30 pm

MAP IMPROVEMENT AND MODEL BUILDING

10:55 am - 11:00 am

Discussion Leader: **Anastassis Perrakis** (Netherlands Cancer Institute, The Netherlands)

11:00 am - 11:35 am

Paul Emsley (University of Oxford, UK)

"Low resolution model building using COOT"

11:35 am - 11:45 am

Discussion

11:45 am - 12:20 pm **Johan Hattne** (EMBL Outstation Hamburg, Germany / UT Southwestern Medical Centre, USA)
"Modelling nucleic acids with ARP/wARP"

12:20 pm - 12:30 pm Discussion

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm Dinner

7:30 pm - 9:30 pm **FUTURE METHODS: FELs AND DIFFRACTION IMAGING**

7:30 pm - 7:35 pm Discussion Leader: **Ed Lattman** (Hauptman-Woodward Medical Research Institute, Buffalo, USA)

7:35 pm - 7:55 pm **Petra Fromme** (Department of Chemistry and Biochemistry, Arizona State University, USA)
"Opportunities for membrane protein analysis with FELs - recent results from LCLS"

7:55 pm - 8:05 pm Discussion

8:05 pm - 8:35 pm **Anton Barty** (Center for Free-Electron Laser Science, Germany)
"Single-particle imaging with pulsed hard-Xray lasers"

8:35 pm - 8:45 pm Discussion

8:45 pm - 9:20 pm **John C.H. Spence** (Arizona State University and Lawrence Berkeley Laboratory, USA)
"Femtosecond nanocrystallography of membrane proteins using LCLS"

9:20 pm - 9:30 pm Discussion

FRIDAY

7:30 am - 8:30 am Breakfast

9:00 am Departure

Funding for this conference was made possible (in part) by 1 R13 GM 093355 - 01 from the National Institute of General Medical Sciences. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention by trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

Diffraction Methods in Structural Biology (2010)

Name	Organization	Participation	Status
ADAMS, PAUL D	LAWRENCE BERKELEY NATIONAL LABORATORY	Discussion Leader	Registered
AISHIMA, JUN	DIAMOND LIGHT SOURCE	Poster Presenter	Registered
AKEY, DAVID L	UNIVERSITY OF MICHIGAN	Poster Presenter	Registered
ANDROULAKIS, STEVE	MONASH UNIVERSITY	Poster Presenter	Registered
APKER, BENJAMIN A	MITEGEN, LLC	Poster Presenter	Registered
BANDARANAYAKE, RAJINTHA M	UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL	Poster Presenter	Registered
BANDYRA, KATARZYNA KJ	CAMBRIDGE UNIVERSITY	Attendee	Registered
BARTY, ANTON	CENTRE FOR FREE ELECTRON LASER SCIENCE	Speaker	Registered
BENNING, MATTHEW M	BRUKER AXS	Poster Presenter	Registered
BIRKTOFT, JENS J	NEW YORK UNIVERSITY	Poster Presenter	Registered
BJORKELID, CHRISTOFER	UPPSALA UNIVERSITY	Poster Presenter	Registered
BORGSTAHL, GLORIA E	EPPLEY INST. FOR CANCER RESEARCH & ALLIED DISEASES	Poster Presenter	Registered
BROWN, KIERON	VERTEX PHARMACEUTICALS	Poster Presenter	Registered
BUBECK, DORYEN A	UNIVERSITY OF OXFORD	Poster Presenter	Registered
CAFFREY, MARTIN	TRINITY COLLEGE DUBLIN	Speaker	Registered
CHUNG, YU SEON	MCMASTER UNIVERSITY	Poster Presenter	Registered
CLASSEN, SCOTT	ADVANCED LIGHT SOURCE, LBNL	Poster Presenter	Registered
COLLETIER, JACQUES-PHILIPPE M	INSTITUT DE BIOLOGIE STRUCTURALE	Poster Presenter	Registered
DEY, RAJA	UNIVERSITY OF SOUTHERN CALIFORNIA	Attendee	Registered
DISCOLA, KAREN F	UNIVERSITY OF SAO PAULO	Poster Presenter	Registered
ECHOLS, NATHANIEL	LAWRENCE BERKELEY NATIONAL LABORATORY	Poster Presenter	Registered
EMSLEY, PAUL	UNIVERSITY OF OXFORD	Speaker	Registered
EVANS, GWYNDAF	DIAMOND LIGHT SOURCE	Speaker	Registered
FERRARA, JOSEPH	RIGAKU AMERICAS CORP	Poster Presenter	Registered
FINFROCK, Y. ZOU	UNIVERSITY OF WASHINGTON	Speaker	Registered
FROMME, PETRA	ARIZONA STATE UNIVERSITY	Speaker	Registered
FROMME, RAIMUND	ARIZONA STATE UNIVERSITY	Poster Presenter	Registered
GIFFORD, LIDA	LAWRENCE BERKELEY NATIONAL LABORATORY	Attendee	Registered
GITTIS, APOSTOLOS	NIAID/NIH	Attendee	Registered
GONZALES, ANA	STANFORD SYNCHROTRON RADIATION LIGHTSOURCE	Vice Chair	Registered
GRANT, THOMAS D	HAUPTMAN-WOODWARD INSTITUTE	Poster Presenter	Registered
GRIESE, JULIA J.	UNIVERSITY OF MUNICH	Poster Presenter	Registered
HARRIS, SETH	GENENTECH	Speaker	Registered
HATTNE, JOHAN	UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER	Speaker	Registered
HEADD, JEFFREY J	LAWRENCE BERKELEY NATIONAL LAB	Poster Presenter	Registered
HO, MENG-CHIAO	ALBERT EINSTEIN COLLEGE OF MEDICINE	Poster Presenter	Registered
HOLTON, JAMES M	UCSF/LBNL	Speaker	Registered
HOTHORN, MICHAEL	SALK INSTITUTE FOR BIOLOGICAL STUDIES	Poster Presenter	Registered
HUNG, LIWEI	LOS ALAMOS NATIONAL LABORATORY	Poster Presenter	Registered
HUNTER, MARK S	ARIZONA STATE UNIVERSITY	Poster Presenter	Registered
IMASAKI, TSUYOSHI	INDIANA UNIV. MED. BIOCHEM. & MOL. BIOL.	Poster Presenter	Registered
INADA, HITOSHI	HARVARD UNIVERSITY	Poster Presenter	Registered
JAKONCIC, JEAN	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
KAISER, JENS T	CALTECH	Attendee	Registered

KIROUAC, KEVIN N	UNIVERSITY OF WESTERN ONTARIO	Poster Presenter	Registered
KISKO, KAISA	PAUL SCHERRER INSTITUT	Poster Presenter	Registered
KUMAR, PRAMOD	CENTRE FOR DNA FINGERPRINTING AND DIAGNOSTICS	Poster Presenter	Registered
LATTMAN, EATON E	HAUPTMAN-WOODWARD MEDICAL RESEARCH INSTITUTE	Attendee	Registered
LATYCHEVSKAIA, TATIANA	UNIVERSITY OF ZURICH	Poster Presenter	Registered
LEE, VERNE	UNIVERSITY OF AUCKLAND	Poster Presenter	Registered
LESBURG, CHARLES A	MERCK RESEARCH LABS	Attendee	Registered
LESLIE, ANDREW G.W	MRC LABORATORY OF MOLECULAR BIOLOGY	Chair	Registered
LIN, SU-CHANG	WEILL CORNELL MEDICAL COLLEGE	Poster Presenter	Registered
LOVELL, SCOTT W	UNIVERSITY OF KANSAS	Poster Presenter	Registered
MATSUI, TSUTOMU	STANFORD	Speaker	Registered
MATTHEWS, LINDSAY A	MCMASTER UNIVERSITY	Poster Presenter	Registered
MATTLE, DANIEL	AARHUS UNIVERSITY	Poster Presenter	Registered
MCSWEENEY, SEAN	EUROPEAN SYNCHROTRON RADIATION FACILITY	Speaker	Registered
MERRITT, ETHAN A	UNIVERSITY OF WASHINGTON	Speaker	Registered
MILLER, MITCHELL D	JOINT CENTER FOR STRUCTURAL GENOMICS / SSRL	Poster Presenter	Registered
MITTAL, SEEMA	UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL	Poster Presenter	Registered
MONCRIEFFE, MARTIN C	CAMBRIDGE UNIVERSITY	Attendee	Registered
MORIARTY, NIGEL W	LAWRENCE BERKELEY LAB	Poster Presenter	Registered
MUELLER, MARCUS	PAUL SCHERRER INSTITUT	Speaker	Registered
MURSHUDOV, GARIB	UNIVERSITY OF YORK	Speaker	Registered
MUSTYAKIMOV, MARAT	LOS ALAMOS NATIONAL LABORATORY	Poster Presenter	Registered
NAGAI, KIYOSHI	MRC LABORATORY OF MOLECULAR BIOLOGY	Speaker	Registered
NOLTE, ROBERT T	GLAXOSMITHKLINE	Attendee	Registered
NONATO, MARIA CRISTINA	FCFRP - UNIVERSIDADE DE SAO PAULO	Poster Presenter	Registered
PEAT, TOM	CSIRO	Poster Presenter	Registered
PERRAKIS, ANASTASSIS	NKI	Discussion Leader	Registered
PORTA, JASON C	UNIVERSITY OF NEBRASKA MEDICAL CENTER	Poster Presenter	Registered
POWELL, HARRY R	MRC-LMB	Poster Presenter	Registered
RAJAGOPALAN, SENAPATHY	THE METHODIST HOSPITAL RESEARCH INSTITUTE	Poster Presenter	Registered
RALAT, LUIS A.	UNIVERSITY OF CHICAGO	Attendee	Registered
RASMUSSEN, KIM KRIGHAAR	UNIVERSITY OF COPENHAGEN	Poster Presenter	Registered
READ, RANDY	UNIVERSITY OF CAMBRIDGE	Speaker	Registered
REES, DOUGLAS C	CALIFORNIA INSTITUTE OF TECHNOLOGY	Speaker	Registered
RENDEK, KIMBERLY N	ARIZONA STATE UNIVERSITY	Poster Presenter	Registered
RICHARDSON, BRIAN C	CORNELL UNIVERSITY	Poster Presenter	Registered
ROBERTS, SUE A	UNIVERSITY OF ARIZONA	Poster Presenter	Registered
ROBINSON, HOWARD H	BROOKHAVEN NATIONAL LAB	Poster Presenter	Registered
ROSSMANN, MICHAEL G	PURDUE UNIVERSITY	Discussion Leader	Registered
SAUTER, NICHOLAS K	LAWRENCE BERKELEY NATIONAL LABORATORY	Poster Presenter	Registered
SAWYER, GREG M	MASSEY UNIVERSITY	Poster Presenter	Registered
SAXENA, AJAY K	JAWAHARLAL NEHRU UNIVERSITY	Poster Presenter	Registered
SCHNEIDER, THOMAS R	EMBL C/O DESY	Discussion Leader	Registered
SCHREUDER, HERMAN	SANOFI-AVENTIS	Poster Presenter	Registered
SCHUERMANN, JONATHAN P	CORNELL UNIVERSITY (NE-CAT)	Poster Presenter	Registered
SCHULZE-BRIESE, CLEMENS	SWISS LIGHT SOURCE	Poster Presenter	Registered

SHERIFF, STEVEN	BRISTOL-MYERS SQUIBB R&D	Poster Presenter	Registered
SHI, MINLONG	HARVARD MEDICAL SCHOOL	Attendee	Registered
SMITH, PAUL	SLOAN-KETTERING INSTITUTE	Attendee	Registered
SMITH, JANET	UNIVERSITY OF MICHIGAN	Speaker	Registered
SNELL, EDWARD	HAUPTMAN-WOODWARD MEDICAL RESEARCH INSTITUTE	Poster Presenter	Registered
SOARES, ALEXEI S	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
SPENCE, JOHN	ARIZONA STATE UNIVERSITY	Speaker	Registered
STAGNO, JASON R	NATIONAL CANCER INSTITUTE, NIH	Poster Presenter	Registered
STERN, EDWARD A	UNIVERSITY OF WASHINGTON	Attendee	Registered
STOJANOFF, VIVIAN	BROOKHAVEN NATIONAL LABORATORY	Speaker	Registered
SUBRAMANIAM, SRIRAM	NCI/NIH	Speaker	Registered
SUTTON, KRISTIN	HAUPTMAN WOODWARD MEDICAL RESEARCH INSTITUTE	Poster Presenter	Registered
SWEET, ROBERT M	BROOKHAVEN NAT'L LAB	Poster Presenter	Registered
SZEBENYI, DOLETHA M	MACCHESS	Poster Presenter	Registered
TANG, WEI-JEN	THE UNIVERSITY OF CHICAGO	Poster Presenter	Registered
TERWILLIGER, THOMAS C	LOS ALAMOS NATIONAL LABORATORY	Speaker	Registered
THEOBALD, DOUGLAS L	BRANDEIS UNIVERSITY	Attendee	Registered
THOMPSON, MICHAEL C	UNIVERSITY OF CALIFORNIA, LOS ANGELES	Poster Presenter	Registered
TRONRUD, DALE E	OREGON STATE UNIVERSITY	Poster Presenter	Registered
TSAI, YINGSSU	STANFORD UNIVERSITY	Poster Presenter	Registered
URZHUMTSEV, ALEXANDRE	IGBMC & NANCY UNIVERSITY	Poster Presenter	Registered
VAJDOS, FELIX F	PFIZER INC	Poster Presenter	Registered
VONRHEIN, CLEMENS	GLOBAL PHASING LTD	Speaker	Registered
WARKENTIN, MATTHEW A	CORNELL UNIVERSITY	Poster Presenter	Registered
WEIK, MARTIN	INSTITUT DE BIOLOGIE STRUCTURALE, GRENOBLE	Speaker	Registered
WELNER, DITTE H	UNIVERSITY OF COPENHAGEN	Poster Presenter	Registered
WHITE, STEPHEN H	UNIVERSITY OF CALIFORNIA AT IRVINE	Speaker	Registered
WHITE, MARK A	UTMB	Poster Presenter	Registered
WHITE, THOMAS A	CENTER FOR FREE-ELECTRON LASER SCIENCE (CFEL)	Poster Presenter	Registered
WIENER, MICHAEL C	UNIVERSITY OF VIRGINIA	Discussion Leader	Registered
WILMOT, CARRIE M	UNIVERSITY OF MINNESOTA	Speaker	Registered
WINTER, GRAEME	DIAMOND LIGHT SOURCE	Speaker	Registered
WU, HAO	WEILL MEDICAL COLLEGE, CORNELL UNIVERSITY	Speaker	Registered
WU, ZHONGREN	VITAE PHARMACEUTICALS	Poster Presenter	Registered
XIONG, YONG	YALE UNIVERSITY	Poster Presenter	Registered
YEATES, TODD O	UNIVERSITY OF CALIFORNIA, LOS ANGELES	Speaker	Registered
YIN, QIAN	WEILL CORNELL MEDICAL COLLEGE	Poster Presenter	Registered
ZHU, JIANGHAI	HARVARD MEDICAL SCHOOL	Poster Presenter	Registered