CURRICULUM VITAE

HIGHTLIGHTS

Alberto Berardi, MPharm Hon., PhD

Associate professor in Pharmaceutics

- An academic and researcher at the Applied Science University since 2013, recently promoted to the rank of associate professor.
- 16 publications (of which 11 as first or corresponding author) since 2017 in ISI-indexed journals with impact factor between 2.4 and 7.4.
- Awarded for highest number of publications in Scopus by the Applied Science University (Jordan) in 2019.
- Research collaborations with groups in Italy, UK, Germany and Spain.
- Awarded for excellence in teaching by the Applied Science University (Jordan) in 2015.
- PhD degree from the University of East of Anglia (UK) in 2013, specialising in oral drug delivery and oral delivery of biopharmaceuticals.
- Master degree from the University of Camerino (Italy) in 2008: awarded 1st Honours (110/110 & honours) and received official encomium of the Degree Board for the excellent curriculum of studies.
- 7 conference presentations in British national and in international conferences: won 3 "best-poster award and prize" in 2008 and 2012 and 1 "second best-oral presentation award and prize" in 2012.

Current research areas:

- Development of extended release dosage forms using biodegradable and biocompatible plant-derived proteins as release modifying ingredients.
- Studying mechanisms of tablets disintegration by image analysis.
- Formulation of viral nanoparticles (VNPs) and evaluation of their potential applications for oral drug and vaccine delivery.
- Studies of biomolecules-nanoparticles interactions in biologically relevant fluids (e.g. gastro-intestinal fluids, mucus and serum).

PERSONAL DETAILS

Name: Alberto Berardi

Date of Birth: 23/09/1984

Nationality: Italian

Email : bertazzi84@hotmail.it; a_berardi@asu.edu.jo

Tel: +962 790 82 58 20

General Pharmaceutical Council (GPhC-UK) registration number: 2069908

EDUCATION

From	To	Name Of Institution	Qualification	Subject	Grades
2010	2013	University of East Anglia-UK	PhD	Drug Delivery (development of formulations for oral vaccines)	
2003	2008	University of Camerino-Italy	Master degree (5yrs) regulated by E.U.	Pharmacy (branch Chemistry and Pharmaceutical technologies)	1st Honours (110/110 & honours)
1997	2003	Giacomo Leopardi Secondary School-Italy	Liceo Classico (equivalent to) A' Levels	Ancient Greek, History, Latin, Philosophy, Chemistry, Maths and Physics	98/100 (Equivalent to) Grade "A"

EXPERIENCE AND SKILLS

Dec 2018-present Applied Science University, Faculty of Pharmacy Amman, Jordan

Associate professor in Pharmaceutics

Teaching experience:

- ✓ 3rd year students: Lectures in "Industrial Pharmacy"
- ✓ 4th year students: Lectures in "Pharmaceutical Technology"
- ✓ Master course: "Research methodologies"

Experience as visiting research fellow:

- ✓ Worked as research fellow in the Laboratory of Prof George Lomonossoff in the John Innes Centre, Norwich (UK) – Summer 2019.

Master's student research project supervisior:

- ✓ Title the project: "Understanding the disintegration action of soy polysaccharide by image analysis".

Administrative position:

- ✓ International Relations Officer (IRO) at university level.

2013-2018 Applied Science University, Faculty of Pharmacy Amman, Jordan

Assistant professor in Pharmaceutics

Teaching experience:

- ✓ 2nd year students: Lectures and practical laboratories in "Pharmaceutics I".
- ✓ 3rd year students: Lectures and practical laboratories in "Pharmaceutics II".
- ✓ 3rd year students: Lectures and practical laboratories in "Industrial Pharmacy"
- ✓ 4th year students: Lectures in "Pharmaceutical Technology"
- ✓ Master course: Lectures in "Advanced Pharmaceutical Technology"
- ✓ Master course: "Research methodologies"

Experience as visiting research fellow:

- ✓ Worked as research fellow in the Laboratory of Prof Giovanni Filippo Palmieri in the Faculty of Pharmacy, University of Camerino (Italy) – Summer courses 2015, 2016 and 2017.
- ✓ Worked as research fellow in the Laboratory of Prof George Lomonossoff in the John Innes Centre, Norwich (UK) – Summer courses 2017 and 2018.

2013 Procarta Biosystems Norwich, UK

Formulation scientist

Development and evaluation of an oral delivery system for novel antibacterial agents: the oral drug delivery of a new proprietary DNA-based antibiotic, loaded into liposomes, was investigated.

Broad research in the fields of Pharmaceutical Technology, Microbiology, Drug Delivery and Nanotechnology.

2010-2013 University of East Anglia Norwich, UK

PhD scholarship

Development of an oral formulation of Hepatitis B vaccine.

Project in collaboration with different research centres within the Norwich Research Park (UK): University of East Anglia (UEA), John Innes Centre (JIC), Institute for Food Research (IFR). Use of techniques and equipments from these three different institutes.

Cross-disciplinary project covering a broad research area in the fields of Pharmaceutical Technology, Molecular Biology and Integrated Biology of the Gastro-Intestinal tract.

2009-2010 Devon and Exter NHS Foundation Trust Exeter, UK

Hospital pharmacist

- Provide professional, clinical and legal supervision required for the effective management of dispensary services.
- Assist and check sterile, intravenous and cytotoxic drug preparations, providing professional and clinical support required for the effective management of aseptic services.
- Wards rounds: review patient medical histories and to participate in the development of effective medicines management.

2008- 2009 Liverpool John Moores University Liverpool, UK

Post-graduate research scholarship

- Production of solid formulations for oral use: coating of pellets and production of sustained release tablets through compression of coated pellets.

2007–2008 Liverpool John Moores University Liverpool, UK

Undergraduate research scholarship

- Formulation development using the new technology fluid-bed "Innojet®".
- Development of oral dosage forms for immediate and controlled release, fluid-bed granulation and coating, characterisation of granules and tablets, dissolution and disintegration tests.

2006–2007 Pharmacy Cairoli Macerata, Italy

Pre-registration pharmacy training

- 26 weeks of supervised and assessed training in pharmacy for admission to registration.

HONOURS, AWARDS

- Master degree Graduation Ceremony, 8th July 2008 (Italy). **1st Honours (110/110 & honours) and awarded official encomium of the Degree Board for the excellent curriculum of studies.**
- Alberto Berardi, Matt Roberts (2009). "Compressed pellet dosage forms for modified drug release" (poster). *In* IHR (Institute for Health Research) Annual Conference Poster Competition. Liverpool (UK), 15th May 2009. **This poster has won the 1st place Poster Award and Price.**
- Alberto Berardi, George Lomonossoff, David J. Evans, Susan Barker (2012). "Plant based production of an oral vaccine" (poster). *In* APS Industrial Insights Conference, 12th-13th April 2012 (UK). **This poster has won the 1st place Poster Award and Price.**
- Alberto Berardi, Claudio Nicoletti, George Lomonossoff, David J. Evans, Susan Barker (2012) "Hepatitis B oral vaccine: development of a "green" oral formulation and investigation of the oral bioavailability and uptake" (presentation). *In* UEA School of Pharmacy Research Day, 27th July 2012 (UK). **This presentation has won the 2nd place Presentation Award and Price.**
- Alberto Berardi, George Lomonossoff, David J. Evans, Susan Barker (2012). "Green vaccines: development of an oral formulation of an Hepatitis B vaccine" (poster). In UK Pharm Sci APS annual conference 12th-14th September 2012 (UK). **This presentation has won the 1st place Poster Award and Price.**
- **Excellence in teaching award,** 2015, ASU faculty of Pharmacy (Jordan).
- **Awarded for highest number of publications in Scopus**, 2018/2019, ASU faculty of pharmacy (Jordan).

PUBLICATIONS

- **Berardi, A.***, Abdel Rahim, S. *, Bisharat, L., and Cespi, M. (2019). Swelling of Zein Matrix Tablets Benchmarked against HPMC and Ethylcellulose: Challenging the Matrix Performance by the Addition of Co-Excipients. *Pharmaceutics*, 11(10), 513.
- Amayreh, R., Bisharat, L., Cespi, M., Palimieri, G. F., and **Berardi, A.*** (2019). Evaluation of the Disintegration Action of Soy Polysaccharide by Image Analysis. *AAPS PharmSciTech*, 20(7), 265.
- Ascani, S., **Berardi, A.**, Bisharat, L., Bonacucina, G., Cespi*, M., and Palmieri, G. F. (2019). The influence of core tablets rheology on the mechanical properties of press-coated tablets. *European journal of pharmaceutical sciences*, 135, 68-76.
- **Berardi, A.***, and Baldelli, B. F. (2019). Oral delivery of nanoparticles-let's not forget about the protein corona. *Expert opinion on drug delivery*, 16(6), 563.
- Bisharat, L., AlKhatib, H. S., Muhaissen, S., Quodbach, J., Blaibleh, A., Cespi, M., and **Berardi, A.*** (2019). The influence of ethanol on superdisintegrants and on tablets disintegration. *European Journal of Pharmaceutical Sciences*, 129, 140-147.
- **Berardi, A.***, Bombelli, F. B., Thuenemann, E. C., and Lomonossoff, G. P. (2019). Viral nanoparticles can elude protein barriers: exploiting rather than imitating nature. *Nanoscale*, 11(5), 2306-2316.
- **Berardi, A**.*, Bisharat, L., Blaibleh, A., Pavoni, L. and Cespi, M. (2018). A simple and inexpensive image analysis technique to study the effect of disintegrants concentration and diluents type on disintegration. *Journal of Pharmaceutical Sciences,* in press. DOI: 10.1016/j.xphs.2018.06.008
- Aljabali, A. A.*, **Berardi, A**., and Evans, D. J. (2018). Nature's nanoparticles: using viruses as nanomedicines and for bioimaging. In Fundamentals of Nanoparticles (pp. 29-50). Elsevier.
- **Berardi, A.***, Bisharat, L., AlKhatib, H. S. and Cespi, M. (2018). Zein as a Pharmaceutical Excipient in Oral Solid Dosage Forms: State of the Art and Future Perspectives. "*AAPS PharmSciTech*":1-14.
- **Berardi, A.***, Evans, D. J., Baldelli Bombelli, F., and Lomonossoff, G. P. (2018). Stability of plant virus-based nanocarriers in gastrointestinal fluids. "*Nanoscale"* 10:1667-1679.
- Bisharat, L., **Berardi, A.**, Perinelli, D. R., Bonacucina, G., Casettari, L., Cespi, M., AlKhatib, H. S. and Palmieri, G. F. (2018) Aggregation of zein in aqueous ethanol dispersions: effect on cast film properties. "*International Journal of Biological Macromolecules"* 106:360-368.
- **Berardi, A.***, Bisharat, L., Cespi, M., Basheti, I. A., Bonacucina, G., Pavoni, L., AlKhatib, H. S. (2017). Controlled release properties of zein powder filled into hard gelatin capsules. "*Powder Technology"* 320:703-713.
- **Berardi, A.**, Bisharat, L., Bonacucina, G., Casettari, L., Serena Logrippo, Marco Cespi*, Hatim S. AlKhatib, and Giovanni F. Palmieri. "Formulation, swelling and dissolution kinetics study of zein based matrix tablets." *Powder Technology* 310:241-249.

- Bisharat, L., Perinelli, D.R., **Berardi, A.,** Bonacucina, G., Logrippo, S., Darwish Elhajji, F. W., Cespi, M.* and Palmieri, G. F. (2017) "Influence of Testing Parameters on In Vitro Tramadol Release from Poloxamer Thermogels using the Immersion Cell Method. "*AAPS PharmSciTech"* 18:2706-2716. https://doi.org/10.1208/s12249-017-0753-x
- **Berardi, A.**, Lomonossoff, G. P., Evans, D. J., and Barker, S.A.*, (2017) Plant-expressed Hepatitis B core antigen virus-like particles: Characterization and investigation of their stability in simulated and pig gastro-intestinal fluids. "*International journal of pharmaceutics"* 522: 147-156.
- **Berardi, A**.*, Bisharat L. (2016). Nanotechnology systems for oral drug delivery: challenges and opportunities. In S. Massadeh, (editor), *Nanotechnology in Drug Delivery*, Chapter 3, PP 52-84, One Central Press (OCP), UK