



Salma LAJHAR

سالمة عبدالله ابسيس لجهر
Bsc, Msc, PhD | MOLECULAR MICROBIOLOGIST

CONTACT

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OVERVIEW

A PhD qualified Microbiologist with substantial skills in clinical and molecular microbiology research via just under six-years' postgraduate research studies with CSIRO (Brisbane, Australia) related to both my Master of Science and PhD academic studies with Griffith University (QLD).

I also possess practical extensive work experience including 3 years as a staff member at UQ university, 3+ years as Laboratory Technician/Senior Laboratory Technician with a leading medical laboratory (Libya); and 4 years as a Laboratory Demonstrator with the College of Medical Technology (Derna, Libya). Currently, I am the head of the laboratory medicine department, and I am also engaged as a lecturer of fundamentals microbiology and clinical training at the College of Medical Technology, Derna, Libya. In addition, I am teaching principles of research and academic writing for fourth year students (all departments).

EDUCATION

Doctor of Philosophy – PhD, Molecular Microbiology

Griffith University | School of Natural Sciences | Brisbane QLD

2013 – 2017

Thesis: *Phenotypic and Genotypic Characterisation of Escherichia coli O26 Strains Isolated from Cattle and Clinical sources in Australia*

Scholarship: Griffith Sciences Postgraduate Research Scholarship (2016)

Grant: Travel Grant Scheme, Griffith University, VTEC, USA (2015)

Master of Science – Second Class Honours, Molecular Microbiology

Griffith University | School of Natural Sciences | Brisbane QLD

2011 – 2012

Thesis: *Comparison of epidemiologically linked Campylobacter jejuni isolated from human and poultry sources*

Grant: Travel Grant Scheme, CSIRO, ASM, Australia (2014)

Bachelor of Laboratory Medicine

Higher Institute of Medical Technology | Derna, Libya

2002 – 2006

Thesis: *Sero-prevalence of toxoplasma gondii infection in pregnant women in Derna, Libya*

Subjects: Bacteriology, Mycology, Virology, Immunology, Biochemistry, Haematology, Blood banking, Medical Genetics, Histopathology and Parasitology

Grant: Libyan Government Scholarship (On merit) to pursue Masters and PhD studies in the area of Microbiology

Professional Development Training Programs

Biosafety and working in a PC2 Lab | Biosafety and working with GMOs | UV Safety and Regulations | GHS Awareness | Fire & Evacuation (FEP) | Principles of scientific writing

PUBLICATIONS

- Lajhar SA, Brownlie J, Barlow R. Characterization of biofilm-forming capacity and resistance to sanitizers of a range of E. coli O26 pathotypes from clinical cases and cattle in Australia. BMC microbiology. 2018 Dec;18:1-5. | Publication Abstract Link: <https://www.ncbi.nlm.nih.gov/pubmed/29739319>
- Lajhar SA, Brownlie J, Barlow R. Survival capabilities of Escherichia coli O26 isolated from cattle and clinical sources in Australia to disinfectants, acids and antimicrobials. BMC microbiology. 2017 Dec;17:1-0. | Publication Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5333398/>
- Lajhar SA, Jennison AV, Patel B, Duffy LL. Comparison of epidemiologically linked Campylobacter jejuni isolated from human and poultry sources. Epidemiology & Infection. 2015 Dec;143(16):3498-509. Publication Abstract Link: <https://www.ncbi.nlm.nih.gov/pubmed/25936829>

CONFERENCE AND POSTERS PRESENTATIONS

Lajhar SA, Brownlie J, Barlow R. 2015. VTEC. Boston, USA
Lajhar SA, Patel B, Duffy LL. 2014. ASM. Melbourne, Australia
Oral Presentation

Lajhar SA, Brownlie J, Barlow R. 2015. Student Symposium, Griffith University, Australia.
Lajhar SA, Brownlie J, Barlow R. 2014. CSIRO, Brisbane, Australia
Lajhar SA, Patel B, Duffy LL. 2012. CSIRO, Brisbane, Australia

PAST WORK POSITIONS

- Head of the Department of the laboratory Medicine | College of Medical Technology, Derna, Libya 2022- currently
- Staff member at the University of Queensland | St Lucia, Brisbane QLD 2018-2022
- Postgraduate Student Researcher | CSIRO, Coopers Plains QLD 2011-2012 then 2013-2017
- Senior laboratory technician | Almadina Medical Laboratory, Derna Libya 2008-2010
- Demonstrator at the Department of the Laboratory Medicine, | College of Medical Technology, Derna, Libya 2006 – 2010

PAST WORK EXPERIENCES

- Handled and maintained laboratory equipment such as: Qubit fluorometer, PCR thermocycler, UV transilluminator, NanoDrop, TapeStation system; QuantStudio digital PCR; fluorescent microscopy (Basic knowledge), microplate reader, PH meter, biological safety cabinet, centrifuge, autoclave, oven, incubator and spectrophotometer
- Planning and Writing research papers
- Reviewing papers for medical journals and conferences
- Proficiently used of Bioinformatics Softwares such as Geneious and BioNumerics; and Microsoft Office applications such as Word, Excel and PowerPoint
- Followed standard operating procedures and Health and Safety documents
- Proficiently conducted the followings
 - Bacterial culture, isolation, identification and maintenance
 - DNA and RNA Extraction and purification, cDNA synthesis
 - PCR, dPCR, ELISA, RFLP, PFGE, HGMF, preparing primers, and sample preparation for sequencing
 - Sample preparation for an electron-microscopic examination
 - Bacteriophage induction, isolation, lysogen construction and characterization of phage insertion sites
 - Characterisation of planktonic and biofilm for their susceptibility to antimicrobial agents
 - Sequence analysis for MLST, plasmid, SNP, MLVA, virulence genes, LOS and flaA typing, phylogenetic relationship and antibiotic genotype
 - Assisted students to gain practical and theoretical skills in a range of laboratory techniques widely used in microbiology, serology, blood banking, biochemistry and biomolecular science
 - Contributed to students understanding to the health and safety requirements in the laboratory environment.
 - Ensured laboratory is well-stocked and resourced.
 - Set, marked and supervised assessments.
 - Communicated proficiently with colleagues, doctors and patients.
 - Trained new lab staff.

NOTABLE ACHIEVEMENTS

Department of laboratory Medicine | College of Medical Technology, Derna, Libya

Currently

Notable Achievements

Appointed as the head of the Department of Laboratory Medicine

Appointed to write a thesis guideline for undergraduate students and design forms for thesis assessment

Postgraduate Student Researcher | CSIRO, Coopers Plains QLD

Associated with PhD in Microbiology

08/2013 – 12/2017

Associated with Master of Science in Molecular Microbiology

02/2011 – 12/2012

Notable Achievements:

- Delivered Conference presentations in the USA and Australia and achieved publications in peer-reviewed journals (BMC Microbiology and Epidemiology and Infection).
- Gained expansive innovative science and technology laboratory experience with at CSIRO's Agriculture & Food research facility over an extended period.

Almadina Medical Laboratory, Derna Libya

Notable Achievement:

Senior Laboratory Technician

01/2008 – 02/2010

Laboratory Technician

08/2006 – 12/2007

- Received a competency-based promotion to the position of Senior Laboratory Technician in Dec 2007.
- Developed and followed Standard Operating Procedures (SOPs).
- Developed and implemented a 'Waste Disposal' policy.

Higher Institute of Medical Technology, Derna Libya

Demonstrator – Department of Laboratory Medicine

11/2006 – 02/2010

Notable Achievement:

- Appointed to this full-time role following the completion of my Bachelor of Laboratory Medicine degree.

Al-Wahda Central Hospital, Derna Libya

Clinical Placement – Pathology Department

09/2004 – 04/2006

Notable Achievement:

- Developed a broad understanding of the various experimental techniques conducted in various fields including microbiology, parasitology, serology, hematology, blood banking, histopathology and biochemistry.

REFEREES

Dr Robert Barlow

Research Microbiologist

CSIRO Division of Food Safety & Stability

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Mrs Lesley Duffy

Research Microbiologist

CSIRO Division of Food Safety & Stability

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Dr Jeremy Brownlie

Deputy Head, School of Natural Sciences

Griffith University

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Mrs Natalie

Friend

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