# **CURRICULUM VITAE**

# **Ashraf E. Hassaballa, MD, MS, PhD, D (ABMLI)**

**Lecturer, Department of Clinical Pathology, Faculty of Medicine,**

**Assiut University, Assiut 71515, Egypt**

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**I. GENERAL INFORMATION:**

***A. EDUCATION***

**Sep. 2011** American Board of Medical Laboratory Immunology D(ABMLI)

**May. 2006 PhD**

**Major:** Medical Microbiology and Immunology**.** Creighton University, Omaha, Nebraska, USA.

**Dec. 1996 MS**

**Major:** Clinical Pathology. Faculty of Medicine, Assiut University, Assiut, Egypt.

**Sep. 1990 MBBCH (MD)**

**Honors:** Graduated with average accumulative grades of Very Good with Honors, Faculty of Medicine, Assiut University, Assiut, Egypt.

***B. PROFESSIONAL APPOINTMENTS***

**Aug 2012- Present General Director of the clinical pathology laboratories, Director of the**

Clinical Immunology Laboratory and **Director** of the MolecularDiagnostic

Laboratory at Al-Rajhi Hospital for Liver Diseases, Assiut University

Hospitals, Assiut, Egypt.

**May 2013- Present Scientific Director** of the Flow Cytometry Core Facility-Center of Medical

Research Excellence, School ofMedicine, Assiut University, Asyut, Egypt

**Jul 2007 – Present** **Lecturer of Clinical Pathology,** Clinical Pathology Department,

School ofMedicine, Assiut University, Asyut, Egypt

**Aug 2008 – June 2012 Post-Doctoral Fellow**, Department of Microbiology, Molecular Genetics and

Immunology, University of Kansas Medical Center, Kansas City, Kansas.

**July 2006- July 2006** **Visiting Research Associate** at the Molecular diagnostics Laboratory,

Department of Pathology and Microbiology, University of Nebraska Medical Center, Omaha, Nebraska.

**Jan 2001 – May 2006 PhD student** in Department of Medical Microbiology and Immunology, School of Medicine, Creighton University, Omaha, NE, USA.

**Mar 1996 –Apr 2000 Assistant Lecturer of Clinical Pathology (equivalent to Clinical Fellow)**, Clinical Pathology Department, School of Medicine, Assiut University, Assiut, Egypt.

**Mar 1992- Feb 1996 Resident of Clinical Pathology**, Clinical Pathology Department, Assiut University Hospitals, Assiut, Egypt**.**

**Mar 1991- Feb 1992 Clinical Internship**, Assiut University Hospitals, Assiut, Egypt.

***C. PROFESSIONAL CERTIFICATION***

**2011** **Diplomat American Board of Medical Laboratory Immunology**

**2007 Consultant of Clinical Pathology Egyptian Medical Syndicate**

**1992 Physician Ministry of Health, Egypt**

***E. HONORS AND AWARDS***

**1997** Award to attend the 2nd International Training Course for Clinical Immunology of Infectious Diseases and Introduction to Molecular Biology (Nov 15 to Dec 17, 1997), sponsored by Japan International Cooperation Agency (JICA) and the Egyptian Fund for Technical Cooperation with Africa (EFTCA), Suze Canal University Hospital, Ismailia, Egypt.

**2004** Blue Ribbon Merit Award for poster presentation, Great Plains Society of Molecular Biology Annual Meeting, 2004. Omaha, Nebraska, USA

**II. RESEARCH**

***A. PUBLICATIONS***

**Published Papers:**

1. Nermien Waly, Waleed S. H. Farrag, and **Ashraf Hassaballa**. Alteration of Hematological and Plasma Physiological Parameters Following a Standard Protocol of General Anesthesia: A Pilot Study in Assiut University Hospitals. Med J Cairo Uni. 2013 Dec; 81(1): 797-800.
2. **Ashraf E. Hassaballa,** Victoria L. Palmer, Dirk K. Anderson, Michele D. Kassmeier, Vincent Nganga, Kevin W. Parks, Dustin Volkmer,Greg A. Perry, and Patrick C. Swanson. Accumulation of B1-like B cells in transgenic mice overexpressing catalytically inactive RAG1in the periphery. *Immunology.* 2011 Dec; 134(4): 469-86.
3. Stacy L. Dalheimer, Ling Zeng, Kevin E. Draves, **Ashraf Hassaballa**, Nasheena N. Jiwa, Torrey D. Parrish, Edward A. Clark, Thomas M. Yankee. Gads-deficient thymocytes are blocked at the transitional single positive CD4+ stage. Eur. J. Immunol. 2009. 39: 1395–1404
4. Eman R. Hofny, AzzA M. Ezz El Din, Hebat Allah G. Rashed. Lubna M. Tag, Soheir K. Sayed, **Ashraf E. Hassaballa,** Enas A. Hamed, Eman A. Omran, and Omar Herdan.. Serum lipids, Apo E Genotypes and Tumor Necrosis Factor Alpha in Psoriatic Arthritis Patients: In Relation to Disease Activity. Egyptian Journal of Dermatology and Venereology. 2007. 27:86-99

**Submitted papers:**

1. **Ashraf E. Hassaballa,** Brooks Parker,Thomas M. Yankee. Gads regulates the efficiency of thymic selection via MAPK pathways. Submitted to *The Journal of Immunology.*

**Published Abstracts**

1. Dalal, Jignesh; Yankee, Thomas; **Hassaballa, Ashraf**; Hirner, Anne; Ryan, Robin; Ganguly, Siddhartha; McGuirk, Joseph P; Abhyankar, Sunil. **An Immunological Assessment of Cytokine Profile of CD4+ Cells in Patients with Chronic Graft vs Host Disease (cGVHD) Undergoing Extracorporal Photopheresis (ECP).** Biology of blood and marrow transplantation: journal of the American Society for Blood and Marrow Transplantation (2013), 19 (2 Supplement) S322-S323.
2. **Ashraf E. Hassaballa,** Thomas M. Yankee. Impairment in the strength and duration of ERK activation in Gads deficient mice *The Journal of Immunology*, 2010, 184, 36.51.
3. Patrick C. Swanson, Dirk K. Anderson, **Ashraf E. Hassaballa**, Kevin W. Parks and Greg A. Perry.Immunodeficiency and accumulation of B1-like B cells in transgenic mice overexpressing catalytically inactive RAG1. *The Journal of Immunology*, 2007, 178, B2
4. Kevin W. Parks, **Ashraf E. Hassaballa,** Dirk K. Anderson, Qinglong Hu, Thomas B. Casale, Patrick C. Swanson, 2006. Transgenic Mice Expressing Catalytically Inactive RAG-1 Exhibit Hypogammaglobulinemia and Altered B Cell Development, but not Autoreactivity. J Allergy Clin Immunol, 2006, 117(2): S100.

**Poster presentation**

1. Jignesh Dalal**, Ashraf Hassaballa,** Thomas Yankee, Joseph McGurik, and Sunil Abhyanker. An Immunological Assessment of B and T Cells in Patient with Chronic Graft-Versus-Host Disease Undergoing Extracorporeal Photopheresis (ECP). BMT Tandem Meetings-American Society for Blood and Marrow Transplantation. San Diego, California, 2012.
2. **Ashraf E. Hassaballa,** Thomas M. Yankee. Impairment in the strength and duration of ERK activation in Gads deficient mice. 1st Annual Resident, Postdoc, and Fellow Research Day. University of Kansas Medical Center, Kansas City, Kansas 2010.
3. **Ashraf E. Hassaballa,** Greg A. Perry, and Patrick C. Swanson. Accumulation of Transitional B Cells in Transgenic Mice Expressing Catalytically Deficient *RAG-1.* Keystone Symposium on B-Cell Development, Function and Disease. Steamboat Springs, Colorado, 2005.
4. **Ashraf E. Hassaballa,** Lei Wang, and Patrick C. Swanson. Investigation of the Dominant Negative Effect of Catalytically Deficient Mutant RAG-1 *in vivo*. Great Plains Society of Molecular Biology. Omaha, Nebraska, USA, 2004.

***B. ORAL PRESENTATIONS AND INVITED LECTURES***

1. Characterization of Transgenic Mice Expressing Catalytically Inactive Recombination Activating Gene-1. Abstract Presented at the Midwest Biomedical Student Research Forum, Omaha, NE. USA 2006
2. A Potential Role of Recombination Activation Gene-1 (RAG-1) in B-cell autoimmunity and malignancy. Invited Speaker at the Clinical Pathology Department Conference, School of Medicine, Tanta University, Tanta, Egypt. 2006
3. Recombination Activating Genes-1 and 2 in health and in diseases. Invited Speaker at

the Annual Conference of School of Medicine, Assiut University, Asyut, Egypt. March

2007.

1. Detection of Apoptosis by Flow Cytometry. Invited speaker at the 3rd Flow Cytometry Workshop: Flow Cytometry as a sensitive analytical tool for small populations. South Egypt Cancer Institute, Assiut University, Asyut, Egypt. Feb 2008.
2. Gene Therapy. Invited Speaker at the 6th Assiut University conference for pharmaceutical sciences. School of Pharmacy, Assiut University, Asyut, Egypt. March 2008.
3. Extracorporeal Photopheresis as an immunomodulatory therapy. Invited Speaker at the 6th Scientific conference of the Department of Clinical Pathology. School of Medicine, Assiut University, Asyut, Egypt. March 2014.
4. Laboratory diagnosis of autoimmune hepatobiliary disorders. Invited Speaker at the 2nd medical Congress in Upper Egypt: The Egyptian Society of Tropical Medicine, Infectious and Parasitic Diseases, Assiut University, Asyut, Egypt. April 2014.

***C. AREAS OF RESEARCH INTEREST***

Currently my research interest is focused on the role of T cells and natural killer cells in the

pathogenesis of infectious and autoimmune diseases. Towards this end, I am currently

involved in four projects.

***D. TWO OF THE CURRENT PROJECTS***

The goal of the first project is to immunologically assess patients undergoing Extracorporeal Photopheresis (ECP) for chronic Graft versus host disease (GVHD). ECP currently is under investigation as a second line of treatment for chronic GVHD patients who are resistant for steroid therapy. Preliminary results showed that ECP is an effective therapy for both acute and chronic GVHD but the mechanism of ECP is poorly understood. Therefore, we conducting this study aiming at understanding the mechanism by which ECP affect lymphocytes populations and cytokines production in patient with chronic GVHD.

The goal of the second project is to assess the role of cytotoxic T cell in the pathogenesis of primary Immune Thrombocytopenia (ITP) in children. ITP has been traditionally thought as an antibody mediated autoimmune disease involving platelets destruction by macrophage. Recently it has been shown that T cell mediated immunity may play a role in platelets destruction in ITP. Therefore we are interested in studying the phenotyping, reactivity and functionality of cytotoxic T cell in children with ITP before, during, and after therapy with corticosteroids as the first line of treatment for ITP.

***E. ADDITIONAL TRAINING:***

2010 Starter Grant Writing Workshop at University of Kansas Medical Center,

Kansas City, Kansas

1997 The 2nd International Training Course for Clinical immunology of Infectious Diseases and

Introduction to Molecular Biology (Nov. 15, 1997 through Dec.17, 1997), Suze Canal

University Hospital, Ismailia, Egypt.

***F. TECHNICAL SKILLS***

**Clinical Laboratory Skills:**

My background as a general clinical pathologist with more than12 years of experience gave me the opportunity to master most of the diagnostic techniques and procedures used in the clinical pathology laboratories including Hematology laboratory, Blood Bank, clinical chemistry laboratory, microbiology laboratory, immunology laboratory and molecular diagnostics laboratory.

Currently my clinical interest is focused in the immunodiagnostics, flow cytometry, and serological and molecular diagnosis of infectious diseases.

**Methods and technique that I used and have been using in my research work:**

* Cell culture (primary and established cell lines)
* Transient and Stable transfection
* Immunocytochemistry and Histochemistry
* Imaging using fluorescence microscope
* Western Blotting
* Immunoprecipitation
* Real time RT-PCR
* ELISA
* Flow cytometry: immunophenotyping, cell cycle analysis, lymphocytes proliferation, and apoptosis. I am a trained user, so I can use the FACS machine independently.
* Lymphocytes proliferation using MTT assay.
* Lymphocytes repertoire diversity analysis and rearrangement studies using PCR and southern blotting techniques.
* Southern Blotting using radiolabeled and non-radiolabeled probes.
* Cloning
* Fetal thymus organ culture
* Cytokines detection using Luminex technology.

***G. MENTORSHIP OF GRADUATE STUDENTS AND RESEARCH PERSONNEL:***

I am currently supervising four master degree students and three MD degree students in Clinical

Pathology, School of Medicine, Assiut University, Assiut, Egypt

**III. TEACHING**

1. ***FORMAL TEACHING:***

* Taught practical Clinical Pathology courses for medical students, School of Medicine, Assiut University from1996 to 2000.
* Have been teaching Diagnostic Immunology and Flow Cytometry and Molecular Diagnostic to post graduate students at the department of Clinical Pathology, Assiut University, Asyut, Egypt from 2006 to 2008 and from 2012 to 2014.
* Teaching Clinical pathology course to Clinical Pharmacy Diploma students, Assiut University, Asyut, Egypt spring and fall 2013 and 2014.

1. ***Others Related:***

* Assisted Dr. Stephen J. Cavalieri in the 10 hours infectious Diseases lab for M2 medical students (2001-2006), where I instructed students to use microscopy and culture of microorganisms from a throat swab, skin and urine, Department of Microbiology and Immunology, School of Medicine, Creighton University, Omaha, NE

**IV. SERVICE**

***A. PROFESSIONAL SOCIETIES***

* The American Association of immunologists (active)
* The Egyptian Society of Laboratory Medicine (active)
* The Egyptian Association of Immunologists (active)

***B. COMMITTEE SERVICE***

* Representative for the Department of Clinical Pathology in the School of Medicine Quality Assurance Committee (2007-2008), School of Medicine, Assiut University, Asyut, Egypt.
* Representative for the Department of Clinical Pathology in the School of Medicine E-learning Committee (2012-2013), School of Medicine, Assiut University, Asyut, Egypt.