



Philadelphia University
PO Box 1
Postal Code 19392
Amman - Jordan

Phone + 962 6 4799000
Ext.:2248
Fax + 962 6 4799040
E-mail:
ihamad@philadelphia.edu.jo

Islam M. Hamad

Education

June 2008 *School of Pharmacy, University of Brighton, Brighton-UK.*

Ph.D. in Pharmaceuticals

Project work: ***Nanomedicines and molecular basis of complement activation.***

Feb 2003 *School of Pharmacy, University Science Malaysia, Penang-Malaysia.*

Masters in Pharmaceuticals

Project work: *Design and in-vivo assessment of novel Testosterone implants*

Aug 1998 *School of Pharmacy, Philadelphia University, Amman-Jordan*

Bachelor of Pharmacy

Acquiring knowledge of Pharmacology, Pharmaceutics, Medicinal Chemistry, Pharmacognosy, Biotechnology and Microbiology

Jul 1994 GCSE- Science, Al Hussein College, Jordan.

▪

Research Interest

- Rational design and biological evaluation of parenteral drug delivery systems.
- Blood opsonitation events
- Adjuvant therapy and design of cancer vaccines

Professional experience

School of Pharmacy and biomolecular Sciences, University of Brighton, Brighton, UK.

As a part-time lecturer/demonstrator (2004-2008).

Job Profile: - Teaching and/or demonstrating:

- ▶ Pharmaceutical dosage forms (Formulation of semi-solid dosage form, Pre-Formulation Studies of different projects,..etc)
- ▶ Drug delivery systems and drug targeting
- ▶ Prepare a small scale batch for clinical and in-vitro
 - ▶ Physical testing of finished batch product (Quality Control Assessment)

RESEARCH ACTIVITIES

A member of Molecular Targeting and Polymer Toxicology, Brighton Uni, UK.

- Rational design and surface-engineering of particulate drug delivery systems (e.g., liposomes, polymeric nanoparticles) for site-specific targeting of drugs.
- Particulate vaccines and adjuvant therapy
- Immunological reactions (e.g., complement activation and associated responses) to synthetic polymeric materials used in particulate and tissue engineering as well as drug solubilization
- Novel controlled-release dosage forms

Patents and publications

- **Hamad I** and Moghimi SM (2008). Critical issues in site-specific targeting of solid tumours; the carrier, the tumour and the bioavailable drug. *Expert Opinion on Drug Delivery*. 5: 205–219.
- Moghimi SM, **Hamad I**, Andresen T, Jørgensen K, Szebeni J (2006). Methylation of the phosphate oxygen moiety of phospholipid-methoxy(polyethylene glycol) conjugate prevents PEGylated liposome-mediated complement activation and anaphylatoxin production. *FASEB J*. 20:E2057–E2067.
- Moghimi SM, **Hamad I**, Bunger R, Anderson TL, Jørgensen K Hunter AC, Baranji L, Rosivall L, Szebeni J (2006). Activation of the human complement system by cholesterol-rich and PEGylated liposomes-modulation of cholesterol-rich liposome-mediated complement activation by elevated serum LDL and HDL levels. *Journal of Liposome Research*. 16(3):167-74.
- S Moein Moghimi, **Islam Hamad** & A Christy Hunter (2007). **Particulate**

nanomedicine in the footsteps of platelet homing: Evaluation of: Simberg D, Duza T, Park JH *et al.*: Biomimetic amplification of nanoparticle homing to tumors. *Nanomedicine*. 2, (3): 381-384.

- Moghimi, S. M. and **Hamad, I.** (2008) Hypersensitivity reactions to nanomedicines: Causative factors and optimization of design parameters. In: *Allergy Frontiers: from Epigenetics to Future Perspectives* (R. Pawankar, S. Holdgate, L. J. Rosenwaser, eds.). Springer Japan KK, Tokyo (in press).
- Moghimi, S. M. and **Hamad, I.** (2008) Factors controlling pharmacokinetics of intravenously injected nanoparticles. In: *Biotechnology: Pharmaceutical Aspects, Nanotechnology in Drug Delivery* (M. M. de Villiers, G. S. Kwon, eds.). Springer Science (in press).
- **I Hamad**, AC Hunter, J Szebeni, SM Moghimi (2008). Poly(ethylene glycol)s generate complement activation products in human serum through increased alternative pathway turnover and a MASP-2-dependent process. *Molecular immunology*, in press.
- **Islam Hamad**, A. Christy Hunter, Kenneth J. Rutt, Zhuang Liu, Hongjie Dai, and S. Moein Moghimi. (2008). Complement Activation by PEGylated Single-Walled Carbon Nanotubes is Independent of C1q-Dependent Classical and Alternative Pathways. *Molecular immunology*, in press.
- Moghimi SM and **Hamad I.** Complement activation by polymers and polymeric constructs. New frontiers in nanomedicine Conference. London UK. Oct 15-15th 2007.
- Moghimi SM and **Hamad I.** Liposome advances, progress in drug and vaccine delivery. 3rd International Liposomes society meeting. School of Pharmacy, London University. UK. 8 -11th Dec 2007.
- **Hamad I**, Hunter AC, Moghimi SM. Complement activation by the thermosensitive block co-polymer poloxamer 407: Implications in vascular medicines. Lipid disorders. Gladstone institute of cardiovascular diseases. SF, California USA. Jan 31-feb 2 (2008).
- Moghimi, S. M. and **Hamad, I.** (2008) Liposome-mediated triggering of complement cascade. (2008). *Journal of Liposome Research*, 18:195–209.