



# REGULATION OF SODIUM TRANSPORT IN HEALTH AND DISEASE

Symposium in memory of Prof. Haim Garty

## 4-5 January 2016

The David Lopatie Conference Centre, Weizmann Institute of Science, Rehovot, Israel

#### January 4, 2016

- 9.15 Opening remarks Prof. Steven J.D.Karlish
- **9.20** Tribute to Haim by **Prof. Daniel Zajfman**, President of the Weizmann Institute

### Session 1: "Hormonal and Genetic control of Sodium Transport in Epithelia"

- 9.30 Dr. Carol Asher (WI)
  Haim Garty's Legacy: A Summary of Thirty Years
  Investigating the Regulation of Epithelial Ion Transport
- 10.00 Prof. Larry Palmer (New York. NY)

  Movements of Na channels in kidney cells: Wailing Wall or Trail of Tears?
- 10.30 Prof. Tom Kleyman (Philadelphia, Pa)
  Regulation of epithelial sodium channels by external cues
- 11.00 Coffee break
- **11.30 Prof. Nicolette Farman** (Paris, France)

  Mineralocorticoid effects beyond renal sodium transport: retinal and skin homeostasia.
- **12.00 Prof. Zvi Farfel** (TAU)

  Hypertension; insights from the rare monogenic form Familial Hyperkalemia and Hypertension (FHHt).
- **12.30 Prof. Giuseppe Bianchi** (Milano, Italy)

  Genetic abnormal function of the Na-K pump both as a cause of arterial hypertension and as a target for a personalized therapy.
- **13.00** Lunch

#### Session 2: "Regulation of active Na, K transport"

- **14.00 Prof. Kathleen Sweadner** (Boston , Mass) *Unanticipated roles of FXYD proteins*
- **14.30 Dr. Ira Lubarski** (WI)

  FXYD5 mediated mechanism of lung metastasis in 4T1 breast cancer model.
- **15.00 Prof. Michael Shattock** (St Thomas, London) Na/K ATPase and phospholemman in the heart
- **15.30** Coffee Break
- **16.00 Prof. Bente Vilsen** (Arhus, Denmark)
  Rescue of sodium affinity by secondary mutation
- **16.30 Prof. Hans Juergen Apell** (Konstanz, Germany) Molecular mechanism of sodium transport by the Na,K-ATPase
- **17.00 Prof. David Lichtstein** (HU)

  Involvement of Na+, K+-ATPase and endogenous cardiac steroids in bipolar disorder.
- 19.30 Meeting Dinner (by invitation) Address by Dr. Nira Garty, Prof. Michal Neeman and Prof. Steven J.D.Karlish

#### January 5, 2016

#### Na transport systems – a functional and structural perspective

- 9.30 Prof. Baruch Kanner (HU)

  Molecular Mechanism of Sodium-Coupled

  Neurotransmitter Transport
- **10.00 Prof. Etana Padan** (HU)

  Structural and Functional Dynamics of NhaA Na+/H+
  antiporter
- **10.30 Prof. Israel Sekler** (BGU)

  Mitochondrial Na+ and Ca2+ in Signaling Metabolism and Secretion and their breakdown in neurological disorders
- **11.00** Coffee break
- 11.30 Prof. Daniel Khananshvili (TAU)
  Structure-dynamic basis of ion transport
  and regulation in the sodium-calcium
  exchanger (NCX) proteins.
- **12.00 Prof. Jack H Kaplan** (Chicago, III)

  The Sodium Pump: More or

  Less Complex?
- **12.30** Lunch

# ORGANIZING COMMITTEE

Prof. Eitan Reuveny Prof. Steven J.D. Karlish

#### **COORDINATOR**

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#### **REGISTRATION**



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