


Short CV Format

Name:	Mohamed Abbas Shemis	
Date of Birth:	9/7/1966	
Last University Degree – Faculty - University – Country - Graduation Date	Ph.D. (<i>Biochemistry</i>), Cairo Univ., Egypt	
Affiliation:	Department of Biochemistry & Molecular Biology	
Current Position:	<ul style="list-style-type: none"> - Professor - Head of the Department of Biochemistry & Molecular Biology - Head Of research Project Committee- TBRI 	
Contact information:	E-mail: mohamedshemies@tbri.gov.eg - mohamedshemis@gmx.com Tel.: +201001651842	
Experience and Research interest:	<ul style="list-style-type: none"> • Designing of nano- and micro-carrier systems for controlled delivery of therapeutic drugs and genetic materials into targeted cells. • The utilization of nanoparticles to develop novel diagnostic tests for detection of biomarkers of disease and viral infections. • Application of colloidal nanoparticles in life science; this involved investigation of the cellular uptake of nanoparticles and of polyelectrolyte multilayer capsules. • Surface chemistry and bioconjugation of colloidal nanoparticles and their exploitation for medical diagnosis and bio-applications. • Recombinant protein over-expression in <i>E. coli</i> and baculovirus infected insect cells. • Application of DNA vaccine technology in schistosomiasis and development of candidate antipathology vaccine. • Molecular diagnosis of Infectious diseases as: <ul style="list-style-type: none"> - Hepatitis viruses (HCV, HBV & HGV), Cytomegalovirus, Human Papillomaviruses, Swine flu (H1N1). - Parasites (Toxoplasmosis, schistosomiasis). 	

	<ul style="list-style-type: none"> - Bacteria (Tuberculosis, Helicobacter pylori, MRSA). • Molecular diagnosis of Genetic diseases as: <ul style="list-style-type: none"> - Cardiovascular Disorders (CVD), Cystic Fibrosis, Y Chromosome Microdeletion, Fragile-X Chromosome and Philadelphia chromosome. - <i>Using Real Time PCR, PCR, branched DNA, Array and In situ hybridization techniques.</i>
Best Five Relevant Publications and/or granted patents	
<p>1. Lesego L. Tshweuab, Mohamed A. Shemis, Aya Abdelghany, Abdullah Goudac, Lynne A. Pilcher, Nicole R. S. Sibuyi, Mervin Meyer, Admire Dube and Mohammed O. Balogun (2020). Synthesis, physicochemical characterization, toxicity and efficacy of a PEG conjugate and a hybrid PEG conjugate nanoparticle formulation of the antibiotic moxifloxacin. <i>RSC Adv.</i>, 2020, 10, 19770.</p>	
<p>2. AR Mashaal, M Abd El-Hameed, AA El Ray, MA Shemis, M Seyam (2019). Detection Of Occult Hepatitis C Virus Infection In Egyptian Patients Who Achieved A Sustained Virologic Response To Direct-Acting Antiviral Agents. <i>Hepatology</i>. 70, 921A-921A.</p>	
<p>3. Manal Diab, Dalia Salem, Ahmed El-Shenawy, Amira El-Far, Aya Abdelghany, Alaa Reda Awad, Inas El Defrawy, Mohamed Shemis (2019). Detection of high level aminoglycoside resistance genes among clinical isolates of Enterococcus species . <i>Egyptian Journal of Medical Human Genetics</i>. 20 (1), 28.</p>	
<p>4. Abdul-Hafez A, Mohamed T, Omar H, Shemis M and Uhal B (2018). The renin angiotensin system in liver and lung: impact and therapeutic potential in organ fibrosis. <i>J Lung Pulm Respir Res</i>. 5(1): 00160. DOI: 10.15406/jlpr.2018.05.00160.</p>	
<p>5. Walaa Mosaad, Dalia Ibrahim Ramadan, Mohamed Abbas Shemis (2016). Prevalence of mutations within major hydrophilic region of hepatitis B virus and their correlation with genotypes among chronically infected patients in Egypt. Arab Journal of Gastroenterology 47 17(1).</p>	
<p>Other information:</p>	<p>PI, Co-Pi and investigator in more than 22 research projects sponsored by international and national agencies.</p> <p><u>Recent Research Projects (PI)</u></p> <p>Academy of Scientific Research and Technology (2020): Development and Validation of a National Diagnostic Assay for Rapid Detection of COVID19</p> <p>Academy of Scientific Research and Technology (2018-2020): “Scaling-up, Production & commercialization of Real Time-PCR kit for HBV diagnosis”;</p> <p>STDF – DAAD, ID: 23052 (2018): “Assessment of potential synergistic or antagonistic toxicity mechanisms during co-exposition of in vitro models towards cerium dioxide nanoparticles and environmental chemicals/pharmaceuticals”.</p> <p>Ministry of Scientific Research `Egypt` & National Research Foundation `South Africa` ID:17-2-12 (2013-2018):”Nanotechnology-based drug delivery for treatment of multi-drug-resistant tuberculosis”</p> <p>Academy of scientific Research and Technology (2014-2015): "Development of a Novel Assay for Direct Quantification of</p>

	<p>Unamplified Hepatitis C Virus RNA Using Gold Nanoparticles and Catalytic Signal Amplification”.</p> <p>Spanish Agency for International Development Cooperation “Aecid” (2012-2015):” Development of Gold Nanoparticle-Based Colorimetric Assay for the Direct Detection of liver Cancerous Cells and biomarkers”.</p> <p>STDF-DAAD-ID4292(2013): “Multilayer Polyelectrolyte Microcapsules: a Novel Tool for Controlled Delivery of Interferon-alpha in Chronic HCV Infected Patients”.</p>
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