# PART I:

# **Personal Information:**

Name:	Khaled Alhomsi, D.Ph., Ph.D., M.S.
Date of Birth:	December 07, 1974
Nationality:	Syrian and USA citizen
Marital Status:	Married to Ghalia Alkatan (Syrian and USA citizen)
Children:	Three: 1 Male: Yazen, 2 Females: Zenah and Ayah (Syrian and USA citizen)

# **Contact Information:**

Office address:	U.S.A:	Quality HealthCare 7 Austin Street Boston, MA. 02129
	Syria:	6 Aljalaa Abo Rumanah Main
		Street,against Saudi Embassy) Abo Romanah, Damascus
Home address:	U.S.A:	73 Bellevue Hill Road
	Symion	Boston, MA. 02132
	Syria:	6 Saleem Aljazaeri Street Abo Romanah, Next to American Embassy
		Damascus
		Damascus
Home Tel:	U.S.A:	001(617) 323-3390
	Syria:	011(963)11 3337103
		011(963)11 3353007
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	Syria:	011(963) 944270444
		011(963) 967142000
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	Syria:	011(963)11 3313401
		011(963)11 3313433
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E-Mail:

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#### **Education:**

- Harvard Medical School and Massachusetts General Hospital, Division of Laboratory Medicine, Department of Clinical Pathology, Boston, USA Post-Doctoral Fellowship Training in Clinical Laboratories, 2006-2010
- Northeastern University and Massachusetts General Hospital, Harvard Medical School, Department of Biomedical Sciences, Boston, USA Doctor of Philosophy (Ph.D.), 2002-2005
- Northeastern University, Bouvé College of Health Sciences, Department of Medical Laboratory Sciences, Boston, USA Master of Science (M.S.), 2000-2002
- Northeastern University and Boston Medical Center, Department of Medical Laboratory Sciences, Clinical Hematology Laboratory, Boston, USA Post-Graduate Certificate in Clinical Hematology, 1998-2002
- Damascus University, School of Pharmacy, Damascus, Syria Doctor in Pharmacy and Pharmaceutical Chemistry Degree (Laboratory Diagnosis Specialty), 1993-1998

### **Professional Training and Experience:**

2021 – now	Vice President Scientific Research Council Al-Sham Private University (ASPU), Syria
2019 - 2020	Vice Dean for Scientific Research Affairs Faculty of Pharmacy, Al-Sham Private University (ASPU), Syria
2010-now	Medical Laboratory Director and Owner Alhomsi Clinical Laboratories, Abo Rumanah Main St., Damascus, Syria
2007-2009	Research Fellow for Laboratory Assays Validation (Hemostasis and Thrombosis), Instrumentation Laboratory, Lexington, USA

- 2007-2009 Clinical Fellowship (Clinical Chemistry, Immunochemistry). Evaluate new assays in detecting tumors and cancers Massachusetts General Hospital and Harvard Medical School, Boston, USA
- 2007- 2008 Clinical Fellowship (Clinical and Special Coagulation Laboratory) Massachusetts General Hospital and Harvard Medical School, Boston, USA
- 2006-2007 Postdoctoral Fellowship Training, Division of Laboratory Medicine, Department of Clinical Pathology, Massachusetts General Hospital and Harvard Medical School, Boston, USA
- 2002-2005 Ph. D. Clinical Research, Division of Laboratory Medicine, Department of Pathology (Ph.D. level), Massachusetts General Hospital and Harvard Medical School, Boston, USA
- 2002 Clinical Internship, Division of Laboratory Medicine, Department of Pathology, Clinical Hematology Laboratory, Boston Medical Center and Boston University, Boston, USA
- 1998-2002 Post-Baccalaureate Certificate in Clinical Hematology, Department of Medical Laboratory Sciences, Northeastern University, Boston, USA
- 1996-1997 Clinical Internship, Department of Laboratory Medicine, Tawleed University Hospital, Damascus, Syria

#### **Licensure and Certification:**

2019	Faculty Member, Ministry of education, Damascus, Syria
2018	International Computer Driving License, ICDL
2016	Syrian Board, Laboratory Medicine, Syrian Commission for Medical Specialties
2006	Laboratory Diagnosis Specialist, Syrian Clinical Laboratory Association (SCLA), Syria
2006	License in Laboratory Diagnosis, Ministry of Health, Syria
2003	Hematology Specialist, Syrian Clinical Laboratory Association (SCLA), Syria

- 2004 License in Hematology, Ministry of Health, Syria
- 2002 Board Registered (ASCP) in Hematology, USA

# **Professional Societies:**

2008	Academy of Clinical Laboratory Physicians and Scientists (ACLPS), associate member
2007	The Endocrine Society (TES), associate member
2006	American Diabetes Association (ADA), professional member
2006	Society of Critical Care Medicine (SCCM), professional member
2006	The International Society on Thrombosis and Hemostasis (ISTH), associate member
2006	Society for Experimental Biology and Medicine (SEBM), associate member
2006	American Physiological Society (APS), regular member
2005	American Association of Bioanalysts (AAB), associate member
2005	American Society of Parasitologists (ASP), associate member
2005	American Association of Clinical Endocrinologists (AACE), professional member
2005	American Association of Reproductive Immunology (AARI), professional member
2004	American Association of Clinical Chemistry (AACC), associate member
2004	American Society of Clinical Laboratory Science (ASCLS), professional member
2004	American Society of Microbiology (AMS), active member
2004	Clinical Laboratory Management Association (CLMA), associate member
2003	American Association of Pharmaceutical Scientists (AAPS), associate member
2003	Syrian Clinical Laboratory Association (SCLA), associate member
2002	American Society of Clinical Pathology (ASCP), associate member
2001	Syrian Association of Pharmacy (SAP), associate member
1998	American Association of Pharmacy (AAP), associate member

# PART II:

## **Research, Teaching, and Clinical Contributions:**

#### **Research:**

- 2019- now : Al-Sham Private University, Lattakia, Syria Do multiple scientific investigations in different medical areas
- 2017-2018: Almujtahed Hospital, Damascus, Syria Study incoming cases to the emergency rooms and clinical laboratories during the Syrian crisis
- 2012-2016: Shriners Hospital for Burns, Boston, USA Develop new techniques in Medical Microbiology system
- 2005-2008: Harvard Medical School and Massachusetts General Hospital, Division of Laboratory Medicine, Department of Pathology, Boston, USA Develop and validate new assays in the clinical laboratory system
- 2002-2005: Harvard Medical School and Massachusetts General Hospital, Division of Laboratory Medicine, Department of Pathology, Boston, USA Investigate the impaired immunity in alcoholics. It was based on studying the nonoxidative metabolites of ethanol, Fatty Acid Ethyl Esters (FAEE) in human mononuclear cells, and their role as mediators of ethanol-induced immunosuppression

#### **Brief Description of Clinical Research Experience:**

- Cell Culture
- Cell Isolation and Preparation for Study
- Thin Layer Chromatography (TLC) for Lipid Isolation and Quantitation
- GC-MS (Gas Chromatography- Mass-Spectrometry)
- Radiolabeling and Measuring Radioactivity by Liquid Scintillation Counter
- ELISA Studies (cAMP, Cytokines, ...)
- Hemacytometer for Cell Counting.
- Spectrofluorimeter (Calcium measurement)
- Spectrophotometer
- Automated Blood Count (CBC) and Cell Differentials
- Complete Coagulation Testing
- Clinical Chemistry, Immunodiagnostic panel testing

- Urine and Stool Testings
- Calibration
- QC (Quality Control)
- PCR (RT)

#### **Research Certification:**

- Certificate of Completion of the Partners Health Care System human-subject protection education requirements (Partners health Care, Boston, USA)
- Radiation Safety: using radioactive materials <sup>14</sup>C and <sup>3</sup>H (Massachusetts General Hospital, Boston, USA)
- Biological Safety: dealing with human blood and substances (Massachusetts General Hospital, Boston, USA)

#### **Teaching:**

- Al-Sham Private University, Faculty of Pharmacy Department of Biochemistry, Lattakia and Damascus, Syria 2019- now

Northeastern University, Bouvé College of Health Sciences
 Department of Medical Laboratory Sciences, Boston, USA
 2005-2009
 Lecturer and laboratory supervisor

 Massachusetts General Hospital and Harvard Medical School, Division of Laboratory Medicine, Department of Pathology, Boston, USA 2005-2009
 Lecturer

#### **Clinical Contributions:**

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2005-2009 Massachusetts General Hospital and Harvard Medical School, Division of Laboratory Medicine, Department of Pathology. Evaluate new versus current quantitative assays. Develop screening and automated quantitative assays.

# Seminars, Professional Meetings, Continuing Education and Conferences:

- Damascus University and Faculty of Medicine, Research Articles Methodology March 26-28, 2023 Damascus University, Damascus, Syria
- Al-Moasat university Hospital, Latest Development in Laboratory Medicine Diagnosis June 19-22, 2022 Dama Rose Hotel, Damascus, Syria
- Damascus University and Faculty of Medicine, Latest Development in Medicine June 26-28, 2019 Dama Rose Hotel, Damascus, Syria
- Syrian Clinical Laboratory Association, Damascus Laboratory workshop and scientific conference January 24 -26, 2017 Damascus Sheraton Hotel, Syria
- American Society for Clinical Pathology (ASCP), workshops for laboratory professionals
   Update in flow cytometry and enhancing diagnostic skills in morphologic hematology
   October 30- November 01 2015, Springfield Marriott hotel, Springfield, Massachusetts, USA
- American Diabetes Association (ADA), 5<sup>th</sup> annual healthcare professionals luncheon New Treatments for Diabetes: The Role of Incretin-Based Therapies March 17<sup>th</sup> 2013, Seaport World Trade Center, Boston, USA
- American Association of Clinical Endocrinologists (AACE) meeting Thyroid and parathyroid glands November 17-18, 2011, O'keefe Auditorium Massachusetts General Hospital, Boston, USA
- Northeastern University, Bouvé College of Pharmacy and Health Sciences Department of Medical Laboratory Sciences CellaVision seminar, digital m0icroscopy: the new advanced technology in clinical hematology October 24, 2010, Curry Student Center, Boston, USA
- The American Diabetes Association consensus conference IFG (Impaired Fasting Glucose) and IGT (Impaired Glucose Tolerance): implications for diabetes care October 16, 2009, Hilton O'Hare International Airport, Chicago, USA
- The American Society for Microbiology (ASM) 106<sup>th</sup> general meeting Addressing management issues New technologies by Roche Diagnostics, Remel, Olympus, Biorad Laboratories, Hary Diagnostics and Vista Technology Inc. May 21-23, 2009, Orange County Convention Center, Florida, USA

- American Association of Clinical Endocrinologists (AACE) 15<sup>th</sup> annual meeting and clinical congress (Novartis) Incretins: the missing piece in the type 2 diabetes puzzle Implications of recent clinical trials: a new perspective on insulin sensitizers April 28, 2008, Hyatt Regency, Chicago, USA
- Lipid Journal Club, Massachusetts General Hospital, Division of Laboratory Medicine, Department of Pathology September 2002- January 2006 (weekly), Laboratory Medicine Conference Room, Boston, USA
- Pharmaceutical Science Colloquium, Bouvé College of Pharmacy and Health Sciences, Department of Pharmaceutical Sciences October 2002- April 2005 (weekly), Snell Library, Boston, USA

## **PART III:**

#### Format for Bibliography:

#### **Original Articles:**

- 1. Fatty Acid Ethyl Ester Effects on Interleukin-2 Production, Cyclic AMP Synthesis, and Calcium Influx in Human Mononuclear Cells.2006
- 2. Fatty Acid Ethyl Esters in Human Mononuclear Cells: Production by Endogenous Synthesis Greatly Exceeds the Uptake of Preformed Ethyl Esters.2006
- **3.** Evaluation of a New, Automated Quantitative Factor XIII Assay.2007
- 4. Induction of Apoptosis and Necrosis in Human Peripheral Blood Mononuclear Cells by Fatty Acid Ethyl Esters.2008
- **5.** Maxillary Fractures in Patients Reviewing Almoujtahed Hospital During the Syrian Criris.2018
- 6. Criris Related Orbit Fractures Distribution and In-Hospital Management at Almoujtahed Hospital.2018
- 7. Review of mandibular fractures at almoujtahed hospital during the syrian crisis.2018
- 8. Antibiotic resistance in e.coli strains in samples from almoujtahd hospital.2018
- 9. Vitamin D3 and Calcium Relation: A Major Dilemma in Recent Times.2019
- **10.** Increased Ratio of Hysterectomies: A Study of The Causes and Prevalence.2019
- 11. Study of Pus Cultures with Positive Staphylococcus Aureus Culture Results.2019
- **12.** The Effects of Various Treatments on Enterobacter Strains.2019
- 13. E. coli Resistance to First-Line Treatments: A Burden to Health Care Systems.2019
- **14.** Klebsiella Pneumonia Strains in Sputum Samples and The Efficiency of Different Antibiotics Against Them: A Laboratory Assessment.2019
- **15.** The Disparities Between C-Reactive Protein and Erythrocyte Sedimentation Rate as Markers of Inflammation.2019
- **16.** Study of Erythrocyte Sedimentation Rate and White Blood Cell Count Values in A Clinical Laboratory.2019

- **17.** The Coexistence of Hemoglobin and Serum Iron Levels: Are They Always Synchronized.2019
- **18.** Study of Squamous Cell Carcinomas of The Larynx and The Regional Lymph Nodes Involvement.2019
- **19.** Study of Facial Malignant Skin Tumors in A Randomized Group.2020
- 20. Evaluation of Nasal Polyposis and its Correlation with Allergic Diseases.2020
- **21.** Analysis of Neck Masses in A Group of Syrian Patients at Almouwasat University Hospital.2020
- **22.** Foreign Body Aspiration: Study of Epidemiological Factors, Site and Type of Foreign Bodies in Children.2020
- **23.** Salivary Gland Tumors: Demographics and Occurrence According to Age and Gender.2020
- 24. The Increasing Ratio of Cesarean Section Deliveries: Causes and Implications.2020
- **25.** Surgical Thyroid Gland Diseases: Epidemiology and Neck Radiation Effect.2020
- 26. B-Thalassemia in Patients Reviewing Al-Mouwasat University Hospital in Damascus, Syria.2020
- 27. Prevalence of Abnormal Pap Smear Results in Syrian Women.2020
- 28. Study of Acute Bacterial Meningitis: Demographics, Symptoms and Signs.2020
- **29.** Cholesteatoma Effects on Hearing and Ossicles at Al-Mouwasat University Hospital.2020
- **30.** Abdominal Hernias in Adults at a group of Syrian Population.2020
- **31.** Breast Cancer Screening Campaign of 2018 and 2019 at Al-Mouwasat University Hospital in Damascus, Syria.2021
- **32.** Study of Cataract Types and Their Effect on Visual Acuity in a Group of Syrian Population.2021
- **33.** The Use of Platelet Rich Plasma in Bone Regeneration: A Systematic Review.2021
- **34.** Eyeing UP the Pandemic: A Literature Review of The Ovular Manifestations of Covid-19.2022
- **35.** Gauging the learning environment at Damascus University Pharmacy School in Syria using the DREEM questionnaire: A cross-sectional study.2022
- **36.** Evaluation of the Undergraduate Learning Environment at Dental Schools in Syria.2022
- **37.** Revealing the Significant Shortcomings in the Learning Environment at the Three Largest Medical Schools in Syria: What's Next?.2023
- **38.** The Challenging Reality of The Clinical Learning Environment at Damascus University Faculty of Dental Medicine in Syria: a Qualitative Study.2023
- **39.** Evaluation of a workplace assessment method designed to improve self-assessment in operative dentistry: a quasi-experiment. 2023
- **40.** Measuring the clinical learning environment in Syria: Translation of PHEEM into Arabic and proposed modifications. 2023

#### NIH NCBI (An official website of the United States government):

 Ophrys fusca trnL-trnF intergenic spacer and tRNA-Phe (trnF-GAA) gene, partial sequence; chloroplast 312 bp linear DNA Accession: OR231540.1 2. Spiranthes spiralis trnL-trnF intergenic spacer and tRNA-Phe (trnF-GAA) gene, partial sequence; chloroplast

446 bp linear DNA

Accession: OR231539.1

**3.** Ophrys fuciflora subsp. bornmuelleri trnL-trnF intergenic spacer and tRNA-Phe (trnF-GAA) gene, partial sequence; chloroplast

291 bp linear DNA

Accession: OR231538.1

**4.** Anacamptis pyramidalis trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast

304 bp linear DNA

Accession: OR514371.1

**5.** Ophrys ferrum-equinum trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast

262 bp linear DNA

Accession: OR514370.1

**6.** Platanthera chlorantha trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast

263 bp linear DNA

Accession: OR514369.1

**7.** Epipactis helleborine trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast

406 bp linear DNA

Accession: OR514368.1

**8.** Ophrys attica trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast

256 bp linear DNA Accession: OR514367.1

**9.** Orchis anatolica trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast

313 bp linear DNA

Accession: OR514366.1

**10.** Cephalanthera longifolia trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 374 bp linear DNA

Accession: OR514365.1

**11.** Anacamptis laxiflora trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 288 bp linear DNA Accession: OR514364.1

12. Ophrys sintenisii trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast309 bp linear DNAAccession: OR514363.1

300 bp linear DNA Accession: OR514362.1 **14.** Dactylorhiza iberica trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 300 bp linear DNA Accession: OR514361.1 **15.** Neotinea tridentata trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 300 bp linear DNA Accession: OR514360.1 **16.** Anacamptis collina trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 293 bp linear DNA Accession: OR514359.1 **17.** Orchis italica trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 276 bp linear DNA Accession: OR514358.1 **18.** Limodorum abortivum trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 340 bp linear DNA Accession: OR514357.1 **19.** Dactylorhiza romana isolate O13 trnL-trnF intergenic spacer, partial sequence; chloroplast 294 bp linear DNA Accession: OR193407.1 **20.** Ophrys argolica isolate O12 trnL-trnF intergenic spacer, partial sequence; chloroplast 304 bp linear DNA Accession: OR193406.1 **21.** Ophrys lutea isolate O11 trnL-trnF intergenic spacer, partial sequence; chloroplast 312 bp linear DNA Accession: OR193405.1 **22.** Ophrys attica isolate O10 trnL-trnF intergenic spacer, partial sequence; chloroplast 258 bp linear DNA Accession: OR193404.1 **23.** Cephalanthera kurdica isolate O9 trnL-trnF intergenic spacer, partial sequence; chloroplast 372 bp linear DNA Accession: OR193403.1 **24.** Epipactis latifolia isolate O8 trnL-trnF intergenic spacer, partial sequence; chloroplast 409 bp linear DNA Accession: OR193402.1 **25.** Ophrys scolopax isolate O7 trnL-trnF intergenic spacer, partial sequence; chloroplast 268 bp linear DNA Accession: OR193401.1

**13.** Anacamptis morio trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial

sequence; chloroplast

**26.** Anacamptis sancta isolate O6 trnL-trnF intergenic spacer, partial sequence; chloroplast 293 bp linear DNA Accession: OR193400.1 **27.** Ophrys sp. O5 trnL-trnF intergenic spacer, partial sequence; chloroplast 308 bp linear DNA Accession: OR193399.1 **28.** Ophrys attica isolate O4 trnL-trnF intergenic spacer, partial sequence; chloroplast 263 bp linear DNA Accession: OR193398.1 **29.** Serapias vomeracea isolate O3 trnL-trnF intergenic spacer, partial sequence; chloroplast 322 bp linear DNA Accession: OR193397.1 **30.** Ophrys fuciflora isolate O2 trnL-trnF intergenic spacer, partial sequence; chloroplast 242 bp linear DNA Accession: OR193396.1 **31.** Ophrys fuciflora isolate O1 trnL-trnF intergenic spacer, partial sequence; chloroplast 262 bp linear DNA Accession: OR193395.1 **32.** Aegilops tauschii trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 355 bp linear DNA Accession: OQ944320.1 **33.** Aegilops bicornis trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 348 bp linear DNA Accession: OQ701700.1 **34.** Aegilops longissima trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 348 bp linear DNA Accession: OQ701699.1 **35.** Aegilops umbellulata trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 355 bp linear DNA Accession: OP957417.1 **36.** Triticum aestivum 23S ribosomal RNA, 4.5S ribosomal RNA, and 5S ribosomal RNA region gene, partial sequence; chloroplast 326 bp linear DNA Accession: OP262697.1 **37.** Rosa x damascena maturase K (matK) gene, partial cds; chloroplast 532 bp linear DNA Accession: OR761842.1 **38.** Rosa x damascena trnL-trnF intergenic spacer, partial sequence; chloroplast 423 bp linear DNA Accession: OR761841.1

**39.** Ophrys fuciflora subsp. bornmuelleri voucher O14 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit gene, partial cds; chloroplast 545 bp linear DNA Accession: OR727283.1 **40.** Aegilops comosa trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 355 bp linear DNA Accession: OR597600.1 **41.** Aegilops markgrafii trnL-trnF intergenic spacer and tRNA-Phe (trnF) gene, partial sequence; chloroplast 355 bp linear DNA Accession: OR597599.1 **42.** Himantoglossum affine trnL-trnF intergenic spacer and tRNA-Phe gene, partial sequence; chloroplast 289 bp linear DNA Accession: OR545541.1 **43.** Amblyopyrum muticum trnL-trnF intergenic spacer, partial sequence; chloroplast 372 bp linear DNA Accession: OR420983.1 **44.** Triticum aestivum trnL-trnF intergenic spacer, partial sequence; chloroplast 368 bp linear DNA Accession: OR420982.1

#### Thesis (M.S. level):

Alhomsi K. Acute Lymphocytic Leukemia in 9 years old girl. Northeastern University; Boston, USA, 2002

#### **Conference Proceedings:**

Alhomsi K, Laposata M. Effects of Fatty Acid Ethyl Esters on Human Mononuclear Cell Morphology, Activation and Viability Pharmaceutical science showcase, Northeastern University, Boston, USA, 2005

#### **Dissertation (Ph.D. level):**

Alhomsi K. Effects of Fatty Acid Ethyl Esters on Human Mononuclear Cell Morphology, Activation and Viability Northeastern University; Boston, USA, 2005