

Joseph Fanous
Joseph.fanous@unibas.ch



Date Prepared: February, 2015

Name: Joseph Fanous

Title: Post-Doctoral Fellow, Biozentrum, University of Basel, Switzerland

Office Address: Klingelbergstrasse 50/70, CH-4056 Basel, Switzerland

Work E-Mail: joseph.fanous@unibas.ch

Education

**2010
to 2015**

The Hebrew University of Jerusalem, Israel

PhD at the Institute of Drug Research

**2008
to 2009**

The Hebrew University of Jerusalem, Israel

Master Degree: Microbiology at The Institute for Medical Research

**2003
to May 2007**

The Hebrew University of Jerusalem, Israel

Bachelor Degree: BSc in Pharmacy with honors, at the School of Pharmacy

Research experience

**August 2015
To present**

Biozentrum, University of Basel, Switzerland

Post-Doctoral Fellow, Prof. Dr. Dirk Bumann Group

**April 2010
to 2015**

Institute for Drug Research, The Hebrew University of Jerusalem, Israel

PhD candidate under the supervision of Prof. Amnon Hoffman

- Investigating modalities for improving the intestinal permeability of biologically active peptides
- Investigating chemical approaches (eg. Cyclization, multiple N-methylation) for improving the metabolic stability of biologically active peptides
- Pharmacokinetics of novel controlled release injectable thermosensible subcutaneous delivery system.
- Discovery and development of novel multiple sclerosis therapeutic agents.
- Development of novel orally available anti HIV drug lead: Pharmacokinetic and pharmacodynamics considerations based on entry inhibition activity.
- Investigation of peptide conformation-biopharmaceutical relationship.

**2008
to 2010**

Institute for Medical Research, The Hebrew University of Jerusalem, Israel

Master student with Prof. Yosef Haviv and Prof. Amos Panet

- Investigated the enhancement of viral vector-mediated gene delivery in vitro with cell penetrating peptides

Honors

The Hoffman Leadership and Responsibility Fellowship Program, HUJI, 2011-2014.

Prize for excellence in teaching at the Hebrew University, 2012.

Professional Societies

2013 to 2014 **President** of the Graduate Student Forum at the Institute for Drug Research, The Hebrew University

2013 to 2014 American Association of Pharmaceutical Scientists (AAPS) **student chapter chair** at the Hebrew University

2013 to 2014 Controlled Release Society (CRS) **student chapter Chair** at the Hebrew University

Skills and Techniques

Animals

- Preclinical biopharmaceutical investigation
 - Rat and Mouse maintenance
 - Intraperitoneal injections
 - Jugular cannulation for IV administration
 - Oral administration (Gavage)
 - Chylomicron production from Rat
 - Brush border membrane vesicles production from rat intestine

Cell culture

- Mammalian cell lines culture
- Transport experiments in transwell

Cellular biology and biochemistry analysis

- Western blot, immunoprecipitation, immunocytochemistry, immunohistochemistry
- FACS analysis, cell sorting

Molecular Biology

- Plasmid amplification
- Adenovirus production
- HIV-1 production

Imaging

- Fluorescence confocal and wild field microscopy, image analysis

Bioanalytical methods

- Assay development using HPLC connected to Mass spectrometer (EPI) and PDA detector

Clinical study

- Assistance in the enrollment of clinical study for bioequivalence and Pharmacodynamics

Agreement for animal experiment (level 1): achieve 2005

Report of Local Teaching and Training

Teaching of Students in Courses

2010 to 2015 Coordinator of course "Specialization Workshop in Pharmacy" for graduate students in Pharmacy, School of Pharmacy, Faculty of Medicine, The Hebrew University of Jerusalem

2010 to 2011 Lab Instructor, Pharmaceutical Engineering program, Jerusalem College of Engineering

2010 Lab Instructor, Chemical Practical Engineering program, Hadassah College Jerusalem.

Report of Regional, National and International Invited Teaching and Presentation

Invited presentation and posters:

National

- 2010 Novel Orally Available Anti-HIV Drug Lead Candidate, **Israeli Chapter of the Controlled Release Society (ICRS), Haifa, Israel**
- 2012 Controlled-release injectable suspension for amoxicillin therapy in veterinary, **Israeli Chapter of the Controlled Release Society (ICRS), Maalot, Israel**

International

- 2012 The Pharmacokinetics and Entry Inhibition Activity of Anti-HIV-1 Peptidomimetic Drug Candidate, **GPEN 2012, Melbourne, Australia**
- 2014 Investigation of the Intestinal Permeability Mechanism and Enzymatic Stability of Cyclic Active Peptides, **AAPS annual meeting and exposition, San Diego, USA**

Report of Clinical Activities and Innovations

Current Licensure and Certification

- 2007 Pharmacist license from the Israeli ministry of health.

Practice Activities

- 2008 to 2010 Pharmacist, Meuhedet Health Services, Jerusalem.
- 2008 to 2010 Pharmacist, Super-pharm, Jerusalem.

Report of Education of Patients and Service to the Community

Activities

- 2011 to 2015 Volunteer worker at the open clinic of "Physicians for Human Rights", Jaffa, Israel.

Report of scholarship

Peer-reviewed publications:

- (1) Fanous, J.; Swed, A.; Joubran, S.; Hurevich, M.; Britan-Rosich, E.; Kotler, M.; Gilon, C.; Hoffman, A. Superiority of the S,S Conformation in Diverse Pharmacological Processes: Intestinal Transport and Entry Inhibition Activity of Novel Anti-HIV Drug Lead. *Int. J. Pharm.* **2015**, 495 (2), 660–663.
- (2) Levi, I.; Eskira, Y.; Eisenstein, M.; Gilon, C.; Hoffman, A.; Talgan, Y.; Fanous, J.; Bersudsky, Y.; Belmaker, R.; Agam, G.; Almog, O. Inhibition of Inositol Monophosphatase (IMPase) at the Calbindin-D28k Binding Site: Molecular and Behavioral Aspects. *Eur. Neuropsychopharmacol. J. Eur. Coll. Neuropsychopharmacol.* **2013**, No. 2013, 1–10.
- (3) Bollinger, M.; Manzenrieder, F.; Kolb, R.; Bochen, A.; Neubauer, S.; Marinelli, L.; Limongelli, V.;

- Novellino, E.; Moessmer, G.; Pell, R.; Lindner, W.; Fanous, J.; Hoffman, A.; Kessler, H. Tailoring of Integrin Ligands: Probing the Charge Capability of the Metal Ion-Dependent Adhesion Site. *J. Med. Chem.* **2012**, *9* (2), 871–882.
- (4) Gershkovich, P.; Fanous, J.; Qadri, B.; Yacovan, A.; Amselem, S.; Hoffman, A. The Role of Molecular Physicochemical Properties and Apolipoproteins in Association of Drugs with Triglyceride-Rich Lipoproteins: In-Silico Prediction of Uptake by Chylomicrons. *J. Pharm. Pharmacol.* **2009**, *61* (1), 31–39.

References

Prof. Amnon Hoffman, PhD

The Institute for Drug Research,
School of Pharmacy, Faculty of Medicine,
The Hebrew University of Jerusalem
Email: amnonh@ekmd.huji.ac.il

Prof. Chaim Gilon, PhD

Institute of Chemistry, Campus Givat Ram,
The Hebrew University of Jerusalem
Email: gilon@vms.huji.ac.il

Prof. Yosef Haviv, MD

Division of Nephrology,
Hadassah-Hebrew University Medical Center, Jerusalem, Israel
Email: yhaviv@hadassah.org.il

Prof. Rafi Gorodetsky

Hadassah Medical Center,
Email: Rafi@hadassah.org.il

Prof. Moshe Kotler

Department of Immunology and Cancer Research, Faculty of Medicine,
The Hebrew University of Jerusalem
Email: moshek@ekmd.huji.ac.il

Prof. Philip Lazarovici

The Institute for Drug Research,
School of Pharmacy, Faculty of Medicine,
The Hebrew University of Jerusalem
Email: philipl@ekmd.huji.ac.il

Prof. Amalya Oliver-Lumerman,

Head of the “Harry and Sylvia Hoffman Leadership and responsibility Program”,
Email: amalya.oliver@mail.huji.ac.il
