

# THE ISRAELI 2016 MAGNETIC RESONANCE MEETING

IN HONOR OF  
JACOB ANGLISTER'S  
65<sup>TH</sup> BIRTHDAY



[tinyurl.com/IMRM2016](http://tinyurl.com/IMRM2016)



#### SUPPORTED BY

The Chorafas  
Institute for  
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Exchange

The Helen and Milton  
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Structure and Assembly

**June 21-22, 2016**

The David Lopatie Conference Centre  
Weizmann Institute of Science

## PROGRAM

#### ORGANIZING COMMITTEE

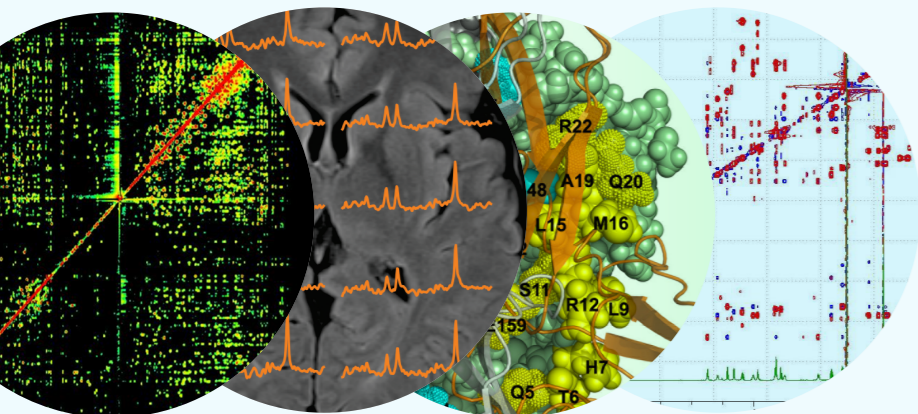
Assaf Tal, Weizmann Institute of Science  
Tali Scherf, Weizmann Institute of Science

#### MORE INFORMATION

**For assistance with accessibility issues, please contact**  
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#### Conference Coordinator

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## DAY 1 - TUESDAY 21 JUNE

### FROM SPIN TO STRUCTURE

- 9.30 – 9.35 **Greetings**  
Gilad Haran, Dean, Faculty of Chemistry, Weizmann Institute of Science
- 9.35 – 9.55 **Opening remarks**  
Tali Scherf, Weizmann Institute of Science
- 9.55 – 10.25 **Use of peptide surrogates to study GPCRs and HIV-1 structural biology**  
Fred Naider, CUNY
- 10.25 – 11.10 **NMR: Why bother?**  
Lewis Kay, University of Toronto
- 11.10 – 11.30 **COFFEE BREAK**

### STUDYING PROTEIN DYNAMICS AND MEMBRANE INTERACTIONS

- 11.30 – 12.00 **Toxins, receptors, channels and..... toxins: lessons learned from protein NMR**  
Jordan Chill, Bar Ilan University
- 12.00 – 12.45 **Protein dynamics in solution and membranes: applications to immune response and neurodegeneration**  
Christian Griesinger, Max Planck Institute
- 12.45 – 13.45 **LUNCH BREAK**

### ELUCIDATING MOLECULAR STRUCTURE WITH MAGNETIC RESONANCE

- 13.45 – 14.15 **Molecular recognition and dynamics of protein complexes in solution**  
Michael Sattler, TUM & Helmholtz Center, Munich
- 14.15 – 14.45 **CEST NMR based approach for mapping the conformation of a client protein through the Hsp70 functional cycle**  
Rina Rosenzweig, Weizmann Institute of Science
- 14.45 – 15.15 **Molecular structure from MAS NMR: The small (a single spin pair) and the large (a single virus)**  
Amir Goldbourt, Tel Aviv University
- 15.15 – 15.35 **COFFEE BREAK**

### PERSPECTIVES ON MR AND STRUCTURAL BIOLOGY

- 15.35 – 16.05 **NMR: A tool for biology**  
Muriel Delepierre, Institut Pasteur
- 16.05 – 16.35 **Antibody modeling now and then**  
Michael Levitt, Stanford
- 16.35 **Concluding remarks**  
Jacob Anglister, Weizmann Institute of Science

## DAY 2 - WEDNESDAY 22 JUNE

### MAGNETIC RESONANCE IN THE SOLID STATE

- 9.30 – 9.40 **Opening remarks**  
Assaf Tal, Weizmann Institute of Science
- 9.40 – 10.10 **Low temperature (100 Kelvin) CPMAS NMR studies on the symmetry change of Platonic-Solid geometry crystalline cubane and dodecahedrane**  
Robert Glaser, Ben-Gurion University
- 10.10 – 10.40 **Biomaterials interfaces and mesoporous materials surfaces: connecting molecular view with function**  
Asher Schmidt, Technion
- 10.40 – 11.10 **Probing the electrode-electrolyte interface in rechargeable batteries by solid state NMR**  
Michal Leskes, Weizmann Institute of Science
- 11.10 – 11.30 **COFFEE BREAK**

### MAGNETIC RESONANCE IMAGING: PROBING PHYSIOLOGY

- 11.30 – 12.00 **Compact self-contained ESR probeheads as new clinical tools**  
Aharon Blank, Technion
- 12.00 – 12.30 **Lessons on neuronal physiology from diffusion weighted NMR**  
Uri Nevo, Tel Aviv University
- 12.30 – 13.00 **Quantitative MRI for human white matter: What can we add to diffusion imaging?**  
Aviv Mezer, The Hebrew University of Jerusalem
- 13.00 – 14.00 **LUNCH BREAK**

### CONTRAST MECHANISMS AND MOLECULAR IMAGING

- 14.00 – 14.30 **Host-guest molecular systems as platforms for <sup>19</sup>F molecular MR imaging**  
Amnon Bar-Shir, Weizmann Institute of Science
- 14.30 – 15.00 **Hyperpolarized MRI - a pathway to metabolic imaging**  
Rachel Katz-Brull, Hadassa-Hebrew University Medical Center
- 15.00 – 15.20 **COFFEE BREAK**

### MAGNETIC RESONANCE IN THE LIQUID STATE

- 15.20 – 15.50 **Reichardt's dye: the NMR story of the solvatochromic betaine dye**  
Hugo Gottlieb, Bar Ilan University
- 15.50 – 16.20 **Copper homeostasis in bacteria cells – exploring cellular metal transfer pathways and mechanisms**  
Sharon Ruthstein, Bar Ilan University
- 16.20 – 16.50 **Exploiting heteronuclear magnetisation transfer phenomena in solution-phase hyperpolarised NMR**  
Lucio Frydman, Weizmann Institute of Science
- 16.50 **Concluding remarks**