

# CURRICULUM VITAE

*Michael London*

## 1. PERSONAL DETAILS:

Date of birth: 10 Feb 1967  
Country of birth: Israel  
Identity number: 059783670  
Permanent address: Rabi Binyamin 13/20  
Mob: +972 (0)508990072  
Work: +02 6586337  
E-mail address: mickey.london@mail.huji.ac.il

## 2. HIGHER EDUCATION

### **1989-1992 B. Sc., The hebrew university of Jerusalem**

Mathematics and Computer Science,  
Graduated 1992, Cum Laude.

### **1993-2001 Ph. D. Student, The hebrew university of Jerusalem**

Interdisciplinary Neural Computation Center Graduate Program, Hebrew University of Jerusalem.  
Dissertation: "The effect of the synaptic input on computational processes in neurons."  
Supervisor: Prof. Idan Segev, Neurobiology and Neural Computation Center. #2-6

### **2002-2005 Human Frontiers long term post doctoral fellow in University College London**

Project: The information efficacy of a synapse in Layer 5 pyramidal neuron.  
Supervisor: Prof. Michael Häusser, University College London. #7,8,9,11

### **2005-2008 MRC Senior research fellow, University College London**

Project: Quantifying the efficacy and plasticity of sensory input at cortical synapses *in vivo*  
Supervisor: Prof. Michael Häusser, University College London. #10

### **2008-2010 Wellcome Trust research fellow, University College London**

Project: Sensitivity to perturbations *in vivo* implies high noise and suggests rate coding in cortex  
Supervisor: Prof. Michael Häusser, University College London. #12

## 3. APPOINTMENTS AT THE HEBREW UNIVERSITY

### **2011-present Senior Lecturer, The Hebrew University of Jerusalem**

Member of the Edmund and Lily Safra for Brain Science and the Alexander Silberman Institute for Life Science.

#### **4. ADDITIONAL FUNCTIONS/TASKS AT THE HEBREW UNIVERSITY**

2014-present Member of the ethics committee for research involving animals

2016-present ELSC academic director of the imaging center

#### **5. SERVICE IN OTHER ACADEMIC AND RESEARCH INSTITUTIONS**

2011-present Honorary fellow, The Wolfson Institute for Biomedical Research,  
University College London

#### **6. OTHER ACTIVITY**

##### **Non-academic work**

1993-1995 Computerized Yield Tools Engineer

Intel Electronics LTD., Har Hotzvim Jerusalem

##### **Honors**

1992 Hebrew University Dean's Honor List

1999 Intel Electronics & and the Hebrew University Dean's Prize

2012 The Golda Meir Prize.

2013 The Sachs Lectureship in Brain Science

##### **Membership of professional bodies**

1996-present Member of the Israeli society for neuroscience.

1999-present Member of the society for neuroscience

##### **Conferences**

2014 "Songs in Jerusalem: neural systems of animal vocal communication". Jerusalem Israel

Organizers: Adi Mizrahi, Mickey London

2012-2014 ELSC annual retreat. Ein Gedi, Israel. Organizer.

#### **7. RESEARCH GRANTS**

##### **Past Grants:**

2005-2008 United Kingdom Medical Research council (MRC), "Quantifying the efficacy and plasticity of sensory input at cortical synapses in vivo", Michael Häusser and Michael London, 200,000/140000 GBP

2010-2012 The Wellcome Trust, "From single neuron perturbation to behaviour", Michael Häusser and Michael London, 250,000/100,000 GBP

##### **Israeli Science Foundation Equipment grant for new faculty**

2012 Femtosecond Laser for Two photon microscope 843000 NIS (Grant 1363/12)

##### **National Institute for Psychobiology**

2013-2015 "The effect of brain state on the integration properties of a cortical neuron" \$50,000 (Grant 229-13-14)

### **Israel Science Foundation - Personal grant**

2012-2016 "From single neuron perturbation to behaviour" 774000 NIS (Grant 845/12)

### **Einstein Foundation**

2013-2016 Somatosensory virtual reality environment (with Prof. York Winter and Prof Matthew Larkum Humboldt Universität, Berlin) 200,000 EUR

### **Active Grants:**

#### **NIH-BRAIN**

2016-2019 Large-scale, simultaneous intracellular recording and stimulation of neural activity (Lead PI: Prof. Micha spira, co-PI: Prof. Israel Nelken, Dr. Michael London). \$1,000,000

#### **ELSC seed grant**

2016-2018 The effect of acetylcholine on cortical sensory microcircuits (joint grant with Prof. Hermona Soreq) \$100,000

### **Israel Science Foundation - Personal grant**

2017-2022 "Working Memory: The role of dendritic function and modulation in prefrontal cortex " 1,600,000 NIS (Grant 1024/17)

### **Einstein Foundation**

12017-2020 Dynamics of electrically coupled neuronal networks (with Prof. Michael Brecht Humboldt Universität, Berlin and Prof. Yosef Yarom HUJI) 240,000 EUR

## **8. TEACHING AT THE HEBREW UNIVERSITY (AND OTHERS)**

### **a) Master's and doctoral degree students**

1. Lisa Beeren, "The interaction between a single neuron and the local network in cortex", PhD student 09/2008-2011. (PhD project in the Wellcome trust project, joint supervision with Prof. M. Häusser and Prof. P.E. Latham). **Graduated**
2. Nisim Perets (Master) - 09/2012-01/2015 Anatomical and histological correlates for cortical control of mice ultrasonic vocalizations. **Graduated**
3. Benjamin Weiner, "Cortical Control in Generating Mouse Courtship Songs", PhD student 09/2014-present. (PhD in ELSC computational neuroscience program). **Stage B** (1 publication in Frontiers Behavioral Neuroscience, 2016)
4. Amir Dudai, "The function of cortical local ACh neuron", PhD student 09/2014-present. (PhD in ELSC computational neuroscience program). **Stage A. Amir is a Hoffman fellow since Oct. 2017**
5. Stav Hertz "The mouse ultrasonic vocalization as a model for temporal sequences in the brain" (PhD in neuroscience and behavior). **Stage B**
6. Adi Kaduri-Amichai, "Prefrontal involvement in working memory processes", PhD student 09/2014-present. (PhD in ELSC computational neuroscience program). **Stage A**

### **Joint supervision:**

1. Vitaly Lerner, "Pattern Recognition by a Cortical Neuron", PhD student 09/2013-present. (PhD in ELSC computational neuroscience program). **Stage B (Joint supervision with Prof. Yosef Yarom)**
2. Yair Deitcher, "The effect of neuromodulation of dendritic computation in cortex", PhD student 09/2014-present. (PhD in ELSC computational neuroscience program). **Stage B (Joint supervision with Prof. Idan Segev)** First author publication in Cerebral cortex (2017) and Equal first co-author publication in Cell reports (2018).
3. David Beniaguev, "Single neurons as deep neural networks", PhD student 09/2014-present. (PhD in ELSC computational neuroscience program). **Stage A (Joint supervision with Prof. Idan Segev)**
4. Adi Kol, "Functional interactions between astrocytes and neurons", PhD student 09/2013-present. (PhD in ELSC computational neuroscience program). Equal first co-author manuscript Cell (2018) *in press*, **Stage A (Joint supervision with Inbal Goshen)**.
5. Nora Vrieler, "Functional connectivity through gap junctions in the inferior olive", PhD student 09/2017-present. (Life Science), **Stage A (Joint supervision with Prof. Yosef Yarom)**.

### **b) PostDoctoral fellows supervised**

Dr. Christina Labererra Monsted - 02/2012-09/2014 - Adrenergic modulation of lh in layer 5 pyramidal neurons (2 publications J.Neurophysiology 2013, Cell Reports 2018)

Dr. Eyal Cohen - 09/2012-09/2014 All optical artificial neural network in an optic fiber. (1 publication in Scientific Reports 2015). (Joint supervision with Prof. Z. Zalevsky Bar-Ilan University).

### **c) Courses**

#### **1995-1998 Teaching Assistant, The Hebrew University of Jerusalem**

1995 - 1996 Introduction to Statistics and Probability Theory.

1996 - 1997 Computer applications in Neural Computation.

1997 - 1998 Introduction to Neurobiology.

#### **Teaching Assistant, University College London**

2003-2011 Seminars in B11 Neurophysiology course, UCL

#### **Post Graduate teaching experience**

1996 Teaching assistant in the european course for neural computation.

2003 Teaching assistant in the international course in Neurophysics, Les Houches.

2003-2011 Occasional lectures in Gatsby computational neuroscience unit as part of Neuroscience course.

## Teaching duties table

Course number	Course name	Level	Credit	When	Comment
76901	Central nervous system physiology - B	PhD	4	2013-running	Course director
72625	Neural Mechanisms of animal behaviour	Undergraduate	3	2013-running	
76943	Selective topics in Neural Computation	PhD	2	2011-2014	
78844	Topics in Nuerobiology	Undergraduate	2	2012-2013	
76947	Live imaging of neurons and networks	PhD	2	2013	
72390	Guided seminar - Honor's program	Undergraduate	2	2011	Course director
76922	Lab rotation	MSc		2013-runinig	
72343	Physiology Advanced	Undergraduate	5	2013-runinig	Course director
76728	International course in in vivo electrophysiology	Graduate+postdocs	6	2013,2015,2017	Course director

### INTERNATIONAL COURSES

ELSC international school on Intracellular in-vivo recording, IUI Eilat Aug 2013 **Organizer**

ELSC international school on Intracellular in-vivo recording, IUI Eilat Aug 2015 **Organizer**

EU corse in computational neuroscience 2015 (Lisbon) Invited instructor

ELSC international school on Intracellular in-vivo recording, Jerusalem Aug 2017 **Organizer**