

# BAHGAT MOHAMED EZZAT FAYED



## CURRICULUM VITAE

2020

- Postdoctoral researcher, Sharjah institute for medical research, Sharjah University, Sharjah, UAE.
- Postdoctoral researcher, Chemistry of natural and microbial products, National Research center, Cairo, Egypt.

### Personal information

Nationality: Egyptian

Birth Date: Jan, 21, 1982

Marital Status: Married

### Professional Synopsis

Doctorate in pharmaceutical science with 15 years of research experience in the field of molecular microbiology, microbial fermentation and drug delivery.

### Education

A Doctor of Philosophy (Pharmaceutical science) awarded from department of pharmaceutics, Faculty of pharmacy, Cairo University (Egypt) in association with department of biology, York University (UK), (11/2015)

Master of pharmaceutical science (Pharmaceutics and microbiology), Faculty of Pharmacy, King Saud University, Saudi Arabia (05/2011)

B.S. Pharmacy and Pharmaceutical Chemistry, Helwan University, Cairo, Egypt (05/2004). (Excellent with honor)

## Work history

- Nov 2019- present: Postdoctoral researcher, Sharjah institute for medical research, Sharjah University, Sharjah, UAE.
- Feb 2019- present: Postdoctoral researcher, Chemistry of natural and microbial products Department, Egyptian National Research Center, Cairo, Egypt.
- April 2018- Feb 2019: Visiting postdoctoral fellow, Los Angeles Biomedical Research Institute, California, USA
- Feb 2017-Sept 2017: Assistant professor of pharmaceutics, Faculty of pharmacy, Nahda University, Beni- Suef, Egypt (Part time)
- Nov 2015- April 2018: Postdoctoral researcher, Chemistry of natural and microbial products Department, Egyptian National Research Center, Cairo, Egypt.
- April 2013- April 2015: Visiting PhD student – York University- UK
- Nov. 2007- April 2011: Assistant researcher, Pharmaceutics and Microbiology Department, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- Jul. 2005 –Nov 2015: Assistant researcher, Chemistry of natural and microbial products Department, Egyptian National Research Center, Cairo, Egypt.

## Skills sets

- Molecular biology: Isolation and purification of genomic DNA, RNA, plasmid and protein, PCR, Primer designing, Real Time PCR, ELISA, Restriction Digestion, Infusion cloning, protein quantification, Gene cloning, SDS-PAGE, Western blotting, Gene knockout, complex gene expression, Bacterial transformation and conjugation.

- Microbiology: Bacterial fermentation, Microbiol enzymes isolation and purification.
- Drug delivery: Polymeric nano-particles fabrication and characterization.

## Teaching courses:-

Controlled drug release- Community pharmacy- Drug economics.

## Publications

### **1- Production of prebiotic chitooligosaccharide and its nano/microencapsulation for the production of functional food.**

SA Ismail, HS El Sayed, **Bahgat Fayed**. Carbohydrate polymer 234, 115941, 2020

### **2- Design and synthesis of new dug inhibitors of Candida albicans hyphae and biofilm formation by Targeting the TUP1 Transcription Repressor gene**

Rania Hamdy , Sameh Soliman, , Abrar I. Alsaadi, **Bahgat Fayed**, Alshaima Hamoda, Mohamed I. Husseiny and Ashraf S. Ibrahim. European journal of pharmaceutical sciences, 105327, 2020

### **3- Essential oil based design and development of novel anti-candida azoles formulations.**

Rania Hamdy , **Bahgat Fayed** , Alshaima Hamoda , Sameh Soliman. Molecules, 25(6). 1463, 2020.

### **4- Studying the potentiality of using deep artificial neural network in the optimization of the production of antifungal exochitinase in comparison with the response surface methodology**

Shaymaa A. Ismail, Ahmed Serwa, Amira Abood, **Bahgat Fayed**, Siham A. Ismail and Amal M. Hashem, JJBS, 12, 2019.

### **5- The application of multiparticulate microcapsule containing probiotic bacteria and inulin nanoparticles in enhancing the probiotic survivability in yogurt.**

**Bahgat Fayed**, Hoda S. El-Sayed , Amira Abood, , Amal M. Hashemd, Nayra SH. Mehanna. Biocatalysis and agriculture biotechnology, 22, 101391, 2019, 193,137-143, 2018.

### **6- A synbiotic multiparticulate microcapsule for enhancing inulin intestinal release and Bifidobacterium gastro-intestinal survivability.**

**Bahgat Fayed**, Amira Abood, Hoda S. El-Sayed, Amal M. Hashemd, Nayra SH. Mehanna. Carbohydrate polymer, 193,137-143, 2018.

### **7- Optimization of amino acid-stabilized erythropoietin parenteral formula: In vitro and in vivo assessment**

**Fayed BE**, Tawfik AF, Yassin AE. Acta pharmaceutica, 66, 2016

**8- Multiplexed integrating plasmids for engineering the erythromycin gene cluster for expression in *Streptomyces* and combinatorial biosynthesis.**

Fayed B, Ashford DA, Hashem AM, Amin MA, El Gazayerly ON, Gregory MA, Smith MC. Appl Environ Microbiol. 15;81(24):8402-13, 2015

**9- Optimizing microbiologically determined entrapment efficiency of erythromycin in PLGA nanoparticles using different parameters: a preformulatory study.**

Bahgat Fayed, Mohammed Abdallah Ahmed, Magdy A Amin et al.. Inventi Impact: NDDS, (4):219-226, 2015.

**10- A novel streptomyces spp. integration vector derived from the s. venezuelae phage, sv1.**

Fayed B, Younger E, Taylor G, Smith MC. BMC Biotechnol. 30;14:51, 2014

**11- Novel erythropoietin loaded nanoparticles with prolonged in vivo response.**

Fayed BE, Tawfik AF, Yassin AE. J Microencapsul. 29(7):650-6, 2012

**12- Novel assessment of synergism between prebiotic chitooligosaccharide and some commercial prebiotics**

Hoda S. El-Sayed, Shaymaa Ismail, Bahgat Fayed. Journal of microbiology, biotechnology and food sciences, Accepted

## Conference and short visits

**Poster and attendance:** Directing Biosynthesis IV (2015)

The John Innes Centre, Norwich, UK

**Attendance:** ESF-EMBO Synthetic Biology for antibiotic production (2014) Sant Feliu. Spain

**Speaker:** 7th Annual Mini-symposium

Prokaryotes Plus.(2014) York :Molecular Microbiology in York University, UK

**Visit:** Polish academy of science, Lodz, Poland (1 month), 2013

**Poster:** AAPS National Biotechnology Conference (2011), USA

## Title of PhD thesis

Production and formulation of novel antibiotics from *Streptomyces*

## Scholarships

- Fulbright scholar exchange fellowship, USA, 2018-2019 (Funded from department of state, USA)

- Channel PhD scholarship, UK, 2013-2015 (Funded from the Egyptian ministry of higher education)
- Master scholarship, KSA, 2008-2011 (Funded from Prince Sultane international program for master and PHD scholarships)