(I)PERSONAL DETAILS:

Name: Mahmoud Ibrahim Yousef Elbadry

Date and place of birth: 15 December 1983, Alexandria, Egypt.

Address: Department of Internal Medicine,
Sohag Faculty of Medicine,
Sohag University, Sohag, Egypt.

Nationality: Egyptian.

Languages: Arabic, English. I studied medicine in English

Contact details: mahmoudibrahim@med.sohag.edu.eg
mahmoudibrahem837@gmail.com

Phone: 002 01065964083 (Mobile)
0020 934591136 (Home)

(II) EDUCATION & QUALIFICATIONS:

■**Medical doctorate:** October 2019

■**Medical doctorate study:** *Kanazawa University, Faculty of Medicine, Institute of Medical Pharmaceutical and Health Sciences, Japan
February 2016 to February 2018.

Subject of doctorate thesis: Establishing Hematopoietic Stem Cell Lacking A Human Leukocyte Antigens Haplotype from Induced Pluripotent Stem Cells Derived from Patients with Acquired Aplastic Anemia.

■**M.Sc:** "Internal Medicine": Sohag Faculty of Medicine,
Sohag University, Egypt.
December, 2012.

■**M.B.B.Ch.:** Sohag Faculty of Medicine, Sohag University, Egypt.
September, 2007.

General grade: *Excellent with Honors*

■**Specialization:**

Major: Internal Medicine

Minor: Hematology.

■**Interest:** Induced Pluripotent Stem Cell, immune pathophysiology Aplastic anemia, Hematopoietic Stem Cell Transplantation, leukemia, lymphoma, Cancer immunotherapy.

(III) CURRENT JOB

Lecturer of Internal Medicine, Sohag Faculty of Medicine, Sohag University, Sohag, Egypt.

(IV)PREVIOUS POSTSIONS:

1- Fellow researcher:	Cellular Transplantation Biology (Hematology/Respirology) Faculty of Medicine,Kanazawa University, Ishikawa, Japan.
2-Clinical training:	Hematology Departement, Faculty of Medicine, Institute of Medical Pharmaceutical and Health Sciences, Kanazawa University, Japan from February 2016 to February 2018.
3- Animal experiment training:	Animal experiment basic training, July, 2017.
4-Radioactive isotopes training:	Radioactive chromium (Cr) release assay training using a gamma counter, Augaust 2016.
3-Society Memberships:	Egyptian Stem Cell Transplantation & Hematologic Disease Association April 2015 till now
4-Assistant lecturer:	Sohag Faculty of Medicine form 3/2/2013 to 30/11/2019.
5-Demonstrator:	Sohag Faculty of Medicine form 1/3/2012 to 3/2/2013.
6-Internal Medicine Resident:	Sohag University Hospital, from 1/3/2009 to 28/ 2/2012.
7- House officer "Rotating internship":	Sohag Faculty of Medicine, Sohag University Hospital, Egypt. from 1/3/2008 to 28/2/2009.

(V)TEACHING EXPERIENCES:

- ❖ Undergraduate Internal Medicine course in Faculty of Medicine and Nursing, Egypt .
- ❖ Undergraduate clinical course of Internal Medicine in Faculty of Medicin, Egypt.
- ❖ House officer clinical course of Internal Medicine in Faculty of Medicin, Egypt.
- ❖ Sharing in teaching of Postgraduate Internal Medicine course of MSc students, Egypt.
- ❖ Sharing in teaching of Postgraduate Stem cells, induced pluripotent stem cells (iPSCs) culturing and differentiation course Cellular Transplantation Biology (Hematology) Faculty of Medicine, Kanazawa University, Japan.

(VI) PROFESSIONAL SCIENTIFIC AND ACADEMIC MEMBERSHIP

- ❖ Member of Egyptian Stem Cell Transplantation & Hematologic Disease Association
- ❖ Member of Stem cells reseraches center in Sohag University.
- ❖ Reviewer in many International Journals.

(VII)EXPERIMENTAL WORKS: Extended over the two years in Japan and they included:

- I have skilled in culturing induced pluripotent stem cells (iPSCs) with different HLA genotypes from the monocytes of patients with aplastic anemia possessing HLA-lacking leukocytes, and achieved induction of hematopiotisc stem progenitor cell (HSPC) differentiation from these iPSC clones using different culture systems.

- Through these experiments, I have performed and skilled
  - ❖ Flow cytometry,
  - ❖ Different types of PCR,
  - ❖ Immunohistochemistry & Immunoflorcense analysis,
  - ❖ Magnetic and fluorescent activated cell sorting (MACS &FACS),
  - ❖ Transfection & Transduction and Cloning,
  - ❖ Clonogenic assay of hematopoietic progenitors
  - ❖ Western blotting analysis.
  - ❖ Enzyme-linked immunosorbent assay (ELISA).
  - ❖ Genetic mutations analysis.
  - ❖ Handling of experimental animals.
  - ❖ Creation of animal model of hematological malignancy for drugs studies
  - ❖ Adminstration of drugs to experimental animals by various routes.
  - ❖ Preparation of cells for examination by different types of microscopes.
  - ❖ Using radioactive chromium (Cr) release assay using a gamma counter.

- I used genetically modified immunodeficient mice (BRGS mice) to reconstitute them with HSPCs derived from iPSCs after intra-femur injection.

- I have skilled in collection and analysis of different mice organs (bone marrow, peripheral blood, spleen, and thymus) and determination of the engrafment of human cells.

- I have also skilled in the assessment of cytotoxicity by T cells using ^{51}Cr release assay, measuring the release of levels of IFN-γ in the cultured supernatants that are determined by an enzyme-linked immunosorbent assay (ELISA), using a CD107 degranulation assay with flow cytometry, and counting dead cells using an inverted microscope.

(VIII)EXPERIENCES AND SCIENTIFIC ACTIVITIES:

- Clinical skills for evaluation of patients with various hematological diseases, and acquired updated knowledge on the most recent investigations and tretments.
- Experince in stem cell transplant and procedures of cord blood transplantation, peripheral blood stem cells transplantation and bone marrow transplantation for patients with hematological malignancies or bone marrow failure syndromes.
- Good experience in diagnosis &treatment of Internal Medicine diseases.
- Practiced and acquired skills in management and dealing with internal medicine emergency states.
- Good experience in dealing with Plasma exchange.
- Being as lecturer in the Internal Medicine department;
  - I am sharing in clinica teaching of undergraduate students
  - I am sharing as well in training, house-officers and residents in the department.
- Attending some of the conferences in the field of Hematology in Egypt and Japan.
- Attending some of the conferences in the field of Internal Medicine in Egypt.
- Attending some of the workshops and EACCME in the field of Hematology.
- Attending and sharing in the weekly "Journal club" and "the research progress meeting conference" of Cellular Transplantation Biology (Hematology) department throughout my two year stay in Kanazawa.

(IX) ORAL PERESENTATIONS

- The hematopoietic reconstitution of mice with HLA(-) HSPCs derived from aplastic anemia patients.
  (79th Annual Meeting of the Japanese Society of Hematology, 22 October 2017, Tokyo, Japan)

- The Promise and Challenge of Induced Pluripotent Stem Cells (iPSCs) in hematology. ***(Clinical pathology department conference, Faculty of medicine, Sohag University, 16 March 2018, Egypt)***

(X) POSTER PERESENTATIONS

- Escape Hematopoiesis By HLA-B5401-Lacking Hematopoietic Stem Progenitor Cells in Male Patients with Acquired Aplastic Anemia.
  (60th American Society of Hematology Annual Meeting and Exposition, December 1-4, 2018, San Diego, USA)

- Identification of T cell receptors specific to antigens presented by HLA-B5401 on IPS cell-derived hematopoietic stem cells in a patient with Acquired Aplastic Anemia Carrying B5401-Lacking Leukocytes .
  (59th American Society of Hematology Annual Meeting and Exposition, December 9-12, 2017, Atlanta, USA)

(XI) PUBLICATION ACTIVITIES

1. Escape hematopoiesis by HLA-B5401-lacking hematopoietic stem progenitor cells in men with acquired aplastic anemia. ***Mahmoud I. Elbadry,*** Hiroki Mizumaki, Kohei Hosokawa, J. Luis Espinoza, ……..,***Haematologica***. 2019 Oct; 104(10): e447–e450.
2. Clonal hematopoiesis by SLIT1-mutated hematopoietic stem cells due to a breakdown of the autocrine loop involving Slit1 in acquired aplastic anemia. Kohei Hosokawa, Hiroki Mizumaki, ***Mahmoud I Elbadry***, Chizuru Saito, J Luis Espinoza, ……***Leukemia.***2019 June; 33,2732–2766.
3. Disease modeling of bone marrow failure syndromes using iPSC-derived hematopoietic stem progenitor cells. **Mahmoud I Elbadry**, J Luis Espinoza, Shinji Nakao. ***Experimental hematology***. 2019 March;71: 32-42
4. Hematopoiesis by iPSC-derived hematopoietic stem cells of aplastic anemia that escape cytotoxic T-cell attack. JL Espinoza, **MI Elbadry**, K Chonabayashi, Y Yoshida, T Katagiri, ...**Blood advances** 2 (4), 390-400 (2018).
5. Escape Hematopoiesis By HLA-B5401-Lacking Hematopoietic Stem Progenitor Cells in Male Patients with Acquired Aplastic Anemia. Kohei Hosokawa, ***Mahmoud Ibrahim Elbadry,*** Hiroki Mizumaki, Luis Espinoza, Noriharu Nakagawa, Kazuhisa Chonabay….. ***Blood***, 2018 November; 132: 3855-3855
6. Identification of T Cell Receptors Specific to Antigens Presented By HLA-B5401 on IPS Cell-Derived Hematopoietic Stem Cells in a Patient with Acquired Aplastic Anemia Carrying B5401-Lacking Leukocytes. N Nakagawa, ***MI Elbadry***, Y Akatsuka, H Hamana, K Shitaoka, Y Yoshida, ...***Blood*** 130 (Suppl 1), 2458-2458 (2017).

7. The hematopoietic reconstitution of mice with HLA(-) HSPCs derived from aplastic anemia patients. ***MI Elbadry***, JL Espinoza, K Chonabayashi, Y Yoshida, T Katagiri, ...79th Annual Meeting of the ***Japanese Society of Hematology*** 22 October (2017)

8. Protective effects of KIR-2DS5, KIR-2DL5 on EBV-related iatrogenic lymphoma (IA-LPD). NTM Anh, T Imi, ***MI Elbadry***, S Nakao.79th Annual Meeting of the ***Japanese Society of Hematology*** 22 October (2017)

9. The simultaneous inhibition of the mTOR and MAPK pathways with Gnetin-C induces apoptosis in acute myeloid leukemia. JL Espinoza, ***MI Elbadry***, M Taniwaki, K Harada, LQ Trung, N Nakagawa, ***...Cancer letters*** 400, 127-136 (2017)

10. Induced pluripotent stem cell technology: A window for studying the pathogenesis of acquired aplastic anemia and possible applications. ***MI Elbadry***, JL Espinoza, S Nakao. ***Experimental hematology*** 49, 9-18 (2017)

11. After Moving of Regulatory T-Cell Therapy to the Clinic: Will We Need a New Tregs Source. ***MI Elbadry***, AKA Noreldin, HA Hassanein. ***Hematol Transfus Int J*** 5 (2), (2017)

12. A functional polymorphism in the NKG2D gene modulates NK-cell cytotoxicity and is associated with susceptibility to human papilloma virus-related cancers. JL Espinoza, VH Nguyen, H Ichimura, TTT Pham, ***MI Elbadry,*** CH Nguyen, TV Pham, ...***Scientific reports*** 6, 39231 (2016)

13. An altered gut microbiota may trigger autoimmune-mediated acquired bone marrow failure syndromes. JL Espinoza, ***MI Elbadry***, S Nakao. ***Clinical immunology*** (Orlando, Fla.) (2016)

14. Association between rs1761667 polymorphism of CD36 gene and risk of coronary atherosclerosis in Egyptian population. A Boghdady, UA Arafa, EA Sabet, E Salama, A El Sharawy, ***MI Elbadry***. ***Cardiovascular diagnosis and therapy*** 6 (2), 120 (2016)

15. Selective immunoglobulin M deficiency in an adult with miliary tuberculosis: A clinically interesting coexistence. A case report and review of the literature. HA Hassanein, ***MI Elbadry. International journal of mycobacteriology*** 5 (1), 106-110 (2016)

16. Study of patients with nephrotic syndrome in Sohag University Hospital. ATA Hassan, AKA Noreldin, ***MIE Badry***. ***The Egyptian Society of Nephrology and Transplantation*** 16 (1), 21-31 (2016).

17. Comparison of Successful Myocardial Reperfusion and Adverse Events in Patients With ST-Elevation Myocardial Infarction Who Underwent Rescue Percutaneous Coronary Intervention After Failed Fibrinolytic Therapy With Versus Without Manual Coronary Thrombus Aspiration. A Boghdady, ***MI Elbadry***. ***The American journal of cardiology*** 116 (8), 1185-1192 (2015)

18. A case report of Thrombotic Thrombocytopenic Purpura Associated with Systemic Lupus Erythematosus: Overlapping Features. ATA Hassan, ***MI Elbadry***, M Adel. ***American Journal of Medical Case Reports*** 2,(10), 206-213 (2014).

19. Epidermodysplasia Verruciformis Associated with Astrocytoma, Mantle Lymphoma and Hepatitis B Virus Infection. ***MI Elbadry***, A Othman. ***American Journal of Medical Case Reports*** 2 (9), 187-193 (2014)

(XII) ONLINE ADDRESS:

Google Scholar URL: https://scholar.google.com/citations?view=&use=&user=CxkTpWIAAAAJ

Linked in URL: https://www.linkedin.com/in/mahmoud-i-elbadry-4b51a0a3/

ResearchGate : https://www.researchgate.net/profile/Mahmoud_I_Elbadry