



## FACULTY FULL NAME: Nada S. Daifalla

POSITION: Assistant Professor

### Personal Data

Nationality | Canada

Date of Birth |

Department | Basic Sciences/Biology

Official UoD Email | nsDaifalla@iau.edu.sa

Office Phone No. |

### Language Proficiency

Language	Read	Write	Speak
Arabic	Proficient	Proficient	Native
English	Proficient	Proficient	Fluent
Others/ French	Beginner	Beginner	Beginner

### Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2009	Ph.D.	Canada	University of Calgary
1997	M.Sc.	Sudan	University of Khartoum
1994	B.Sc.	Sudan	University of Khartoum

### PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Assessment of the immunogenicity and protective efficacy of <i>Leishmania Donovanii</i> superoxide dismutase and peroxidoxins and the role of peroxidoxin gene cluster in parasite survival
Master	Characterization of the serologic responses to <i>Leishmania chagasi</i> specific cloned antigen (rk39).
Fellowship	On the acute toxicity of two Sudanese scorpions: <i>Leiurus quinquestriatus</i> and <i>Buthus occitanus</i> on albino mice and toads. (BSc Honors)

### Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
----------	---------------------------	------



Assistant Professor		Imam Abdulrahman Bin Faisal University	KSA	2016- present
Post doctorate		The Forsyth Institute	USA	2012-2016
Post doctorate		University of Calgary	Canada	2010-2012
Graduate Student		University of Calgary	Canada	2003-2009
Research Associate		Infectious Disease Research Institute	USA	2001-2003
Lecturer		Endemic Diseases Research Institute, University of Khartoum	Sudan	1997-2001

#### Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date

#### Scientific Achievements

##### Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication

##### Refereed Scientific Research Papers Accepted for Publication

#	Name of Investigator(s)	Research Title	Journal	Acceptance Date
1	Nira Pollock, Rakesh Dhiman, <b>Nada Daifalla</b> , Maha Farhat, and Antonio Campos-Neto	Discovery of a unique <i>Mycobacterium tuberculosis</i> protein through proteomic analysis of urine from patients with active tuberculosis.	Microbes and Infection	2018
2	Bayih AG, <b>Daifalla N</b> , and Gedamu L.	Immune response and protective efficacy of a heterologous DNA-protein immunization with <i>Leishmania</i> superoxide dismutase B1.	Biomed Research International	2017
3	Carolina S. Lopes, <b>Nada Daifalla</b> , Bikul Das, Valdo Dias da Silva, and Antonio Campos-Neto	Mesenchymal stem cells as a unique infectious niche for <i>Leishmania</i> .	PLoS ONE	2016
4	Claudia Abeijon, <b>Nada Daifalla</b> , Greice Krautz-	Immunogenicity in dogs and protection against visceral leishmaniasis	Trials in Vaccinology	2016



	Peterson, Stefano Pizzirani, Gillian Beamer, Neuza M. Galinna, Isaias Raw & Antonio Campos- Neto.	induced by a 14kDa <i>Leishmania infantum</i> recombinant polypeptide.		
5	<b>Daifalla N</b> , Genetu A, Gedamu L.	Differential immune response against recombinant <i>Leishmania</i> <i>donovani</i> peroxidoxin 1 and peroxidoxin 2 proteins in BALB/c mice.	Journal of Immunological Research	2015
6	<b>Daifalla NS</b> , Mark J. Cayabyab, Emily Xie, Hyeun Bum Kim, Saul Tzipori, Philip Stashenko, Margaret Duncan, and Antonio Campos-Neto.	Commensal <i>Streptococcus mitis</i> is a unique vector for oral mucosal vaccination.	Microbes and Infection	2015
7	Bayih AG, <b>Daifalla NS</b> , Gedamu L.	DNA-protein immunization using <i>Leishmania</i> peroxidoxin- 1 induces a strong CD4+ T cell response and partially protects mice from cutaneous leishmaniasis: role of fusion murine granulocyte-macrophage colony-stimulating factor DNA adjuvant.	PLoS Neglected Tropical Diseases	2014
8	<b>Daifalla N</b> , Genetu A, Gedamu L.	Protection of BALB/c mice against <i>Leishmania</i> <i>major</i> infection by immunization with iron superoxide dismutase B1 in the presence of Th1 adjuvant.	Journal of Experimental. Parasitology	2012
9	<b>Daifalla N</b> , Genetu A, Gedamu L.	Immunogenicity of <i>Leishmania donovani</i> iron superoxide dismutase B1 and peroxidoxin 4 in BALB/c mice: the contribution of Toll-like receptor agonists as adjuvant.	Journal of Experimental. Parasitology	2011



10	Mukherjee S, Kashino SS, Zhang Y, <b>Daifalla N</b> , Rodrigues V Jr, Reed SG, Campos-Neto A.	Cloning of the gene encoding a protective <i>Mycobacterium tuberculosis</i> secreted protein detected in vivo during the initial phases of the infectious process.	Journal of Immunology	2005
11	Mukherjee S, <b>Daifalla N</b> , Zhang Y, Douglass J, Brooks L, Vedvick T, Houghton R, Reed SG, Campos-Neto A.	Potential serological use of a recombinant protein that is a replica of a <i>Mycobacterium tuberculosis</i> protein found in the urine of infected mice.	Clinical Diagnostic Laboratory Immunology	2004
12	Mukherjee S, <b>Daifalla N</b> , Liu C, Campos-Neto A.	Alternative approach to express <i>Mycobacterium tuberculosis</i> proteins in Escherichia coli.	Biotechniques	2003
13	Iman N. Satti, H.Y. Osman, <b>N.S. Daifalla</b> , S.A Younis, E.A.G. Khalil. E.E. Zijlstra, A.M Elhassan, and H.W. Ghalib.	Immunogenicity and safety of autoclaved <i>Leishmania major</i> plus BCG vaccine in healthy Sudanese volunteers.	Vaccine	2001
14	Abdalla NM., Ibrahim M.E., El-Hassan A.M., Osman O.F., <b>Daifalla, N.S.</b> , Barker C., Lambson B., Miles M., Mauricio I., Magzoub M.M.	Seroepidemiological study on leishmaniasis in the Nuba Mountain, Sudan.	Türkie Parazitoloji Dergisi	2000

#### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
	Nada Daifalla, Abebe Genetu, Lashitew Gedamu	Leishmania Antioxidants: Peroxidoxin 1 as a Promising Target for Vaccine Development	
	Nada Daifalla	Immunogenicity of Leishmania peroxidoxins	

#### Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
---	---	----------------	-------------




#### Current Researches

#	Research Title	Name of Investigator(s)

#### Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	2 <sup>nd</sup> International Vaccine Summit, invited speaker	Dubai, UAE, 2017	Invited Speaker, Panel moderator
2	Alberta Graduate Conference,	University of Calgary, 2011	Presenter
3	First Scientific Meeting, Institute of Endemic Diseases	University of Khartoum, Sudan, 1999	Presenter
4	46 <sup>th</sup> annual meeting of American Soc. of Trop. Med. & Hyg.	Orlando, USA, 1997	Presenter

#### Membership of Scientific and Professional Societies and Organizations

- The Royal Society of Tropical Medicine and Hygiene (UK)
- American Society of Tropical Medicine and Hygiene (USA)
- Sudanese Society of Tropical Medicine and Hygiene (Sudan)

#### Teaching Activities

##### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
	Biology	102	4 Lec., 2 Lab
	Cellular, Molecular and Microbial Biology	CMMB٤٥١	1 lab

#### Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

BIO١٠٢: Human Biology, theoretical and laboratory components
CMMB٤٥١: Laboratory component for senior undergraduates



### Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Lectures in Immunology and Molecular Biology	Master Qualifying Program	1
2			

### Brief Description of Postgraduate Courses Taught: (Course Title – Code: Description)

1	Lectures for students in Master Qualifying Program, U of K
2	

### Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad.	From	To

### Guest/Invited Lectures for Undergraduate Students

#	Activity/Course Title and Code	Subject	College and University or Program	Date

### Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To

### Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date

### Ongoing Research Supervision

#	Degree Type	Title	Institution	Date



Administrative Responsibilities, Committee and Community Service (Beginning with the most recent)

Administrative Responsibilities

#	From	To	Position	Organization

Committee Membership

#	From	To	Position	Organization

Scientific Consultations

#	From	To	Institute	Full-time or Part-time

Volunteer Work

#	From	To	Type of Volunteer	Organization
	2014	2016	Biosafety officer, The	Forsyth Institute, USA
	2015	2015	Ambassador with DIGITS to promote Science, Technology, Engineering & Math (STEM) professions in schools	DIGITS, USA

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Teaching
2	<b>Stem cell</b> research, <b>antigen discovery</b> , <b>vaccines &amp; diagnostics</b> development, and <b>animal</b> experiments
3	<b>Immunology and molecular biology techniques:</b> Flow cytometry, immunohistochemistry & confocal microscopy, ELISA, DOT plot, ELISPOT, cell and tissue culture, <i>in vitro</i> and <i>in vivo</i> research, Protein expression & purification, DNA/RNA extraction & hybridization, cloning, RT-PCR, RNAi, mutagenesis, gene knockout



4	<b>Lab safety</b> including biohazard & radioactive handling and disposal.
5	Computer and Information technology: Microsoft office, SPSS for windows, Flow Jo and Zen software, STATA,

---

Last Update

11./27/2018