

## OVER VIEW OF SCIENTIFIC & PROFESSIONAL EXPERIENCE

### PROFESSOR SABAH A. A. JASSIM

*B.Sc., M.Phil., Ph.D., M.I.BIOL., C.I.BIOL.*

March 27, 2011, Sabah was ranked in *The top 13 of Power 500 the World's Most Influential Arabs/Middle East*: <http://arabic.arabianbusiness.com/special-reports/59512/>

Dr. Sabah A. A. Jassim, a Canadian and British citizen, obtained his *M.Phil* in dairy and food microbiology in 1984 at Nottingham University, UK, and obtained his *Ph.D.* in medical microbiology in 1988 at Loughborough University of Technology, UK. Dr. Jassim completed a Faculty Research Fellowship in Microbiology at Nottingham University, UK and was Executive Director for JSD Technologies Limited, University of Nottingham.

He is a Member and Chartered Biologist of the Institute of Biology, UK (1982 to date), and a member of the Society for Applied Microbiology, UK. He was president of the Arab Biotechnology Network <http://biotech.astf.net/> from 2008-2011.

Dr. Jassim has been actively involved throughout his career in bacteriophage display technologies, rapid bacterial detection, rapid drug susceptibility testing, bio-control and alternative therapy, molecular detection and characterization of bacterial pathogens, control of pathogens in environmental industries, microbial bioluminescence, bacterial biofilm formation and deletion, bacterial stress response, microbial physiology and pathogenicity.

For the last decade he has been involved in research on advanced phage biotechnology for rapid bacterial detection, food preservative, food bioprocess, and as an animal growth promoters alternative to the antibiotics; novel antimicrobial agents from medicinal plants; quality control of herbal medicines; novel medicinal camelid IgG products; microbial biodegradation; methods to control harmful algal blooms; algae biofuels; cleanup oil spills; industrial wastewater cleanup to be reused for recreational and agricultural industries; phyto anti-nematodes; and many more (see CV below).

Dr. Jassim holds 17 PCT, US and/or European patents ([http://patent.ipexl.com/inventor/Jassim\\_Sabah\\_A\\_A\\_1.html#.URx1U-r31UE.mailto](http://patent.ipexl.com/inventor/Jassim_Sabah_A_A_1.html#.URx1U-r31UE.mailto)) and has published numerous full, peer-reviewed papers and abstracts and is actively researching and publishing on phage and camelid biotechnologies. He has received many international grants awards (see below).

Dr. Jassim brings considerable experience and innovations in the areas of phage technology, camelid biotechnology and antimicrobial herbal medicine. He has also helped in scientific editing as reviewer for several microbiology journals and granting agencies.

### SIGNIFICANT CONTRIBUTIONS

**I. Faculty Visiting Lecturer and Research Fellow: Department of Pharmacy and Biomolecular Science, University of Nottingham, Nottingham, UK. March 1988 - August 1995.**

Duties and responsibilities:

1. Supervised 3 Ph.D. theses, 5 M.Sc. theses and 9 research scientists in different aspects of microbiology and molecular biology
2. Taking charge day-to-day to ensure the safe and satisfactory organization and running of microbiology laboratories level II.
3. Isolation and purification of anti-microbial components from medicinal plants

4. Investigation of rapid bacterial detection via bacteriophage amplification in pharmaceutical water, chicken, eggs, blood and human body fluids
5. Investigating the application of genetically-engineered bioluminescent bacteria and bacteriophage for (A) rapid microbial detection in food sample adherence/biofilms and phagocytosis and (B) estimate biocide killing potential
6. Studies of coagulase-negative staphylococci infection in peritonitis complicating continuous ambulatory peritoneal dialysis patients. Research carried-out between School of Pharmacy and Queen's Medical School at University of Nottingham Executive Director (November 1993 - 1995) for JSD *Technologies Limited*. University of Nottingham, University Park, Nottingham, NG7 2RD, UK. JSD Technologies Limited specializes in the development of rapid diagnostic, monitoring and bio-control systems for use in the detection, measurement and control of bacterial contamination on a wide range of manufacturing processes, end products and environments

**II. Adjunct Professor Advanced Microbiology: Department of Food Science, University of Guelph, Guelph, Canada. Sept 1995–Sept 1997.**

Duties and responsibilities:

1. Graduate teaching in antimicrobial agents and Food Microbiology
2. Supervision of M.Sc., and Ph.D. students and research assistant team
3. Directing research in the following areas:
  - i. Novel anti-viral (anti-HIV) /anti-bacterial/anti-fungal agents from Canadian plants
  - ii. Rapid microbial detection methods
  - iii. Novel and rapid methods for the detection of cell wall deficient forms
  - iv. Attachment and biofilm formation of bacteria to food and clinical contact surfaces
  - v. Novel bacteriophage-breeding system

**III. Director of Research and Development Julphar Pharma GmbH, Max-Woelm-Straße 4, D-37269 Eschwege, Germany Sept 1997 – Nov 1998**

**IV. Research Professor and Head of Microbiology Department, Zayed Complex for Herbal Research and Traditional Medicine, General Authority for Health Services, Emirate of Abu Dhabi, UAE. December 1999 – 2008.**

Duties and responsibilities:

1. Established *State-Of-The-Art* Level II Microbiology Laboratory
2. Reporting to the General Director
3. Quality Control Management Representative
4. Overview of Research Program
  - i. Molecular detection and characterization of herbal-borne bacterial pathogens
  - ii. Control of pathogens in herbaceutical industries
  - iii. Developing novel antimicrobial agents from medicinal plants
  - iv. Bacterial stress response
  - v. Microbial physiology and pathogenicity
  - vi. Novel camel IgG development of immunotherapy
  - vii. Bacteriophage display technologies and therapeutically application
5. Research and development into the following areas:
  - i. Isolation and purification of antimicrobial active components from different medicinal plants/herbs
  - ii. Developing anti-viral/anti-bacterial/anti-fungal agents from medicinal plants
  - iii. Anti-TB-disease
  - iv. Anti-Enterohemorrhagic *Escherichia coli* (EHEC) serotype O157:H7
  - v. Anti-MRSA as biocontrol/therapeutic agents
  - vi. Investigation the natural immune-therapy from camel IgG
  - vii. Falcon's herbal treatment against endoparasites "*Serratospiculum* sp."

- viii. Rapid microbial screening - bacterial detection *via* bacteriophage amplification
- 6. Medicinal Herb Production. List of medicinal herbal products developed in the Microbiology Department:
  - i. Seventh nerve paralysis-*Ointment*
  - ii. Acne-*Cream*
  - iii. Eczema-*Ointment*
  - iv. Alopecia Areata-*Ointment*
  - v. Anthelmintic/benign-prostatic hyperplasia/bladder stone-*Powder*
  - vi. Herpes simplex virus-*Ointment*
  - vii. Anti-tussive, expectorant, and anti-asthma-*Teabag*
  - viii. Anti-depressant-*Teabag* ix. Anti-diabetic type 1 & 2-*Teabag*
  - x. Anti-convulsion activity-*Oil*
  - xi. Skin burn-*Oil*
  - xii. Immuno-stimulant
  - xiii. Anti-oxidant
  - xiv. Anti-gastric ulcer xv. Anti-diuretic
  - xvi. Estrogenic activity
  - xvii. Cardiac: BP & HR force contraction
  - xviii. Anti-hypertension
  - xix. Erectile dysfunction
  - xx. Nutraceuticals-dates supplemented with active camel IgG
  - xxi. Kombucha tonic-drinkable
- 7. Quality Control Zayed Complex for Herbal Research and Traditional Medicine 8. Supervise staff working in the Department of Microbiology in the areas of:
  - i. Research and development
  - ii. Microbial quality control
  - iii. Sterility test
  - iv. Organize microbiology training programs
- 9. Supervise and organize training programs in ISO Q.C. and management system for all staff to ensure the safe and satisfactory organization
- 10. Advisor for research committee on science and microbiology
- 11. WHO monographs: Writing monographs for medicinal plant antimicrobial activities
- 12. Member in the UAE's Infection Control Committee. Ministry of Health, UAE
- 13. Manufacturing Area: Supervise in the design of the manufacturing area at Zayed Complex for Herbal Research and Traditional Medicine
- 14. International link: Maintaining good contacts or working closely with scientific group leaders in the European and North American Universities, organizations, institutions and herbaceutical and pharmaceutical industries related to projects and programs in research and scientific knowledge in *Advance Microbiology, Alternative Medicine and Pharmaceutical Molecular Microbiology*
- 15. Scientific Presentation: Presenting scientific papers in the national and international conferences and meetings related to the advance/complementary medicine and herbaceutical technologies and the new generic biopharmaceuticals industries and biomolecular sciences
- 16. June 2003: I obtained ISO Lead Auditor Certificate. UAE Accreditation Board Certificate No. LA/2003/UAE/05/5

**V. Visiting Professor, Institute of Bioscience, Universiti Putra Malaysia, Kuala Lumpur, Malaysia. Jan 2007- Feb 2011.**

Duties and responsibilities: Supervising post-doctors working in innovative bacteriophage biotechnology- Bacteriophage Design.

**VI. CEO: Applied Bio Research Inc. Aug 2012 – Present. Windsor, Canada.**  
<http://appliedbioresearch.co/>

**VII. Adjunct Professor, Civil and Environmental Engineering, University of Windsor, Canada. July 1, 2013- Present.**

Duties and responsibilities: Supervising Ph.D. student working in innovative technology for cleaning up industrial water.

**VIII. Invited Lecturer**

1. December 14, 2003: Viral Infection and Drug Development. Graduate Seminar Course for Cell and Molecular Biology M.Sc. Project students. Al Ain University, UAE.
2. November 1-10, 1996: Lecture series "Developing of diagnostic kits for the food and pharmaceutical industries. New Horizons diagnostics corporation, Columbia, Maryland, USA.
3. June 7, 1995: Lecture title "Rapid *E. coli* O157: H7 detection from farm and abattoir samples via phage amplification". Ontario Cattlemen's Association, 130 Malcolm Rd., Guelph, Ontario, Canada
4. February 13, 1995: Lecture title "Rapid Bacterial Pathogen Detection Using Phage Amplification". Ministry of Agriculture, Food and Rural Affairs (OMAFRA) research employees at OMAFRA Food Laboratory Services Branch, 95 Stone Rd., Guelph, Ontario, Canada
5. September 18 - Dec. 2, 1993: Lecture series "The Antimicrobial Agents" given to first year undergraduate students of Department of Applied Biochemistry and Food Science University of Nottingham England.
6. September 1, 1993: Lecture title "Rapid Bacterial Detection in Pharmaceutical Water Sample". Glaxo Group research employees at Glaxo Group Research Limited, Park Road, Ware, Hertfordshire, UK., SG12 0DP.

**IX. Workshop and Teaching** I have organised the following workshops and teaching courses:

1. November 24, 1992: Rapid bacterial detection via bacteriophage amplification. For Glaxo Group Research employees at Glaxo Group Research Limited, Park Road, Ware, Hertfordshire, UK, SG12 0DP.
2. September 4, 1992: Rapid methods of use in the food and pharmaceutical industries. For Amersham employees at Amersham International plc, Cardiff Laboratories, Cardiff, UK.
3. August 30 – 31, 1990: Construction and demonstration of the effect of different samples of the ethidium bromide gradients on purification and biological transformation of closed circular DNA of *E. coli*. For Boots Pharmaceutical employees at Boots Company plc Nottingham, UK.
4. October 16-18, 1989: Construction and demonstration of the application of genetically engineered bioluminescent bacteria for rapid detection and determination of biocide agents in water. For pharmaceutical employees at Amersham International plc, Cardiff Laboratories, Cardiff, UK.
5. March 3 – 5, 2008: Biotechnology in the Arab World. Kempinski Hotel - Amman – Jordan. Sabah Jassim has presented at the conference the following Biotechnologies:
  - i. *Bacteriophage Advanced Biotechnology: Microbial rapid diagnostic, biocontrol and therapy,*
  - ii. *Camelid Biotechnology: New approaches to drug discovery*
  - iii. *The Potential Development of Phyto Anti-HIV*
  - iv. *Phytobiotechnology: Development of inexpressive and environmentally friendly herbal anti-nematode and anti-fungal agents for agricultural field*

# CURRICULUM VITAE

**PROFESSOR SABAH A. A. JASSIM**

*B.Sc., M.Phil., Ph.D., M.I.BIOL., C.I.BIOL.*

*This document was last updated January 2017*

## CURRENTLY

**CEO: Applied Bio Research Inc.** <http://appliedbioresearch.co/>

Privately held company formed in order to commercialize various technologies

**Adjunct Professor, Civil and Environmental Engineering, University of Windsor,  
Ontario Canada**

*E-mail:* [prof.jassim@yahoo.co.uk](mailto:prof.jassim@yahoo.co.uk)

## EDUCATION AND QUALIFICATIONS

**September 1988**

Loughborough University of Technology, UK.  
Degree awarded **Doctor of Philosophy** (Ph.D.)  
in Medical Microbiology.

Thesis Title: "Aspects of staphylococcal growth,  
haemolysis and phagocytosis"

[https://openlibrary.org/books/OL13931223M/Aspects\\_of\\_staphylococcal\\_growth\\_haemolysis\\_and\\_phagocytosis](https://openlibrary.org/books/OL13931223M/Aspects_of_staphylococcal_growth_haemolysis_and_phagocytosis)

**August 1984**

University of Nottingham, Nottingham, UK.  
Degree awarded **Master of Philosophy**  
(M.Phil.) In Dairy and Food Microbiology.

Thesis Title: "Growth and toxin production of  
Staphylococcus aureus in dairy products".

## PROFESSIONAL EXPERIENCE, UNIVERSITY & ACADEMIC ACHIEVEMENTS

**2007-Feb 2011**

**Visiting Professor Universiti Putra Malaysia.**  
<http://www.upm.edu.my/>

**February 2007-2008**

**Supervisor (PI)** for a post-doc at The Arab  
Science and Technology Foundation (ASTF):  
<http://www.astf.net/>: Development of a novel herbal  
agent to control plant parasitic nematodes and  
plant mould pathogens. Funded by an ASTF  
grant.

- February 2008-2010** **Supervisor (PI)** for a post-doc at Universiti Putra Malaysia: Rapid detection method for *E.coli* O157:H7. Funded by an ASTF grant.
- 2008-2010** **Supervisor (PI)** Investigation of the super-immunity of camels. Funded by an ASTF grant.
- 2005-2010** **Scientific Reviewer** for ASTF: <http://www.astf.net/>
- 1995-1997** **Adjunct Professor** at University of Guelph Canada, Department of Food Sciences.  
[http://www.uoguelph.ca/research/assets/communications/magazines/HTML\\_MAGS/newtech/firefly.html](http://www.uoguelph.ca/research/assets/communications/magazines/HTML_MAGS/newtech/firefly.html)
- 1988-1995** **Faculty Research Fellow** at Nottingham University, Department of Pharmacy and Department of Food Science.

## RESEARCH ACTIVITIES

- Dec 1999 – March 2008** **Research Professor** Head of Microbiology Department, General Authority for Health Services for the Emirate of Abu Dhabi, Zayed Complex for Herbal Research and Traditional Medicine, Abu Dhabi – UAE.
- November 1998 – Nov. 1999** PI of Joint Venture and Member of Board of Directors of Bio-Horizon Diagnostic Limited. Maryland, USA and Dubai, UAE.
- September 1997 – Nov. 1998** Director of Research and Development Julphar Pharma GmbH, Max-Woelm-Straße 4, D-37269 Eschwege, Germany.

## GRANTS / AWARDS

- March 2009** US \$96,000 ASTF, UAE. Research funded: Establishment of novel camel's embryonic stem cell-derived erythroid progenitor cell lines able to produce large-scale functional red blood cells for consistent large-scale production of a hemoglobin-based oxygen carrier for human and animal treatment.
- March 2009** US \$50,000 ASTF, UAE. Research funded: Development of a novel phytodrug for treating nematodes in domestic grazing ruminants.

<b>March 2009</b>	US \$50,000 ASTF, UAE. Research funded: Novel industrial biotechnology methods for production of heparin.
<b>July 2006</b>	US \$96,000 ASTF, UAE. Research funded: Phage design biotechnologies and novel phyto antiviral agents
<b>June 7, 1995</b>	\$5,000 Ontario Cattlemen's Association, 130 Malcolm Rd., Guelph, Ontario, Canada.
<b>13 August 1994</b>	£60,000 Department of Trade and Industry (DTI, England), the Department for Enterprise, Small Firms Merit Award for Research and Technology (SMART) 1994 Stage 2 Winner for research on <i>Virus-Breeding</i> .
<b>10 August 1993</b>	£45,000 Department of Trade and Industry (DTI, England), the Department for Enterprise, Small Firms Merit Award for Research and Technology (SMART) 1993 Stage 1 Winner for research on <i>A Novel and Rapid Method of Salmonella Detection</i> .
<b>1 December 1993</b>	£750 Award prize. The Nottingham University performance.

## **INTERNATIONAL PATENT APPLICATIONS**

*Sabah Jassim is the principal inventor for several international patent applications such as camelid anticancer, phage design, phage-breeding, rapid bacterial detection, phyto anti-viral agents, phyto anti-nematodes and phyto antifungal, etc. The phage amplification technology patents are based on three patents (#1-4 below) owned by Merck KGaA of Darmstadt Germany, who acquired them from Amersham International plc in April 1995.*

## **SUMMARY OF PATENT APPLICATIONS**

### **LINK TO SUMMARY**

- 1. WO1992/002633** Methods for rapid microbial detection  
<http://brevets-patents.ic.gc.ca/opic-cipo/cpd/eng/patent/2066561/summary.html>
- 2. CA 2066561** Methods for rapid microbial detection  
<http://brevets-patents.ic.gc.ca/opic-cipo/cpd/eng/patent/2066561/summary.html>
- 3. United States Patent 5723330** Genetically engineered reporter bacteria for the detection of bacteriophage. <http://www.patentgenius.com/patent/5723330.html>
- 4. WO/1995/023848** Selective virus culture. <http://patentscope.wipo.int/search/en/WO1995023848>

5. **United States Patent 5840308** Antiviral or antifungal composition comprising an extract of pomegranate rind or other plants and method of use.  
<http://www.freepatentsonline.com/5840308.pdf>
6. **United States Patent 6187316** Antiviral or antifungal composition and method. <https://patentimages.storage.googleapis.com/pdfs/US6187316.pdf>
7. **US 20020064567 A1** Antiviral or antifungal composition and method  
<https://www.google.com/patents/US20020064567>
8. **WO/1995/022254** Antiviral or antifungal composition and method.  
<https://patentscope.wipo.int/search/en/detail.jsf?docId=WO1995022254>
9. **EP 0 896 792 A1** Antiviral agent. <http://www.freepatentsonline.com/EP0896792.pdf>  
<https://patentscope.wipo.int/search/en/detail.jsf?docId=WO1999008536>
10. **WO/2009/093079; International Application No PCT/GB2009/050063:** Environmentally friendly plant protection agents.  
<http://www.wipo.int/patentscope/search/en/WO2009093079>
11. **WO2010109224 (A1):** Methods and compositions for the control of harmful algal blooms. <http://v3.espacenet.com/publicationDetails/biblio?CC=WO&NR=2010109224&KC=&FT=E>  
[http://www.wipo.int/patentscope/search/en/detail.jsf?docId=WO2010109224&recNum=1&docAn=GB2010050483&queryString=ALLNAMES:\(Sabah%20Jassim\)&maxRec=1](http://www.wipo.int/patentscope/search/en/detail.jsf?docId=WO2010109224&recNum=1&docAn=GB2010050483&queryString=ALLNAMES:(Sabah%20Jassim)&maxRec=1)
12. **WIPO Patent Application WO2010/064044 A1** Methods for bacteriophage design. <http://www.sumobrain.com/patents/wipo/Methods-bacteriophage-design/WO2010064044A1.pdf>;  
<http://www.sumobrain.com/patents/wipo/Methods-bacteriophage-design/WO2010064044.html>
13. **WO 2011/104565 A1** Camelid antibodies for use in compositions and methods for the treatment of cancer [http://www.formulascan.com/wopct\\_pdf/WO2011104565.pdf](http://www.formulascan.com/wopct_pdf/WO2011104565.pdf);  
<http://www.sumobrain.com/patents/wipo/Camelid-antibodies-use-incompositions/WO2011104565.html>
14. **WO2011/098820A1** Phage-based limulus amoebocyte lysate assay for rapid detection of bacteria.  
[http://www.lens.org/images/patent/WO/2011098820/A1/WO\\_2011\\_098820\\_A1.pdf](http://www.lens.org/images/patent/WO/2011098820/A1/WO_2011_098820_A1.pdf)
15. **WO 2014135934 A1** Camelid compound(s), composition(s) and method(s).  
<https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2014135934>
16. **US Provisional Patent 022808:** Treatment and prevention of autism through passive immunization with anti-cytokine antibodies.
17. **US Provisional Patent 62393593:** Composition and Methods for Separating Oil from Water. Filing Date: SEPT. 12, 2016.



## REFEREED PUBLICATIONS

### 1. Book

1. Bacteriophages: Practical Applications for Nature's Biocontrol. Jassim S. A. A. and Limoges RG (editors), 2017. Springer International Publishing. eBook ISBN 978-3-319-54051-1; Hardcover ISBN 978-3-319-54050-4; DOI 10.1007/978-3-319-54051-1.  
<http://www.springer.com/us/book/9783319540504#otherversion=9783319540511>
2. Encyclopedia of Medicinal Plants of UAE. Contributor, 2005. Health Authority, Abu Dhabi, Zayed Complex for Herbal Research and Traditional Medicine, Abu Dhabi, UAE. Volume 1, ISBN 9948-03-161-x .  
[http://www.haad.ae/haad/Encyclopedia\\_en/index.html#/8/](http://www.haad.ae/haad/Encyclopedia_en/index.html#/8/)

### 2. Chapters in Books

- 1) Stewart G. S. A. B., **Jassim S. A. A.** and Denyer S. P. 1993. Engineering microbial bioluminescence and biosensor applications. *In Molecular Diagnostics*. R. Rapley and M.R. Walker (Eds). Blackwell Scientific Publications, Oxford. Chapter **27**, pp. 403-423.
- 2) **Jassim S. A. A.**, Camprubi S., Tomas J. M., Williams P., Stewart G. S. A. B. and Denyer S. P. 1993. *In vivo* bioluminescence for studying bacterial adhesion and *in vitro* phagocytosis. *In Bioluminescence and Chemiluminescence*. A. A. Szalay; L.J. Kricka and P. Stanley (Eds). John Wiley and Sons, New York, pp. 491-495.
- 3) Stewart G. S. A. B., **Jassim S. A. A.** and Denyer S. P. 1991. Mechanisms of action and rapid biocide testing. *In Mechanisms of Action of Chemical Biocides: Their study and Exploitation*. SAB Technical Series **27**. S. P. Denyer. and W. B. Hugo, (Eds.). Blackwell Scientific Publications, Oxford, pp. 319-329.

### 3. Review Articles (Refereed)

- 1) **Jassim S. A. A.**, Limoges RG and El-Cheikh H (2016). Bacteriophage biocontrol in wastewater treatment. *World Journal of Microbiology and Biotechnology*. Apr;32(4):70. doi: 10.1007/s11274-016-2028-1.  
<http://www.ncbi.nlm.nih.gov/pubmed/26941243>
- 2) **Jassim S. A. A.** and Limoges R. G. 2014. Natural solution to antibiotic resistance: bacteriophages 'The Living Drugs'. *World Journal of Microbiology and Biotechnology* 30(8):2153-2170. doi: 10.1007/s11274-014-1655-7. <http://link.springer.com/article/10.1007%2Fs11274-014-1655-7#>

- 3) **Jassim S. A. A.** and Limoges R. G. 2014. Date palm tree's defense mechanisms from viral infection and solar ultraviolet radiation. *Advances in Microbiology* 4, 1-5. Published Online January 2014. <http://dx.doi.org/10.4236/aim.2014.41001>
- 4) **Jassim S. A. A.** and Limoges R. G. 2013. Impact of external forces on cyanophage–host interactions in aquatic ecosystems. *World Journal of Microbiology and Biotechnology* 29(10), 1751–1762. DOI 10.1007/s11274-013-1358-5. (<http://www.ncbi.nlm.nih.gov/pubmed/23619821>) ; <http://www.ilakes.org/ch/web/s11274-013-1358-5.pdf>
- 5) **Jassim S. A. A.** 2005. Novel phyto-anti-HIV drugs: A cause for optimism, *Biologist* (UK) 52 (5), 268-272. <http://connection.ebscohost.com/c/articles/18876946/novel-phyto-anti-hiv-drugs-cause-optimism>
- 6) **Jassim S. A. A.** and Naji M. A. 2003. Novel antiviral agents: A medicinal plant perspective. *Journal of Applied Microbiology* (UK) 95, 412-427. (Most download review article 2003-2004) <http://www.ncbi.nlm.nih.gov/pubmed/12911688>
- 7) **Jassim S. A. A.** and Naji M. A. 2001. The desert ship: heritage and science. *Biologist* (UK) 48 (6), 268-272. <http://www.ncbi.nlm.nih.gov/pubmed/11740078>
- 8) **Jassim S. A. A.** and Naji M. A. 2002. The desert ship: heritage and science. *Middle East Laboratory*. (UK) **5 (2)**, 6-11.
- 9) **Jassim S. A. A.** and Denyer S.P. 1997. Coagulase-negative staphylococci: Useful Organism or Potential Problem for Food Processing? *Food Quality magazine* (USA). April pp. 31-35.

#### 4. Refereed Research Publications

Altahir BM, Feng W, Jasim HH, Taylor KE, Biswas N, Bewtra JK, and **Jassim SAA** (2016) Soybean peroxidase-catalysed removal of benzidines from water. *Journal of Environmental Engineering and Science* 10(4):73-80. DOI: <http://dx.doi.org/10.1680/jenes.15.00018>

Abdulmir AS, **Jassim SAA**, Hafidh RR, Bakar FA (2015) The potential of bacteriophage cocktail in eliminating Methicillin-resistant *Staphylococcus aureus* biofilms in terms of different extracellular matrices expressed by PIA, ciaA-D and FnBPA genes. *Ann Clin Microbiol Antimicrob* 14:49. doi: 10.1186/s12941-015-0106-0. <http://www.ncbi.nlm.nih.gov/pubmed/26558683>

Aldoori A.A., Mahdii E.F., Abbas A.K. and **Jassim S.A.A.** 2015. Bacteriophage Biocontrol Rescues Mice Bacteremic of Clinically Isolated Mastitis from Dairy Cows Associated with Methicillin-Resistant *Staphylococcus aureus*. *Advances in Microbiology* 5: 383-403. Published Online June 2015 in SciRes. <http://www.scirp.org/journal/aim> <http://dx.doi.org/10.4236/aim.2015.56040>

- Abdulmir AS, **Jassim SAA** and Abu Bakar F (2014) Novel approach of using a cocktail of designed bacteriophages against gut pathogenic *E. coli* for bacterial load biocontrol. *Annals of Clinical Microbiology and Antimicrobials* **13:39**. <http://www.ann-clinmicrob.com/content/pdf/s12941-014-0039-z.pdf>
- Jassim S. A. A.** 2013. Novel antiviral agents from plants and herbs as treatments for viral infections. The 10<sup>th</sup> Annual NHPRS Conference: The Best of Both worlds - Traditional and Modern Approaches. May 12<sup>th</sup>-15<sup>th</sup>, 2013. Winssor, Ont. Canada. PP. 34.
- Jassim S A A**, Abdulmir A. S. and Abu Bakar F. 2012. Novel phage-based bio-processing of pathogenic *Escherichia coli* and its biofilms. *World Journal of Microbiology and Biotechnology* **28:47-60**. Published online: 22 May 2011 <http://www.springerlink.com/content/k7553p5360518r66/>
- Jassim S A. A.** and Griffiths M.W. 2007. Evaluation of a rapid microbial detection method *via* phage lytic amplification assay coupled with Live/Dead fluorochromic stains. *Letters in Applied Microbiology* **44**, 673-678. <http://www.ncbi.nlm.nih.gov/pubmed/17576232>
- Jassim S A. A.** and Naji. M. A. 2007. In vitro evaluation of the antiviral activity of an extract of date palm (*Phoenix dactylifera* L.) pits on a pseudomonas phage. *Evidence Based Complementary and Alternative Medicine*. Advance access published October 27, 2007: <http://downloads.hindawi.com/journals/ecam/2010/816839.pdf>; <http://www.hindawi.com/journals/ecam/2010/816839/abs/> eCAM 2010;7(1)57–62
- Jassim S A. A.**, Hibma A.M. and Griffiths M.W. 2005. The attachment efficiency of cell-walled and L-forms of *Listeria monocytogenes* to stainless steel. *Journal of Food, Agriculture and Environment* **3 (2)**, 92-95. [http://www.world-food.net/download/journals/2005-issue\\_2/f16.pdf](http://www.world-food.net/download/journals/2005-issue_2/f16.pdf)
- Jassim S. A. A 2005**. Drinking-water needs cleaning. International Newspaper for the Organic Trade, Organic and Wellness News. Berlin, Germany. Spring 2005 pp. 3. <http://www.organicwellnessnews.com/2005/02/clean-water/>
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## 5. Publications Referenced in Various Media

**5.1. Arabian Business:** March 27, 2011, Sabah was ranked in The top 13 of Power 500 the World's Most Influential Arabs/Middle East: <http://arabic.arabianbusiness.com/special-reports/59512/>

### 5.2. Bacteriophages (Phages) and Antibiotics

Wikipedia Encyclopedia: Bacteriophage Experimental Evolution

[http://en.wikipedia.org/wiki/Bacteriophage\\_experimental\\_evolution](http://en.wikipedia.org/wiki/Bacteriophage_experimental_evolution)

Podcast: Not So Boring Conversations: Episode 8 Antibiotics, Phages and You. Aug 22, 2014. <http://www.notsoboringconversations.com/>; <http://www.notsoboringconversations.com/index.php?id=8>

### 5.3. Camelid IgG

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