

## CURRICULUM VITAE

### FOR

**Mostafa, Ahmed, M.B., B.Ch. (MD), MSc, Ph.D., D. (ABHI), F. (ACHI)**

Department of Pathology & Lab Medicine  
College of Medicine, University of Saskatchewan,

#### 1. PERSONAL

- Mailing Address: Histocompatibility and Immunogenetics Laboratory (HIL), St. Paul's Hospital, 1702-20<sup>th</sup> St W, Saskatoon, SK, Canada.
- Office: 306-655-5919
- Email: [Ahmed.Mostafa@saskhealthauthority.ca](mailto:Ahmed.Mostafa@saskhealthauthority.ca)

#### 2. DEGREES

- Clinical Fellow and Director in Training (DIT) in an American Society for Histocompatibility & Immunogenetics (ASHI) Certified Training Program, University of Calgary, Alberta, Canada 2019. Department of Pathology and Laboratory Medicine, Alberta Precision Laboratory.
- Postdoctoral Fellow, Arnie Charbonneau Cancer Institute & University of Calgary, Calgary Alberta, Canada 2016. Department of Oncology, Cumming School of Medicine.
- Doctor of Philosophy (Ph.D.), Memorial University of Newfoundland, St John's, Newfoundland, Canada 2013. Department of Biomedical Sciences (Immunology and Infectious Disease), Faculty of Medicine.
- Master of Science (M.Sc.), Menoufia University, Menoufia Egypt 2002. Department of Medical Biochemistry, Faculty of Medicine.
- Bachelor of Medicine, Bachelor of Surgery (Medicinae Baccalaureus, Baccalaureus Chirurgiae) M.B., B.Ch. (MD), Cairo University, Egypt, 1996. Faculty of Medicine.

#### 3. CREDENTIALS

- Fellow of the American College of Histocompatibility and Immunogenetics F. (ACHI), June 2020.
- American Society of Histocompatibility And Immunogenetics (ASHI) accredited Director for the following areas in June 2020:
  - Solid Organ Transplantation: Deceased Donor
  - Solid Organ Transplantation: Live Donor
  - HSC/BM Transplantation: Related Donor
  - HSC/BM Transplantation: Unrelated Donor
  - Histocompatibility Testing for Other Clinical Purposes
- Diplomat of American Board of Histocompatibility and Immunogenetics D. (ABHI), October 2019.

Certificates:

- Short Course: Inviting Indigenous People into your Learning Space, the Gwenna Moss Center for Teaching and Learning, University of Saskatchewan, March 2024
- Short Course: Education and Reconciliation Virtual Coffee Talk, the Gwenna Moss Center for Teaching and Learning, University of Saskatchewan, March 2024
- Short Course: Using Harvest for Open Educational Practices, the Gwenna Moss Center for Teaching and Learning, University of Saskatchewan, March 2024

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- Short Course: Online Chat about ChatGPT, the Gwenna Moss Center for Teaching and Learning, University of Saskatchewan, February 2023
  - Short Course: Introduction to Open Educational Practices, the Gwenna Moss Center for Teaching and Learning, University of Saskatchewan, January 2023
  - Short Course: Making Learning Stick through Practice, Feedback, and Reflection, the Gwenna Moss Center for Teaching and Learning, University of Saskatchewan, January 2023
  - Short Course: Creating Your Course Syllabus, the Gwenna Moss Center for Teaching and Learning, University of Saskatchewan, December 2022.
  - Short Course: Leadership Orientation, American Society for Histocompatibility & Immunogenetics (ASHI), September 2022.
  - Short Course: Trauma Informed Practice: Growing Awareness, Saskatchewan Health Authority, May 2022.
  - ASHI Accreditation Review Board (ARB) Inspector's Training Workshop, Orlando, FL, USA September 2021.
  - Short Course: 3-Minute Teaching Philosophy Statement, the Gwenna Moss Center for Teaching and Learning, University of Saskatchewan, April 2021
  - Short Course: Planning for Remote Assessment and Academic Integrity, the Gwenna Moss Center for Teaching and Learning, University of Saskatchewan, April 2021

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- American Foundation for Donation & Transplantation Histocompatibility Specialist Course Examination, Clearwater Beach, FL, USA, 2018.
  - Basics of Biostatistics workshop, Cumming School of Medicine, University of Calgary, Calgary, AB, 2017.
  - Time Management and Career Professionalism, Mitacs Certificate Cumming School of Medicine, University of Calgary, Calgary, AB, 2016
  - Network Skills Teaching Opportunity for a Graduate Assistant, (TOGA level 1), Memorial University of Newfoundland, St. John's NL, 2008.

- Network Skills Teaching Opportunity for a Graduate Assistant, (TOGA level 2), Memorial University of Newfoundland, St. John's NL, 2009.

#### **4. APPOINTMENTS (INCLUDING JOINT) AND PROMOTIONS AT THE U OF S**

- Associate Professor, College of Graduate Studies, University of Saskatchewan, July 2024 to present.
- Assistant Professor, College of Graduate Studies, University of Saskatchewan, February 2020 to July 2024.

#### **5. MEMBERSHIPS AND AFFILIATIONS**

##### **5.1 Associate Memberships at the U of S**

- Associate Professor, College of Graduate Studies, University of Saskatchewan, July 2024 to present.
- Assistant Professor, College of Graduate Studies, University of Saskatchewan, February 2020 to April 2024.

##### **5.2 Adjunct Appointments at Other Institutions**

- Histocompatibility & Immunogenetics Clinical Laboratory Director, St. Paul's Hospital, Saskatchewan Health Authority (SHA), June 2020 to present (100%).
- Provincial Clinical Co-Lead Genomics at Saskatchewan Health Authority (SHA).

##### **5.3 Affiliations**

#### **6. PREVIOUS POSITIONS RELEVANT TO U OF S APPOINTMENTS**

- Histocompatibility & Immunogenetics Clinical Laboratory Co-Director, St. Paul's Hospital, Saskatchewan Health Authority (SHA), August 2019 to June 2020.
- Clinical Laboratory Scientist Lead, Histocompatibility & Immunogenetics, Department of Pathology and Laboratory Medicine, Alberta Precision Laboratory, Alberta, Canada July 2018 to July 2019.
- Clinical Fellow, Director in training ASHI Certified Histocompatibility Training Program. Histocompatibility and Immunogenetics, Department of Pathology and Laboratory Medicine. Calgary Laboratory Services Canada. July 2016- July 2018.
- Postdoctoral Fellow: (Cancer Immunology and Immunotherapy), Tom Baker Cancer Centre, University of Calgary, Canada. January 2014- June 2016.
- Research Associate: (Human Genetics), Faculty of Medicine, Memorial University of Newfoundland, Canada. September 2012- December 2013.
- Ph.D. in Immunology Candidate and Teaching Assistant: (Medicine), Faculty of Medicine, Memorial University of Newfoundland, Canada. January 2007- December 2013.

- Visiting Scholar: (Clinical Biochemistry), Faculty of Medicine, Memorial University of Newfoundland, Canada June 2005- December 2006.
- Assistant Lecturer in Clinical Biochemistry, Faculty of Medicine, Menoufia University, Egypt. June 2003-May 2005.
- Clinical Laboratory Manager at Al Borg Laboratories. - Cairo, Egypt June 2003-May 2005.
- MSc (Clinical Biochemistry) Student and Lab Demonstrator, Faculty of Medicine, Menoufia University, Egypt. November 1998- May 2002
- Internal Medicine Residency- Police Academy Hospital, Agouza, Cairo-Egypt, April 1998-November 1999.
- Internal Medicine Residency- Mahmoud Hospital, Moahndseen, Cairo-Egypt, April 1998-June 2003.
- House Officer (Obligatory training course for the medical student): Cairo University hospitals, Cairo, Egypt- March 1997- March 1998.
- Medical Representative, Schering-Plough (International Pharmaceutical Company), Cairo Egypt. March 1997- March 1998.
- Medical Representative, Clinilab (laboratory equipment) Cairo Egypt. December 1996- March 1997.
- Medical Student, M.B., B.Ch. (MD), Faculty of Medicine, Cairo University, Egypt, 1991-1996.

## 7. LEAVES

## 8. RECOGNITIONS

- Genome Canada - Genomic Applications Partnership Program (GAPP) - Precision Medicine CanPREVENT AMR: Applying Precision Medicine Technologies in Canada to Prevent Antibody Mediated Rejection and Premature Kidney Transplant Loss. Genome Canada has approved funding for this project to a maximum of \$5,823,737 over 3 years, of which Genome Canada's maximum contribution is \$1,941,251. June 2024. **(My role is Collaborator)**
- 38<sup>th</sup> HLA and Transplant Workshop Travel Award, In Carlsbad, California, USA. USD\$4000. March 13-16, 2024. This award was presented to Eric Wang (Student). Eric's exceptional research, ranked among the top 5 studies, secured him this prestigious award for an oral presentation **(My role is principal investigator)**.
- Dean's Research Project Awardee. Enhance the Identification of Potential Immunological Mismatches in Kidney Transplantation by Using Computational Algorithm. College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. January 2024.
- Dean's Research Project Awardee. Eplet Mismatches in Organ Transplantation: Bridging the Knowledge Gap. College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. January 2024.
- American Society for Histocompatibility & Immunogenetics Travel Award to attend the 49th annual ASHI meeting, in San Antonio, Texas, USA. USD\$2000. October 16-20, 2023. This award was presented to Destinie Webster, our Lab Supervisor **(My role is principal investigator)**.
- American Society for Histocompatibility & Immunogenetics Travel Award to attend the 49th annual ASHI meeting, in San Antonio, Texas, USA. USD\$2000. October 16-20, 2023. This award was

presented to Pramath Kakodkar (PGY3) **(My role is principal investigator)**.

- American Society for Histocompatibility & Immunogenetics Travel Award to attend the 49th annual ASHI meeting, in San Antonio, Texas, USA. USD\$2000. October 16-20, 2023. This award was presented to Henry Pan (PGY3) **(My role is principal investigator)**.
- Fellows Top Oral Abstracts and Travel Grant (CAD\$500) to attend the 2023 Canadian Society of Transplantation (CST) Annual Scientific Meeting, being held October 16-20, 2023, in Winnipeg, Manitoba. This award was presented to Yayuan Zhao (PGY4) **(My role is principal investigator)**.

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- Canadian Blood Service Recognition Award: awarded to the Saskatoon Histocompatibility and Immunogenetics laboratory for the significant contribution to the 1000 Kidney Paired Donation program. June 2023.
  - Canadian Society of Transplantation Allied Health Professional Travel Grants to attend the annual CST Meeting in Winnipeg. MB.CAD\$1000. May 2023.
  - Dean's Research Project Awardee. Epitope analysis as a tool for prediction of graft failure. College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. January 2023.
  - Dean's Research Project Awardee. Vitamin Testing: Do We "Choose Wisely" in Saskatchewan? University of Saskatchewan. CAD\$5000 to support a medical student stipend. January 2023.
  - Dr. Lorne Massey Top Presentation Award. *The role of the HLA Allelic Repository on the clinical severity of COVID-19*. Pathology and Laboratory Medicine Research Day, College of Medicine, University of Saskatchewan. CAD\$300, November 2022.  
Presenter: Pramath Kakodkar (PGY2). **(My role is principal investigator)**
  - Canadian Society of Transplantation Allied Health Professional Travel Grants to attend the annual Banff-CST Joint Meeting in Banff.CAD\$1000. September 2022.
  - CAP Foundation Rippey Grant for Expedited Research - The Impact of Laboratory Testing for SARS-CoV-2 on Quality and Patient Safety. *Investigation of COVID-19 Vaccines on Kidney Transplant*. College of American Pathologists (CAP). A grant amount of USD\$17,500. April 2022. Applicant: Yayuan Zhao (PGY3). **(My role is principal investigator)**
  - Dean's Research Project Awardee. *Cytokine profile and disease severity in patients with COVID-19*. College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. February 2022.
  - Quality Improvement Category top presentation award. *Choosing Wisely: Thyroid Function Testing*. Undergraduate Research Showcase College of Medicine, University of Saskatchewan. CAD\$200. October 2021.  
Presenter: Shravan Murthy (2<sup>nd</sup> Year Medical Student). **(My role is Co-Principle Investigator)**
  - American Society for Histocompatibility & Immunogenetics Travel Award to attend the 47th annual ASHI meeting, Hyatt Regency Grand Cypress, Orlando, FL, USA. USD\$1500. September 2021.
  - Dean's Research Project Awardee. *Choosing Wisely: Thyroid Function Testing* College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. February 2021.

- Dean's Research Project Awardee. *Appropriateness of laboratory test utilization for diagnosis of Celiac disease*. College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. February 2021.
- Rapid Response COVID-19 Research Award, College of Medicine, OVDR, Respiratory Research Center, University of Saskatchewan. *Modeling for risk stratification of patients infected with COVID-19 based on cytokine profile and other immune-related biomarkers*, A grant amount of CAD\$ 10,000. June 2020.
- Recognition for Contribution Award, College of Medicine, University of Saskatchewan, Saskatoon SK, Canada. January 2020.
- Calgary Laboratory Services Health Service Research Funding Competition. *"Improvements of crossmatching technique to eliminate interference by Rituximab therapy"*. \$15,000 for two years January 2019.
- Top poster presentation award in basic science research. Annual Department of Pathology and Laboratory Medicine Residents' & Graduate Students' Research Day at the Diagnostic Service Center, University of Calgary, Calgary, AB, Canada. CAD\$500. August 2018.
- Top oral presentation award in basic science research, Annual Department of Pathology and Laboratory Medicine Residents' & Graduate Students' Research Day at the Diagnostic Service Center, University of Calgary, Calgary, AB, Canada. CAD\$500. May 2017.
- Clinical Fellowship Training Award in Histocompatibility & Immunogenetics Laboratory, Department of Pathology and Laboratory Medicine. Alberta Precision Laboratory & University of Calgary, Alberta (\$110,000). July 2016.
- BioCanRx High-Quality Professional Travel Award to attend the Summit4CI, which brings together the 9th annual Canadian Cancer Immunotherapy Consortium (CCIC) Symposium and the 1st annual scientific meeting of BioCanRx: Biotherapeutics for Cancer Treatment. Westin Nova Scotian Hotel in Halifax, Nova Scotia. CAD\$3000. June 2016.
- Canadian Breast Cancer Foundation Postdoctoral Fellowship in the form of one- a year salary award (\$50,000). July 2015.
- Alex Cummings Travel Award to attend the 9th International Conference on Oncolytic Virus Therapeutics, Boston, Massachusetts, USA. CAD\$1500 June 2015.
- Top poster award presentation, Annual Calgary Cancer Research Symposium, - Southern Alberta Cancer Research Institute (SACRI), University of Calgary, Calgary, AB, Canada. CAD\$500 January 2015.
- Paul Clark Postdoctoral Fellowship in Lung Cancer Research administrated from the University of Calgary, in the form of a 2-year salary award (\$120,000). January 2014.
- Fellow of the School of Graduate Studies and Distinction Award. The Memorial University of Newfoundland, St. John's, NL, Canada. December 2013.
- Top poster award presentation, 1<sup>st</sup> Research, and Graduate Studies Reunion – Faculty of Medicine, Memorial University of Newfoundland St John's, NL, Canada. CAD\$200. August 2012.
- Top poster award presentation, 1<sup>st</sup> Research, and Graduate Studies Reunion – Faculty of Medicine,

Memorial University of Newfoundland St John's, NL, Canada. CAD\$200. August 2011.

- Top poster award presentation, 4<sup>th</sup> Annual Cancer Immune Therapy Symposium, Fairmont Chateau, Lake Louise, AB, Canada. CAD\$200. April 2011.
- De Novo travel award to attend the 4<sup>th</sup> Annual Canadian Society for Immunology, Fairmont Chateau, Lake Louise, AB, Canada. CAD\$1500. April 2011.
- Top research award from the Egyptian Student Association in North America (ESANA) to attend the general assembly annual meeting in Washington, DC, USA. CAD\$2000 January 2011.
- Top Ph.D. presentation award, Immunology, and Infectious Diseases Graduate Student Research Forum, Memorial University of Newfoundland, St. John's, NL, Canada. CAD\$200. November 2010.
- Travel award from the Cancer Research Training Program at Dalhousie University to attend the BHCRI CRTP cancer symposium. CAD\$1000. November 2010.
- Nominated by the Memorial University of Newfoundland-Canada as being within the top 5% of doctoral students, for participation in the CIHR Research Poster Competition, in Winnipeg and received a travel award to present my work. CAD\$2000. June 2010
- Canadian Institute of Health Research-Regional Partnership Program (CIHR- RPP) Health Professional Fellowship in the form of 2 years doctoral student salary award and research allowance (\$90,000). January 2010.
- Travel award from the Cancer Research Training program at Dalhousie University to attend the 2009 BHCRI CRTP Cancer Symposium. CAD\$1000. November 2009.
- Top Ph.D. presentation award, Immunology, and Infectious Diseases graduate student research forum at the Memorial University of Newfoundland St. John's Canada. CAD\$200. November 2008.
- Faculty of Medicine Research Scholarship in the form of a stipend, Memorial University of Newfoundland Canada, (CAD\$80,000). December 2007.
- Best poster award presentation, Canadian Society of Clinical Chemist 51st annual meeting Toronto, Ontario. CAD\$200. June 2007.
- Best poster award presentation, Canadian Society of Clinical Chemist 50th annual meeting Victoria, BC. CAD\$200. June 2006.
- Egyptian Missions and Scholarship fellowship to study in Canada for 2 years in the form of a student salary award and research allowance of CAD\$90,000. June 2005.
- Faculty of Medicine full scholarship to do a Master's degree in clinical biochemistry in the Faculty of Medicine, Menoufia University. June 1999.
- Faculty of Medicine full scholarship for studying Medicine, Cairo University September 1991.

## 9. TEACHING ACTIVITIES

### 9.1 Scheduled Instructional Activity

Year	Course Title	Inst Type	ENRL	YIH	YSCH
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2024	3 <sup>rd</sup> Practical Approach to Renal and Organ Transplant Immunology Course	LEC(Hybrid)	300	6.0	1800
2023	The 42nd AND the 38th CURRENT didactic and laboratory Courses on Immunogenetics & Molecular Genetics. Faculty of Medicine of The National University of Mexico- UNAM. Mexico City Mexico.	LEC (In Person)	50	3.0	150
2023	Deceased Donor Transplantation Workshop. Ministry of Health, the Arab Republic of Egypt.	LEC(Online)	80	4.0	320
2022	The Georgetown University Current Topics in Histocompatibility and Transplantation lecture series Georgetown University Hospital in Washington, D.C.	LEC(Online)	300	3.0	900
2021	Arab Society of Nephrology and Renal Transplantation (ASNRT) Fellowship program in clinical transplantation	LEC(Online)	200	6.0	1200

## 9.2 Unscheduled Instructional Activity

- 42 hours of the clinical foundation of transplant immunology teaching to the transplant nephrologist elective and Medical students, August 2023- to.
  - 9 hours of Laboratory principles of transplantation teaching to the General Pathology Resident Transfusion/Coagulation rotation, September 2023-December 2024.
  - 6 hours of Foundations in Clinical Pathology teaching to PGY1. Pathology and lab medicine at the University of Saskatchewan, November 2023.
  - 21 hours of HLA Immunogenetics rotation for pathology residents. Pathology and lab medicine at the University of Saskatchewan, November 2023.
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- 72 hours of the clinical foundation of transplant immunology teaching to the transplant nephrologist elective students, September 2020-December 2022.
  - 12 hours of Laboratory principles of transplantation teaching to the General Pathology Resident Transfusion/Coagulation rotation, September 2020-December 2022.
  - 3 hours of Foundations in Clinical Pathology teaching to PGY1. Pathology and lab medicine at the University of Saskatchewan, November 2022.
  - 6 hours of the clinical foundation of transplant immunology teaching to the Rheumatology Resident Rotation, January 2021.
  - 6 hours of half-day education for nephrology fellow, January 2021.

## 9.3 Course and Program Development

- 3rd Practical Approach to Renal and Organ Transplant Immunology Course in the Arab Republic of Egypt. January 9-11<sup>th</sup>, 2024. **(My role is course moderator).**

- The 42nd AND the 38th CURRENT didactic and laboratory Courses on Immunogenetics & Molecular Genetics. Faculty of Medicine of the National University of Mexico- UNAM. Mexico City Mexico. August 7-11 2023.

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- Deceased Donor Transplantation Workshop. Ministry of Health, the Arab Republic of Egypt. June 17<sup>th</sup>, 2023.
  - Current Topics in Histocompatibility & Transplantation, MedStar Georgetown University Hospital Histocompatibility Laboratory in Washington, D.C. November 2022.
  - ASNRT Fellowship program in clinical transplantation. **(My role is member of the scientific board)**. September 2021.
  - Foundation of Clinical Pathology for General Pathology residence, Department of Pathology and Lab Medicine, College of Medicine, University of Saskatchewan September 2020.
  - Solid Organ Transplant Elective for fourth-year medical students, Department of Medicine, University of Saskatchewan and the Saskatchewan Transplant program **(My role is member of the scientific board)**. September 2019.

#### 9.4 Teaching Materials

##### Course Moderator for 3rd Practical Approach to Renal and Organ Transplant Immunology Course

- Basic Transplant Immunology and Histocompatibility
- Creating Synergy Between the HLA Lab and Transplant Team for Optimal Patient Care
- Exploring HLA Laboratory Test Agreements for Transplant Programs and OPOs in Canada
- Standardization of HLA typing Report
- Standardizing HLA Laboratories for Enhanced Transplantation Outcomes The Canadian Experience

Immunological Risk Assessment for Kidney Transplantation didactic and laboratory Courses on Immunogenetics & Molecular Genetics. Faculty of Medicine of the National University of Mexico- UNAM. Mexico City Mexico.

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Development of Histocompatibility and Immunogenetics lab rotation for General Pathology Residency Program, Department of Pathology & Lab Medicine, the University of Saskatchewan

Development of Histocompatibility and Immunogenetics lab rotation for Solid Organ Transplant Elective Medical Students Program, Department of Internal Medicine, the University of Saskatchewan

Development of Histocompatibility and Immunogenetics lab rotation for Solid Organ Transplant Elective Nephrology Fellowship Program, Department of Internal Medicine, the University of Saskatchewan

- HLA Typing Methods
- Identification of HLA-specific antibodies
- Principle of Crossmatch Techniques
- Engraftment Monitoring

- Epitope matching and Epitope analysis in Transplantation
- Method Validation
- Case studies in Transplantation Immunology

*Note: Hours used for the development of these teaching materials: approximately 90 hours (about 15 hours per module)*

### 9.5 Other Teaching-Related Activities

*Didactic Lectures Delivered during Solid Organ Transplant Elective Medical Student HIL Rotation, University of Saskatchewan*

Year	# Of days of HIL rotation supervision & teaching	Hours
2023	10	30
2023	2	6
2022	4	12
2021	20	60
2020	2	6
Total	38 Days	114
<p>Note: ~3 hours per day  <i>Note: estimation of 5 hours for preparing each teaching lecture. In total, I spent 140 hours in the development of these teaching materials.</i></p>		

# of Students	21
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November 6<sup>th</sup>, 2023 to November 19<sup>th</sup>, 2023 (2 days), Elective Student: Michael Heynen

*Teaching activities:* Introducing basics of Histocompatibility laboratory techniques

November 3<sup>rd</sup>, 2023 (1 day), Medical Student (Shadow a Pathologist): Jing Liu

*Teaching activities:* Introducing basics of Histocompatibility laboratory techniques

October 23<sup>rd</sup> 2023 to October 31<sup>st</sup> 2023 (2days), volunteer undergraduate student Kinesiology

*Teaching activities:* Introducing basics of Histocompatibility laboratory techniques

September 11<sup>th</sup>, 2023 to September 22<sup>nd</sup>, 2023 (2 days), Elective Student: Riley Schaag

*Teaching activities:* Introducing basics of Histocompatibility laboratory techniques

September 6<sup>th</sup>, 2023 (1 day), Medical Student (Shadow a Pathologist) Jackie Valois

*Teaching activities:* Introducing basics of Histocompatibility laboratory techniques

August 1<sup>st</sup>, 2023 to August 13<sup>th</sup>, 2023 (2 days), Elective Student: David Kim

*Teaching activities:* Introducing basics of Histocompatibility laboratory techniques

June 5<sup>th</sup>, 2023, (1 day) Summer Research Student with the Saskatchewan Transplant Program: Sameer Rathnayaka.

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

June 5<sup>th</sup>, 2023, (1 day) Summer Research Student in the PaLM: Eric Wang.

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

November 21<sup>st</sup>, 2022 to December 4<sup>th</sup>, 2022. (2 days), Elective Student: Devyn McIntyre

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

November 8<sup>th</sup> 2021- November 21<sup>st</sup> 2021 (2 days), Elective Student: Devin Edwards

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

October 25<sup>th</sup> 2021- November 7<sup>th</sup> 2021 (2 days), Elective Student: Emma Maelde

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

October 11<sup>th</sup>, 2021- October 24<sup>th</sup>, 2021 (2 days), Elective Student: Muhammad Shoker

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

September 27<sup>th</sup> 2021- October 8<sup>th</sup> 2021 (2 days), Elective Student: Vivian Murungi

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

August 30<sup>th</sup> 2021- September 12<sup>th</sup> 2021 (2 days), Elective Student: Alana Goertzen

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

August 30<sup>th</sup> 2021- September 12<sup>th</sup> 2021 (2 days), Elective Student: Alana Goertzen

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

August 2<sup>nd</sup> 2021- August 15<sup>th</sup> 2021 (2 days), Elective Student: Richard Chaulk

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

February 8<sup>th</sup> 2021- February 21<sup>st</sup> 2021 (2 days), Elective Student: Stephen Patrick

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

January 15<sup>th</sup>, 2021- January 29<sup>th</sup>, 2021 (2 days), Elective Student: Bashir Daud Shah

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

January 11<sup>th</sup>, 2021- January 24<sup>th</sup> 2021 (2 days), Elective Student: Schick, Kaitlyn

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

November 30<sup>th</sup> 2020- December 14<sup>th</sup> 2020 (2 days), Elective Student: Amiee Prefontaine

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

February 10<sup>th</sup>, 2020- February 23<sup>rd</sup>, 2020 (2 days), Elective Student: Erin Kelly

Teaching activities: Introducing basics of Histocompatibility laboratory techniques

Medical Resident HIL Rotation Teaching & Supervision, University of Saskatchewan

Year	# Of days of HIL rotation	Hours
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	supervision & teaching	
2024	9	19
2023	6	18
2023	1	3
2022	8	24
2021	3	9
2020	2	6
Total	24 days	76
Note: ~3 hours per day		

# of Residents	24
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April 22<sup>nd</sup> to 27<sup>th</sup> (1 week) Dr. Daniel Markewich, (PGY 3)

Teaching activities: General Pathology Resident Genomic rotation.

April 22<sup>nd</sup> to 27<sup>th</sup> (1 week) Dr. Henry Pan (PGY3)

Teaching activities: General Pathology Resident Genomic rotation.

March 5<sup>th</sup> 2024 Dr. Pramath Kakodkar (PGY 4)

Teaching activities: General Pathology Resident Transfusion/Coagulation rotation.

March 5<sup>th</sup> 2024 Dr. Daniel Markewich, (PGY 3)

Teaching activities: General Pathology Resident Transfusion/Coagulation rotation.

February 6<sup>th</sup>, 2024 (1 day) Nephrology Fellow: Dr. Lindsay Richels (PGY4)

Teaching activities: Half-day education for nephrology fellows.

February 6<sup>th</sup>, 2024 (1 day) Nephrology Fellow: Dr. Matthew Patterson (PGY5)

Teaching activities: Half-day education for nephrology fellows.

November 27<sup>th</sup>- 29, 2023, (1 day) Dr. Pramath Kakodkar (PGY 4)

Teaching activities: HLA Immunogenetics rotation for pathology residents

November 23<sup>rd</sup> 2023, (1 day) Dr. Richard Zhu (PGY1)

Teaching activities: Introduction to Clinical Pathology Bootcamp

November 23<sup>rd</sup> 2023, (1 day) Dr. Dan Zhang (PGY1)

Teaching activities: Introduction to Clinical Pathology Bootcamp

September 20<sup>th</sup>, 2023 (1 day), Pathology Resident: Dr. Leonard Mutema, (Hematopathologist)

Teaching activities: Foundations In Clinical Pathology

September 20<sup>th</sup>, 2023 (1 day), Pathology Resident: Dr Yayuan Zhao (PGY3)

Teaching activities: Foundations In Clinical Pathology

September 20<sup>th</sup>, 2023 (1 day), Pathology Resident: Dr. Henry Pan (PGY3)

Teaching activities: Foundations In Clinical Pathology

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May 26<sup>th</sup>, 2023, (1 day), Nephrology Fellow: Dr. Matthew Patterson (PGY4)

Teaching activities: Half-day education for nephrology fellows.

November 24<sup>th</sup>, 2022. (1 day), Pathology Resident: Dr. Joel Scott (PGY1)

Teaching activities: Foundations In Clinical Pathology

November 24<sup>th</sup>, 2022. (1 day), Pathology Resident: Dr. Javera Tariq (PGY1)

Teaching activities: Foundations In Clinical Pathology

November 9<sup>th</sup>, 2022. (1 day), Pathology Resident: Dr. Ingrid Tam (PGY4)

Teaching activities: General Pathology Resident Transfusion/Coagulation rotation.

November 9<sup>th</sup>, 2022. (1 day), Pathology Staff: Dr. Reshma Khoosal

Teaching activities: General Pathology Resident Transfusion/Coagulation rotation.

January 18<sup>th</sup> to April 19<sup>th</sup>, 2022. (2 day), Nephrology Fellow: Dr. Khalid Musa (PGY5)

Teaching activities: Half-day education for nephrology fellows.

January 18<sup>th</sup> to April 19<sup>th</sup>, 2022. (2 days), Nephrology Fellow: Dr. Vanessa Wheeler. (PGY5)

Teaching activities: Half-day education for nephrology fellows.

October 20<sup>th</sup>, 2021. (1 day), Pathology Resident: Dr. Archana Ark (PGY4)

Teaching activities: General Pathology Resident Transfusion/Coagulation rotation.

October 20<sup>th</sup>, 2021. (1 day), Pathology Resident: Dr. Suresh Tharmaradinam (PGY4)

Teaching activities: General Pathology Resident Transfusion/Coagulation rotation.

April 21<sup>st</sup>, 2021. (1 day), Pathology Resident: Dr. Macpherson, James (PGY4)

Teaching activities: General Pathology Resident Transfusion/Coagulation rotation.

October 9<sup>th</sup>, 2020. (1 day), Pathology Resident: Dr. Jana Suresh (PGY4)

Teaching activities: General Pathology Resident Transfusion/Coagulation rotation.

October 9<sup>th</sup>, 2020. (1 day), Pathology Resident: Dr. David Li (PGY4)

Teaching activities: General Pathology Resident Transfusion/Coagulation rotation.

Medical Resident HIL Rotation Teaching & Supervision, University of Calgary, Department of Pathology & Lab Medicine.

May 9<sup>th</sup>, 2019. (1 week), Adult Hematology Fellow: Dr. Samar Osia

Teaching activities: Introducing the basic of Histocompatibility laboratory techniques.

April 18<sup>th</sup> 2018. (1 week), Pathology Transplant Fellow: Dr. Tariq Roshan (PGY5)

Teaching activities: Introducing the basic of Histocompatibility laboratory techniques.

April 18<sup>th</sup> 2018. (1 week), Pathology Transplant Fellow: Dr. Robby Wang (PGY5)

Teaching activities: Introducing the basic of Histocompatibility laboratory techniques.

April 18<sup>th</sup> 2018. (1 week), Pathology Transplant Fellow: Dr. Lucy Bradley (PGY5)

Teaching activities: Introducing the basic of Histocompatibility laboratory techniques.

April 18<sup>th</sup> 2018. (1 week), Pathology Transplant Fellow: Dr. Marcia Abbott (PGY5)

Teaching activities: Introducing the basic of Histocompatibility laboratory techniques.

Undergraduate Student teaching, Department of Medical Oncology, University of Calgary

2014-2016, Teaching Assistant, Basic Immunology and Tumor Immunology, BSc. Honor Students

Graduate and Post Graduate Student Teaching, Department of Basic Medical Science, Memorial University of Newfoundland

2010-2013, Teaching Assistant, Basic Immunology and Tumor Immunology, Graduate Students

- Advanced Immunological Methods (HLA typing and transplantation)
- Assisted in the development of Instructional Learning Units
  - Anaphylaxis Unit
  - Allergy and Hypersensitivity Unit

Undergraduate Student Teaching, Department of Basic Medical Science and Faculty of Science, Memorial University of Newfoundland

2008-2013, Teaching Assistant

- Medicine 310A Physiology of Reproduction
- Medicine 310B Heart and Circulation
- Medicine 310B Hematology and Immunology
- Introduction to Genetics 2100.
- Introduction to biochemistry 2101.
- Metabolism 3106.
- Nucleic Acid Biochemistry & Molecular Biology 3107

Grand Rounds Presentation:

# of Grand Round Presentation	6 Grand Rounds Each round is ~ 1 hour, (a total of 5 hours)
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- 1) May 23<sup>rd</sup> 2023, Unveiling the New HIL Eplet Mismatch Group Report: A Comprehensive

## Introduction

*Renal Transplant Grand Rounds, College of Medicine, University of Saskatchewan*

### Objectives:

- HLA and HLA antibodies
- Epitope matching and Epitope analysis
- New HIL Eplet Mismatch Group report
- Clinical significance

## 2) January 30<sup>th</sup> 2023, Engraftment/Chimerism Monitoring: Fantasy to Reality

*Pathology and Laboratory Medicine Grand Rounds, College of Medicine, University of Saskatchewan*

### Objectives:

- Myths and legends about Chimerism
- Principle of Chimerism in HSCT
- Methods used for Engraftment monitoring (STR and NGS)
- Validation of NGS for Chimerism testing

## 3) January 17<sup>th</sup>. 2023, Practical Application of Crossmatch Techniques; Challenges and Solutions

*Renal Transplant Grand Rounds, College of Medicine, University of Saskatchewan*

### Objectives:

- Understand the HLA Typing
- Understand the cPRA, Cumulative cPRA and Current CPRA
- Physical Crossmatch
- Virtual Crossmatch

## 4) December 5<sup>th</sup> 2022, Engraftment/Chimerism Monitoring: Fantasy to Reality

*Marrow and Stem Cell Transplant Grand Rounds, College of Medicine, University of Saskatchewan*

### Objectives:

- Myths and legends about Chimerism
- Principle of Chimerism in HSCT
- Methods used for Engraftment monitoring (STR and NGS)
- Validation of NGS for Chimerism testing

## 5) November 29<sup>th</sup> 2021, History of Transplantation Immunology: Ancient Legends to Modern Practice.

*Pathology and Laboratory Medicine Grand Rounds, College of Medicine, University of Saskatchewan*

### Objectives:

- Myth and legends about transplantation
- History of transplantation
- Evolution of Immunology
- Discovery of the HLA system
- Development of transplant immunology in Saskatoon

6) November 23<sup>rd</sup> 2020, History of Transplantation Immunology: Ancient Legends to Modern Practice.  
*Renal Transplant Grand Rounds, College of Medicine, University of Saskatchewan*

Objectives:

- Myths and legends about transplantation
- History of transplantation
- Evolution of Immunology
- Discovery of the HLA system
- Development of transplant immunology in Saskatoon

## 10. SUPERVISION AND ADVISORY ACTIVITIES

### 10.1 Undergraduate Student Supervision

Year	# Of weeks of supervision & teaching	# of Students
2023	8	2
2022	10	1
2021	20	2
2017	10	1
2015	10	1
2014	20	1
2013	10	2
2011	30	2
2010	20	1
2009	10	1
2006	20	1
Total	148 weeks	15

Note: ~25 hours per week/ for each student for direct supervision of all lab work and thesis work. A total of 375 hours

University of Saskatoon

Hasan Jamil, MD. Candidate 2026, supervisor, Dean's research project title: Vitamin Testing: Do We "Choose Wisely" in Saskatchewan? 10 weeks June 2023 to August 2023

Eric Wang, MD. Candidate 2026, supervisor, Dean's research project title: Epitope Analysis as Tool for Prediction of Graft Failure. 10 weeks June 2023 to August 2023

Mujtaba Ibrahim, MD. Candidate 2025, supervisor, Dean's research project title: Cytokine profile and disease severity in patients with COVID-19. 10 weeks, May 2022 to August 2022

Shravan Murthy, M.D. Candidate 2024, supervisor, Dean's research project title: Choosing Wisely: Thyroid Function Testing; project duration: 10 weeks, May 2021 to August 2021

Filip Davidovic M.D. Candidate 2024, supervisor, Dean's research project title: Appropriateness of laboratory test utilization for diagnosis of Celiac disease: 10 weeks, May 2021 to August 2021

University of Calgary

Yacine Berka, BSc. Class 2019, supervisor, Calgary laboratory service research project title: Improvements of crossmatching technique to eliminate interference by Rituximab therapy: 10 weeks, May 2017 to August 2017

Rahul Arora, BSc. Class 2019, supervisor, University of Calgary research project title: Evaluating methods to increase the efficacy of oncolytic virotherapy with reovirus in the treatment of non-small-cell lung cancer. 10 weeks, May 2015 to August 2015

JianRui (Peter) Liu, BSc. Class 2015, supervisor, Honors thesis research title: Augmentation of oncolytic viral therapy by immune checkpoint blockade and reversal of tumor microenvironment immunosuppression in breast cancer. 20 weeks, September 2014 to April 2015

Memorial University of Newfoundland

Jessica Besaw, Master student, 2013, co-supervisor, Identification of the structure of the wild-type and mutant FOX family of genes. 10 weeks, May 2013 to August 2013

Isabel Eisen, High school summer student, Westmount C. In high school in Ontario in 2013, supervisor, Structural and functional role of one of the FOX family of genes 10 weeks, May 2013 to August 2013

Jillian Green M.D. Candidate 2014, supervisor, Dean's research project title: Role of MAPK in the regulation of HLA-II in breast cancer cells. 10 weeks, May 2011 to August 2011.

Tracey Dyer, BSc. Class 2012, supervisor, Honors thesis research title: Role of hormonal and growth factor receptor in the regulation of HLA Class II in Breast Cancer. 20 weeks, September 2011 to April 2012

Mostafa, Ahmed (*May 2024*)

Christa Lewis, BSc. Class 2011, supervisor, Honors thesis research title: Mechanism involved in the modulation of HLA class II expression in Her2 positive breast cancer. 20 weeks, September 2010 to April 2011

Rebecca Hollett, High school student at Holy Heart High School, St. John's, NL Canada 2009, supervisor, Sanofi-Aventis Biotech Challenge Mentorship project title: Juniper Tree: Breast Cancer Free?. 10 weeks, May 2009 to August 2009.

Ravi Pullela, BSc. Class 2007, supervisor, Honors thesis research title: Examination of Human Hemoglobin for Methylglyoxal Derived Advanced Glycation End products. 20 weeks, September 2006 to April 2007

## 10.2 Graduate Student Supervision

### 10.3 Graduate Theses Supervised

### 10.4 Post-Doctoral Supervision

<i>Total weeks:</i>	<i>56 weeks</i>
<i># of Residents</i>	<i>5</i>
<i>Weekly meeting with each resident and each meeting for 1 hour. A total of 56 hours.</i>	
<i>Extra 200 hours for Data Analysis, Manuscript, and Abstracts Revisions</i>	

- 1) Dr. Pramath Kakodkar Pathology resident (PGY3), supervisor, pathology research block: Validation of next-generation sequencing-based chimerism testing for accurate detection and monitoring of engraftment in hematopoietic stem cell transplantation. 4 months July 2023- October 2023.

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- 2) Dr. Henry Pan, Pathology resident (PGY2), supervisor, Research: Investigation of COVID-19 Vaccines on Kidney Transplant. 1 year January 2023 to August 2023.
- 3) Dr. Yayuan Zhao, Pathology resident (PGY2), supervisor, CAP Foundation Rippey Grant for Expedited Research: Investigation of COVID-19 Vaccines on Kidney Transplant. 1 year August 2022 to August 2023.
- 4) Dr. Pramath Kakodkar Pathology resident (PGY2), supervisor, pathology research block: Modeling for risk stratification of patients infected with COVID-19 based on cytokine profile and other immune-related biomarkers. 6 months July 2022- January 2023.
- 5) Dr. Khalid Mussa (Nephrology fellow PGY5), supervisor, Transplant nephrology research block: Assessment of risk stratification of COVID-19 Vaccines in waitlist kidney transplant recipients. One month May 2022- June 2022

## 10.5 Staff Supervision

- 1) Ashley Day, Medical Lab technologist I in Saskatchewan Health Authority, Histocompatibility and Immunogenetics Laboratory April 2024

- 2) Didem Hammond Medical Lab technologist I in Saskatchewan Health Authority, Histocompatibility and Immunogenetics Laboratory January 2024
- 3) Svetlana Parsyak, Medical Lab technologist I in Saskatchewan Health Authority, Histocompatibility and Immunogenetics Laboratory August 2023

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- 4) Aprit Sharma, Medical Lab technologist in London Ontario HLA Laboratory, mentor, Canadian Blood Services National HLA Advisory Committee Rotation Program: Principle of NGS for HLA typing. One week, July 2022.

## 10.6 Other Advisory Activities

### 11. BOOKS AND CHAPTERS IN BOOKS

#### 11.1 Authored Books

#### 11.2 Edited Books

#### 11.3 Chapters in Books

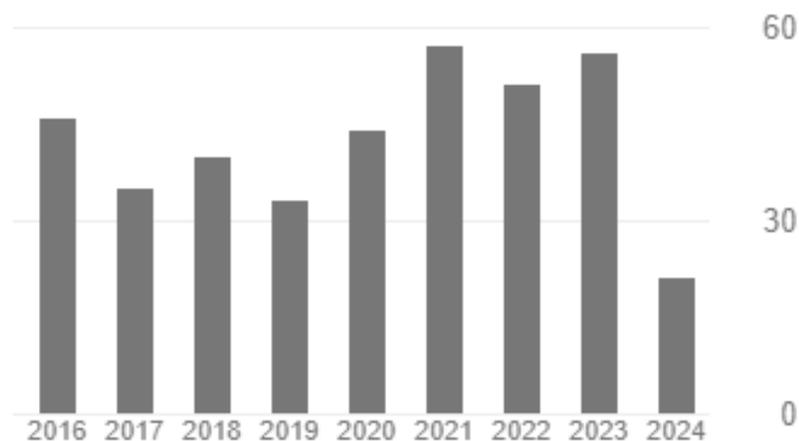
- 1) Title: Egyptian clinical practice guideline for deceased donor transplantation, Chapter 5  
 Author: Ahmed Mostafa, PhD, F(ACHI), University of Saskatchewan, Saskatoon, SK, Canada; Ahmed.Mostafa@saskhealthauthority.ca  
 Halawa, Ahmed; Elhadedy, Muhammed; Naga, Yasmine; Shehab, Abeer; Elthakaby, Ahmed; Emara, Ahmed; Mostafa, Ahmed; Shokeir, Ahmed; Shaker, Mohamed; Donia, Ashraf; Belal, Dawlat; Fadel, Fatina; Saadi, Gamal; Marzouk, Khaled; Elsharkawy, Magdy; Hassaballa, May; Zaki, Mohamed SE; Eltemamy, Mohamed9; Refaai, Khaled10; Hafez, Mohamed H8; Mostafa, Mohamed H11; El Kossi, Mohsen; Hassaballa, May. Egyptian clinical practice guideline for deceased donor transplantation. Journal of The Egyptian Society of Nephrology and Transplantation 24(2):p 67-101, April-June 2024. | DOI: 10.4103/jesnt.jesnt\_6\_24  
 % Contribution: Wrote the entire chapter 5 of the guidelines
- 2) Title: Engraftment Monitoring published, Module 5 Chapter 5.02.  
 Author: Ahmed Mostafa, PhD, F(ACHI), University of Saskatchewan, Saskatoon, SK, Canada; Ahmed.Mostafa@saskhealthauthority.ca  
 Previous authors: Ada Ng, Chris McFarland, Charles Kellum, Fred Schmitt, Zerlina Velarde, Dana McLendon, Anajane G. Smith, and Shalini Pereira. Fred Hutchinson Cancer Research Center, University of Washington, Seattle, Seattle Cancer Care Alliance, Seattle, WA  
 Thanks to Bing Melody Zhang, MD, MS, FCAP, A(ACHI), for reviewing this module.  
 Updated and revised: July 25, 2023  
 Publisher Name: ASHI University (Online)  
 % Contribution: 85%  
 I collected all the new literature reviews, re-wrote the entire chapter, approved the version to be published, submitted the chapter to the ASHI-University, and prepared the reply letter to address the reviewers' questions.
- 3) Title: Guidelines for the Discovery and Documentation of Novel HLA Alleles: A Standard Operating Procedure  
 Author: Ahmed Mostafa, PhD, F (ACHI), University of Saskatchewan, Saskatoon, SK, Canada;

ASHI Quarterly, Fourth Quarter 2023 Volume 47, Issue 4 Page 8-11

% Contribution: 100%

I collected all the new literature reviews, re-wrote the entire chapter, approved the version to be published, submitted the chapter to the ASHI-University, and prepared the reply letter to address the reviewers' questions.

## 12. PAPERS IN REFEREED JOURNALS



	ALL	Since 2019
citations	484	263
h-index	9	8
i-10 index	9	8
Cumulative Impact Factor	131.1	66.5
Cumulative H Index	3084	1567
Total Number of Publication	20	13

### Published:

- 1) Kakodkar P, Shekari N, Johnston B, Mainra R, Webster D, Pearce T, Wu F and **Mostafa A\***.The Emergence of de novo Donor-Specific HLA Antibodies Post Standard Pneumococcal and Varicella Zoster Vaccinations in A Waitlisted Renal Transplant Candidate: A Case Presentation with Mechanism Insights. Submitted to Transplantation (2024). Impact Factor 6.2 and H index 219.  
% Contribution: 70%

*Senior author and the primary supervisor of the first author. I analyzed and interpreted the data, re-wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

- 2) Zhao Y, Kakodkar P, Pan H, Zhu R, Musa K, Hassan A, Shoker A, Webster D, Pearce T, Dokouhaki P, Wu F, **Mostafa A\***. The Interplay between Human Leukocyte Antigen Antibody Profile and COVID-19 Vaccination in Waitlisted Renal Transplant Patients. Arch Pathol Lab Med (2024). Impact Factor 5.7 and H index 132

*% Contribution: 70%*

*Senior author and the primary supervisor of the first author. I analyzed and interpreted the data, re-wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

- 3) Zhang Z, Yu H, Wong-Ma E, Dokouhaki P, **Mostafa A**, S.Shavadia J, Wu F, Huan T. Reducing Quantitative Uncertainty Caused by Data Processing in Untargeted Metabolomics. Anal Chem. 2024 Feb 23. doi: 10.1021/acs.analchem.3c04046. Epub ahead of print. PMID: 38395621. Impact Factor 8.008 H index 407

*% Contribution: 30%*

*I contributed to the work design, wrote a section for the manuscript, reviewed the manuscript and approved the version to be published*

- 4) Kakodkar P, Zhao Y, Pan H, Wu F, Pearce T, Webster D, Elemetry M, Sabry W, Kwan L, Pelzer L, Bosch M, Tran J, Sherwood K, Lan J, Keown P, Liwski R and **Mostafa A**. Validation of Next-Generation Sequencing (NGS) Based Chimerism Testing for Accurate Detection and Monitoring of Engraftment in Hematopoietic Stem Cell Transplantation. Front. Genet., Sec. Immunogenetics Volume 14 - 2023 <https://doi.org/10.3389/fgene.2023.1282947> Impact Factor 4.8 and H index 107

*% Contribution: 70%*

*Senior author and the primary supervisor of the first author. I analyzed and interpreted the data, re-wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

- 5) Tran J, Sherwood K, **Mostafa A**, Benedicto RV, ElaAlim A, Greenshields A, Keown P, Liwski R and Lan JH. Novel alleles in the era of next-generation sequencing-based HLA typing calls for standardization and policy. Front. Genet., Sec. Immunogenetics Volume 14 - 2023 <https://doi.org/10.3389/fgene.2023.1282834> Impact Factor 4.8 and H index 107

*% Contribution: 30%*

*I contributed to the work design, wrote a section for the manuscript, reviewed the manuscript and approved the version to be published*

- 6) Kakodkar P, Dokouhaki P, Wu F, Shavadia J, Nair R, Webster D, Sawyer T, Huan T and **Mostafa A\***. The role of the HLA allelic repertoire on the clinical severity of COVID-19 in Canadians, living in Saskatchewan. Hum Immunol. 2023 Jan 20;84(3):163-171. doi: 10.1016/j.humimm.2023.01.003. Epub ahead of print. PMID: 36707385; PMCID: PMC9852320. Impact Factor 2.211 and H index 97

*% Contribution: 70%*

*Senior author and the primary supervisor of the first author. I analyzed and interpreted the data, re-wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

=====

- 7) Abdelfatah N, **Mostafa AA**, French CR, Doucette LP, Penney C, Lucas MB, Griffin A, Booth V, Rowley C, Besaw JE, Tranebjærg L, Rendtorff ND, Hodgkinson KA, Little LA, Agrawal S, Parnes L, Batten T, Moore S, Hu P, Pater JA, Houston J, Galutira D, Benteau T, MacDonald C, French D, O'Rielly DD, Stanton SG, Young TL A Pathogenic Deletion in Forkhead Box L1 (FOXL1) Identifies the First Otosclerosis (OTSC) Gene. *Hum Genet.* 2022 Apr;141(3-4):965-979. doi: 10.1007/s00439-021-02381-1. Epub 2021 Oct 11. PMID: 34633540; PMCID: PMC9034980.  
*Impact Factor 6.099 and H Index 140*  
*% Contribution: 50%*  
*I contributed to the work design, designed and analyzed all the functional work of the manuscript wrote 50% of the manuscript, reviewed the manuscript and approved the version to be published.*
- 8) Smith AG, Pereira S, Jaramillo A, Stoll ST, Khan FM, Berka N, **Mostafa AA**, Pando MJ, Usenko CY, Bettinotti MP, Pyo CW, Nelson WC, Willis A, Askar M, Geraghty DE. Comparison of sequence-specific oligonucleotide probe vs next generation sequencing for HLA-A, B, C, DRB1, DRB3/B4/B5, DQA1, DQB1, DPA1, and DPB1 typing: Toward single-pass high-resolution HLA typing in support of solid organ and hematopoietic cell transplant programs. *HLA.* 2019 Sep;94(3):296-306. doi: 10.1111/tan.13619. Epub 2019 Jul 15. PMID: 31237117; PMCID: PMC6772026.  
*Impact Factor 4.513 and H Index 100*  
*% Contribution: 30%*  
*I contributed to the work design, wrote a section for the manuscript, reviewed the manuscript, and approved the version to be published*
- 9) Gareau AJ, **Mostafa AA**, Stamm L, Khan F, Berka N. The identification of a novel HLA-B allele, HLA-B\*27:05:38. *HLA.* 2019 Aug;94(2):157-158. doi: 10.1111/tan.13576. Epub 2019 Jun 3. PMID: 31074116.  
*Impact Factor 4.513 and H Index 100*  
*% Contribution: 50%*  
*I contributed to the work design, designed and analyzed all the data of the manuscript wrote 50% of the manuscript, reviewed the manuscript, and approved the version to be published.*
- 10) Gareau AJ, **Mostafa AA**, Williams J, Stamm L, Berka N: Identification of a Novel HLA-C Allele, HLA-C\*07:778, in an Unrelated Hematopoietic Stem Cell Donor. *HLA.* 2019 Aug;94(2):161-162. doi: 10.1111/tan.13575. Epub 2019 May 26. PMID: 31069965.  
*Impact Factor 4.513 and H Index 100*  
*% Contribution: 50%*  
*I contributed to the work design, designed and analyzed all the data of the manuscript wrote 50% of the manuscript, reviewed the manuscript and approved the version to be published.*
- 11) Thirukkumaran CM, Shi ZQ, Nuovo GJ, Luidier J, Kopciuk KA, Dong Y, **Mostafa AA**, Thakur S, Gratton K, Yang A, Chin AC, Coffey MC, Jimenez-Zepeda VH, Stewart D, Chesi M, Bergsagel PL, Morris D. Oncolytic immunotherapy and bortezomib synergy improves survival of refractory multiple myeloma in a preclinical model. *Blood Adv.* 2019 Mar 12;3(5):797-812. doi: 10.1182/bloodadvances.2018025593. PMID: 30850386; PMCID: PMC6418503.  
*Impact Factor 7.637 and H Index 52*  
*% Contribution: 30%*  
*I contributed to the work design, wrote a section for the manuscript, reviewed the manuscript, and approved the version to be published.*
- 12) **Mostafa AA**, Meyers DE, Thirukkumaran CM, Liu J, Gratton K, Spurrell J, Shi Q, Morris DG. Oncolytic Reovirus and Immune Checkpoint Inhibition as a Novel Immunotherapeutic Strategy for Breast Cancer.

Cancers (Basel). 2018 Jun 15;10(6):205. doi: 10.3390/cancers10060205. PMID: 29914097; PMCID: PMC6025420.

*Impact Factor 6.886 and H Index 92*

*% Contribution: 85%*

*I collected, analyzed, and interpreted the data, wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

- 13) **Mostafa, AA.**, Kostur, C., Stamm, L., M., Faisal, K., Berka, N: Characterization of a novel allele HLA-C\*02:135N, by full-length genome sequencing in a Caucasian bone marrow donor. HLA. 2018 Jun;91(6):538-539. doi: 10.1111/tan.13260. PMID: 29575749.

*Impact Factor 4.513 and H Index 100*

*% Contribution: 85%*

*I collected, analyzed, and interpreted the data, wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

- 14) **Mostafa, AA.**, Faisal, K., Stamm, L., Petrosenko, M., and Berka, N. A novel HLA-A\*26 allele, HLA-A\*26:01:44, identified in a Caucasian individual. HLA. 2018 Feb;91(2):127-128. doi: 10.1111/tan.13182. Epub 2017 Dec 20. PMID: 29168355.

*Impact Factor 4.513 and H Index 100*

*% Contribution: 85%*

*I collected, analyzed and interpreted the data, wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

- 15) **Mostafa, AA.** Petrosenko, Stamm, L., M., Faisal, K., Berka, N: The novel HLA-B\*08:183 allele identified by sequence-based typing in a Caucasian leukemia patient. HLA. 2017 Dec; 90(6):367-368. doi: 10.1111/tan.13151. Epub 2017 Oct 10. PMID: 2898045

*Impact Factor 4.513 and H Index 100*

*% Contribution: 85%*

*I collected, analyzed and interpreted the data, wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

- 16) **Mostafa, AA,** Faisal, K., Stamm, L., Petrosenko, M., and Berka, N. HLA- DQB1\*05:144, a novel allele, discovered in a Southeast Asian matched unrelated donor for hematopoietic stem cell transplantation patient. HLA. 2017 Sep;90(3):182-183. doi: 10.1111/tan.13074. Epub 2017 Jun 28. PMID: 28660703.

*Impact Factor 4.513 and H Index 100*

*% Contribution: 85%*

*I collected, analyzed and interpreted the data, wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

- 17) Lawson KA, **Mostafa AA\***, Shi Z, Spurrell J, Chen W, Kawakami J, Morris DG. Repurposing Sunitinib with Oncolytic Reovirus as a Novel Immunotherapeutic Strategy for Renal Cell Carcinoma. Clin Cancer Res. 2016 Dec 1;22(23):5839-5850. doi: 10.1158/1078-0432.CCR-16-0143. Epub 2016 May 24. PMID: 27220962.

*Impact Factor 13.8 and H Index 344*

*% Contribution: 50%*

*\*Shared first Author, I collected, analyzed, and interpreted the data, wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions.*

- 18) O'Reilly D, Uddin M, Codner D, Hayley M, Zhou J, Pena-Castillo L, **Mostafa AA**, Hasan M, Liu W, Haroon N, Inman R, Rahman P. Private rare deletions in SEC16A and MAMDC4 may represent novel pathogenic variants in familial axial spondyloarthritis. *Ann Rheum Dis.* 2016 Apr;75(4):772-9. doi: 10.1136/annrheumdis-2014-206484. Epub 2015 May 8. PMID: 25956157; PMCID: PMC4819618.

*Impact Factor 28.003 and H Index 257*

*% Contribution: 30%*

*I contributed to the work design, wrote a section for the manuscript, reviewed the manuscript, and approved the version to be published.*

- 19) **Mostafa AA**. and Morris DG. Immunotherapy for lung cancer: Has it finally arrived? *Front Oncol.* 2014 Oct 22;4:288. doi: 10.3389/fonc.2014.00288. PMID: 25374843; PMCID: PMC4206190.

*Impact Factor 6.244 and H Index 102*

*Contribution: 85%*

*I collected, analyzed, and interpreted the data, wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions*

- 20) **Mostafa AA**, Codner D, Hirasawa K, Komatsu Y, Young MN, Steimle V, Drover S. Activation of ER $\alpha$  Signaling Differentially Modulates IFN- $\gamma$  Induced HLA-class II Expression in Breast Cancer Cells. *PLoS One.* 2014 Jan 27;9(1):e87377. doi: 10.1371/journal.pone.0087377. PMID: 24475282; PMCID: PMC3903652

*Impact Factor 3.572 and H Index 367*

*Contribution: 85%*

*I collected, analyzed, and interpreted the data, wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions*

- 21) **Mostafa AA**, Randell EW, Vasdev SC, Gill VD, Han Y, Gadag V, Raouf AA, El Said H.2007: Plasma protein advanced glycation end products, carboxymethyl cysteine, and carboxyethyl cysteine, are elevated and related to nephropathy in patients with Diabetes *Mol Cell Biochem.* 2007 Aug; 302(1-2):35-42

*Impact Factor 3.842 and H Index 128*

*Contribution: 85%*

*I collected, analyzed, and interpreted the data, wrote the entire manuscript, approved the version to be published, submitted the manuscript to the journal, and prepared the reply letter to address the reviewers' questions*

### 13. ARTISTIC WORKS

### 14. REFEREED CONFERENCE PUBLICATIONS

- 1) Kakodkar P, Zhao Y, Pan H, Elemetry M, Sabry W, Pelzer L, Kwan L Pearce T, Webster D, **Mostafa A\***. Improving monitoring and detection of engraftment in hematopoietic stem cell transplantation through

next-generation sequencing (NGS) based Chimerism testing: A robust validation study. Human Immunology. 2023 Sep 1;84:112-3.

\*Senior Author

- 2) Pan, H., Zhao, Y., Kakodkar, P, Mainra, R Webster, D., Pearce, T., **Mostafa A\***. Cracking the code: Exploring the connection between COVID-19 vaccines and HLA antibodies in kidney transplant candidates. Human Immunology. 2023 Sep 1;84:149-50.

\*Senior Author

- 
- 3) Zhao Y, Wu F, Dokouhaki P, **Mostafa A\***. SARS-COV2 Vaccination could induce HLA antibodies and impact the renal transplant. Clin Invest Med. 2022 Dec 31;45(4): E46-89. doi:10.25011/cim.v45i4.39557. ID: 31 P 56

\*Senior Author

- 4) Pearce T, Webster D, Gorkoff K, Shanofer C, **Mostafa A\***. Mixed Chimerism identified by SureTyper analysis software during validation of LinkSeq HLA Typing. Hum Immunol. 83 (2022) page 75. <https://doi.org/10.1016/j.humimm.2022.08.008>. ISSN 0198-8859.

\*Senior Author

- 5) Kakodkar P, Webster D, Sawyer T, Wu F, Dokouhaki P, **Mostafa A\***. The role of the HLA allelic repository on the clinical severity of COVID-19. Hum Immunol. 83 (2022) page 133. <https://doi.org/10.1016/j.humimm.2022.08.008>. ISSN 0198-8859.

\*Senior Author

- 6) Davidovic F, Dokouhaki P, Pearce T, **Mostafa A\***. Overutilization of HLA Testing for Celiac Disease Screening. Human Immunology 82 (2021) page 165 <https://doi.org/10.1016/j.humimm.2021.08.003>

\*Senior Author

- 7) **Mostafa A\***, Webster D, Twyla Pearce T, Gorkoff K, Shanofer C, Seasonal Influenza vaccine impacted HLA antibody formation in a kidney transplant recipient with history of blood transfusion: A case study Human Immunology 82 (2021) page 64 <https://doi.org/10.1016/j.humimm.2021.08.003>

\*First Author

- 8) **Mostafa AA\***, Berka Y, Kalra A, Khan K, Berka A. The Significance Of Monocyte Crossmatch In Solid Organ Transplantation. Human Immunology 81 (2020) Page: 147 <https://doi.org/10.1016/j.humimm.2021.06.004>

\*First Author

- 9) **Mostafa A\***, L Stamm, I Galaszkievicz, C Ott, J Williams, F Khan, N Berka. Validation of two commercial buccal swabs for HLA typing by next-generation sequencing. Human Immunology 80 (2019) Page: 128 <https://doi.org/10.1016/j.humimm.2019.07.154>

\*First Author

- 10) Y Berka, A Akhter, R Faridi, **Mostafa A**, N Berka, MT Shabani-Rad, J Storek, D Stewart, F Khan. Influence of NK cell receptors on rituximab-mediated ADCC against different types of lymphomas. Human Immunology 80 (2019) page: 50 <https://doi.org/10.1016/j.humimm.2019.07.047>

- 11) **Mostafa AA\***, Hobden C, Stamm L, Galaszkievicz I, Khan F, Berka N. The effect of pronase on B-cell flow cytometry crossmatch results: a case study. Human Immunology 79 (2018) page 84. <https://doi.org/10.1016/j.humimm.2018.07.091>

\*First Author

- 12) **Mostafa AA\***, Sidahmed A, Ghandorah S, Yilmaz S, Tibbles L, Alabadi A, Wang J, Abootaleb R, Khan F, Berka N. C3D as a non-invasive tool for early prediction of Antibody-Mediated Rejection (AMR) and renal allograft failure. *Human Immunology* 78 (2017) page 15. <https://doi.org/10.1016/j.humimm.2017.06.019>  
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- 13) Thirukkumaran C, Shi Z, Luider J, Kopciuk K, Chesi M, Bergsagel L, Dong Y, Zhang C, **Mostafa AA**, Gratton K, Thakur S, and Morris D. Successful oncolytic virotherapy in a bortezomib-resistant syngeneic mouse model of multiple myeloma: Implications for translational significance. *Cancer Res* 2016;76(14 Supplement): 541. <https://doi.org/10.1158/1538-7445.AM2016-541>
- 14) **Mostafa AA\***, Gratton K, Lawson K, Shi Z, Thirukkumaran C and Morris DG. PDL-1 blockade and Sunitinib enhance the efficiency of oncolytic viral therapy. October 2015 *Cancer Immunol Res* (2015) 3 (10\_Supplement): A12. <https://doi.org/10.1158/2326-6074.TUMIMM14-A12>  
\*First Author
- 15) O'Rielly D, Uddin M, **Mostafa AA**, Codner D, Hackett D, Haroon N, Inman R, Rahman P: Sec16a gene deletion in a large axial spondyloarthritis family. *Annals of the Rheumatic Diseases* 2014;73:440 <http://dx.doi.org/10.1136/annrheumdis-2014-eular.3327>
- 16) **Mostafa AA\***, Codner D, Lewis C, Hirasawa K, Christian S, Victor Steimle V and Drover S. Class II transactivator (CIITA) transcription is reduced by the ER-E2 signaling pathway in breast cancer cells. *Cancer Res* (2011) 71 (8\_Supplement): 804. <https://doi.org/10.1158/1538-7445.AM2011-804>  
\*First Author
- 17) **Mostafa, A.A\***, Randell E.W., Vasdev, S.C., Han, Y., and Gill, V.D. Plasma protein advanced glycation end products, carboxymethyl cysteine and carboxyethyl cysteine, are elevated and related to nephropathy in patients with diabetes. *Clinical Biochemistry* 41 (2008) page: 184. <https://doi.org/10.1016/j.clinbiochem.2007.12.005>  
\*First Author
- 18) Han, Y., Randell, E.W., Vasdev, S.C., Gill, V., Gadag, V., and **Mostafa, A.A**. Elevated levels of plasma methylglyoxal and glyoxal in young patients with type 1 diabetes as early markers of diabetic complications. *Clinical Biochemistry* 41 (2008) page: 185. <https://doi.org/10.1016/j.clinbiochem.2007.12.005>
- 19) **Mostafa AA\***, Vasdev S, Randell EW. Evidence for significant modification of albumin arginine residues in diabetes mellitus and its relationship with risk factors for diabetic complications. *Clinical Biochemistry* Volume: 39 (2006) Issues: 11 Pages: 1099 <https://doi.org/10.1016/j.clinbiochem.2006.10.002>  
\*First Author

## 15. PRESENTATIONS

### 15.1 Invited Presentations

- 1) **Mostafa AA (2024)**: Enhancing the HLA Toolbox: Introducing Epitope Matching and Analysis. Qasr El Aini Medical School Lecture, Cairo University, Cairo, Egypt, May 7th, 2024
- 2) **Mostafa AA (2024)**: Enhancing Deceased Donor Donation: Insights from the Histocompatibility Lab with Case Studies, Summit of Urology and Nephrology 2023 Annual Meeting, Triumph Luxury Hotel Cairo, Egypt, May 8<sup>th</sup> 2024.

- 3) **Mostafa AA (2024):** Advancing the HLA Toolkit: Unveiling Epitope Matching and Analytical Techniques. HLA By Luminex Overview and Products Workshop, Summit of Urology and Nephrology 2023 Annual Meeting, Triumph Luxury Hotel Cairo, Egypt, May 9th, 2024
  - 4) **Mostafa AA (2024):** Unlocking the future: Revolutionizing research with AI tools, Summit of Urology and Nephrology 2024 Annual Meeting, Triumph Luxury Hotel Cairo, Egypt, May 9th, 2024.
  - 5) **Mostafa AA (2024):** Basic Transplant Immunology and Histocompatibility. 3rd Renal and Organ Transplantation Immunology- Novotel Cairo Airport, Egypt January 11th, 2024.
  - 6) **Mostafa AA (2024):** Creating Synergy between the HLA Lab and Transplant Team for Optimal Patient Care. 3rd Renal and Organ Transplantation Immunology- Novotel Cairo Airport, Egypt January 12th, 2024
  - 7) **Mostafa AA (2024):** Standardization of HLA typing Report. 3rd Renal and Organ Transplantation Immunology- Novotel Cairo Airport, Egypt January 13th, 2024
  - 8) **Mostafa AA (2023):** Unlocking New Horizons Exploring the Vitality of Lineage-Specific Chimerism Analysis after HSCT 49th Annual ASHI Meeting- San Antonio, Texas, USA. STEMCELLS User Group October 19th, 2023
  - 9) **Mostafa AA (2023):** Revolutionizing Chimerism Analysis: Harnessing the Power of NGS and SNP Panels for Superior Results. 49th Annual ASHI Meeting- San Antonio, Texas, USA. CareDx User Group October 18th, 2023
  - 10) **Mostafa AA (2023):** Unlocking the Versatility of Real-Time PCR: Expanding Horizons Beyond Deceased Donor Typing. 49th Annual ASHI Meeting- San Antonio, Texas, USA. One Lambda User Group October 17th, 2023
  - 11) **Mostafa AA (2023):** Advancements in Engraftment and Chimerism Monitoring: Bridging Imagination with Scientific Achievement. National HLA Advisory Board Committee (NHAAAC) Monthly Journal Club, Canada, October 12th 2023. Virtual Webinar (35 Participants).
  - 12) **Mostafa AA (2023):** Revolutionizing Stem Cell Engraftment Monitoring with Next-Generation Sequencing Groundbreaking Discoveries from a Canadian Laboratory. 12th Oriental Congress of Lab Medicine-Shanghai, China September 15th, 2023
  - 13) **Mostafa AA (2023):** Beyond the Bench: Navigating Immunological Risk Assessment with Our HLA Lab Experience. The 42nd AND the 38th CURRENT didactic and laboratory Courses on Immunogenetics & Molecular Genetics, Mexico City Mexico, August 9th 2023
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- 14) **Mostafa AA (2023):** History of Transplantation Immunology: Ancient Legends to Modern Practice, the North American Chinese Clinical Chemists Association (NACCCA) webinar, June 26<sup>th</sup>. Virtual Webinar (35 Participants).
  - 15) **Mostafa AA (2023):** Epitope Mismatch as a Tool for Predication of Graft Outcome. Summit of Urology and Nephrology 2023 Annual Meeting, Royal Maxim Palace Kempinski Cairo, Egypt, May 3<sup>rd</sup>-5<sup>th</sup> 2023.
  - 16) **Mostafa AA (2023):** Expanding the HLA Toolbox: Introducing the Epitope for Enhanced HLA Antibodies Analysis, Summit of Urology and Nephrology 2023 Annual Meeting, Royal Maxim Palace Kempinski Cairo, Egypt, May 3<sup>rd</sup>-5<sup>th</sup> 2023.

- 17) **Mostafa AA (2023)**: Interpretation of Donor/Recipient HLA Typing (Clinical scenarios and interactive discussion). 3<sup>rd</sup> Kidney Transplant Update. Dubai Hospital-United Arab Emirates. February 25<sup>th</sup>, 2023. Keynote Speaker. Virtual Conference (Over 300 participants).
- 18) **Mostafa AA (2023)**: Two cases of kidney transplantation: challenges and solutions. Practical approach to renal transplant Immunology 2<sup>nd</sup> course, Novotel Cairo Airport, Egypt. 19<sup>th</sup> January 2023. Physical Conference but my talk was delivered virtually.
- 19) **Mostafa AA (2023)**: Principles of Virtual Crossmatch for organ matching Practical approach to renal transplant Immunology 2<sup>nd</sup> course, Novotel Cairo Airport, Egypt. 20<sup>th</sup> January 2023. Physical Conference but my talk was delivered virtually.
- 20) **Mostafa AA (2022)**: A Roadmap for Novel HLA Alleles from Discovery to Submission. One Lambda Webinar Transplant Immunology Series December 14<sup>th</sup> and 15<sup>th</sup>, 2022. Virtual Webinar. (120 Participants over two different time zones).
- 21) **Mostafa AA (2022)**: Lessons on Adopting AllType™ FASTplex™ HLA Typing: Innovation Across the Pre- and Post-NGS Journey SBTMO, Centro de Convenções Frei Caneca, São Paulo, Brazil August 23-26<sup>th</sup>, 2022
- 22) **Mostafa AA (2022)**: History of Transplantation Immunology: Ancient Legends to Modern Practice, Arabian Society of Histocompatibility and Immunogenetics (ARSHI) first annual meeting, Riyadh Saudi Arabia 4-5 March 2022.
- 23) **Mostafa AA (2021)**: AllType™ FASTplex™ v2: Our HLA Laboratory Experience. ASHI 2021 annual meeting. Orlando, Florida USA, September 26- October 1<sup>st</sup>, 2021.
- 24) **Mostafa AA (2021)**: AllType™ FASTplex™ NGS and MiniSeq: Our Lab Combo for HLA Typing. ASHI 2021 Regional Educational Virtual Workshops June 4<sup>th</sup> 2021.
- 25) **Mostafa AA, (2020)**: NGS for HLA Typing: A Tale of Two Cities. National HLA Advisory Board Committee (NHAAAC) Monthly Journal Club, Canada, December 10<sup>th</sup>, 2020
- 26) **Mostafa AA, (2020)**: Monocyte Flow Cell Crossmatch as an Alternative Approach for Patients under Rituximab Therapy. Flow Cytometry Virtual Workshop King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia December 19<sup>th</sup>, 2020.
- 27) **Mostafa AA, (2020)**: Monocyte Flow Cell Crossmatch as an Alternative Approach for Patients under Rituximab Therapy. Annual Department of Pathology and Laboratory Medicine Residents' & Graduate Students' Research Day, College of Medicine, University of Saskatchewan, Saskatoon, SK, Canada October 26<sup>th</sup>, 2020.
- 28) **Mostafa AA, (2019)**: C3d complement as a predictable marker for antibody-mediated rejection (AMR) of solid organ allografts. Annual Department of Pathology and Laboratory Medicine Residents' & Graduate Students' Research Day, College of Medicine, University of Saskatchewan, Saskatoon, SK, Canada. November 26<sup>th</sup>, 2019.

## 15.2 Contributed Presentation

- 1) Wang E, Wu F, **Mostafa A\***. Unveiling Precision in Kidney Transplantation: A Paradigm Shift in Risk Stratification through Molecular Mismatch Analysis. 38<sup>th</sup> HLA and Transplant Workshop, In Carlsbad, California, USA. March 14, 2024.

\*Senior Author

- 2) Zhao Y, Kakodkar P, Pan H, Zhu R, Musa K, Hassan A, Shoker A, Mainra R, Webster D, Pearce T, Wu F, Dokouhaki P, **Mostafa A\***. The interplay between HLA antibody profile and COVID-19 vaccination in renal transplant patients. 2024 Pathology and Laboratory Medicine Grand Rounds University of Saskatchewan. January 29, 2024.

\*Senior Author

- 3) Zhao Y, Kakodkar P, Pan H, Zhu R, Musa K, Hassan A, Shoker A, Mainra R, Webster D, Pearce T, Wu F, Dokouhaki P, **Mostafa A\***. The interplay between HLA antibody profile and COVID-19 vaccination in renal transplant patients. 2023 CST Annual Scientific Meeting held at the Fairmont Winnipeg, in Winnipeg, Manitoba, October 16 - 20, 2023.

\*Senior Author

- 4) Kakodkar P , Webster D , Sawyer T, Wu F, Dokouhaki P, **Mostafa A\*** .The role of the HLA allelic repository on the clinical severity of COVID-19. Department of Pathology and Lab medicine Research Day, RUH Mall Theatre, College of Medicine, University of Saskatchewan. November 7<sup>th</sup>, 2022

\*Senior Author

- 5) Murthy S I, Dokouhaki P, **Mostafa A\*** Wu F. Thyroid Function Testing: Choosing Unwisely in Saskatchewan. Department of Pathology and Lab medicine Research Day, RUH Mall Theatre, College of Medicine, University of Saskatchewan. November 7th, 2022

\*Co-Supervisor

- 6) Davidovic F, **Mostafa A\***, Dokouhaki P, Wu F. Overutilization of HLA Testing for Celiac Disease Screening. 2021 Department of Pathology and Lab medicine Research Day, RUH Mall Theatre, College of Medicine, University of Saskatchewan. November 7th, 2022.

\*Co-Supervisor

- 7) **Mostafa AA**, Sidahmed A, Ghandorah S, Yilmaz S, Tibbles L, Alabadi A, Wang J, Rahmanian Abootaleb R, Khan F, Berka N. Not All Antibodies Are Created Equal: Factors That Influence Antibody-Mediated Rejection. McCaig Tower (Department of Pathology), Calgary, Alberta, Canada. 2017 November 9

- 8) **Mostafa AA**, Sidahmed A, Ghandorah S, Yilmaz S, Tibbles L, Alabadi A, Wang J, Rahmanian Abootaleb R, Khan F, Berka N. Renal antibody-mediated rejection: what are the characteristics of donor-specific antibodies impacting allograft outcomes? Alberta Transplant Institute Seminar Series. University of Calgary, Calgary, Alberta, Canada. 2017 September 20

- 9) **Mostafa AA**, Sidahmed A, Ghandorah S, Yilmaz S, Tibbles L, Alabadi A, Wang J, Rahmanian Abootaleb R, Khan F, Berka N. C3d as a non-invasive tool for early prediction of antibody-mediated rejection and renal allograft failure. 43rd Annual Meeting of American Society for Histocompatibility and Immunogenetics. Francisco, California, USA. 2017 September 11–15, 2017

- 10) **Mostafa AA**, Sidahmed A, Ghandorah S, Yilmaz S, Tibbles L, Alabadi A, Wang J, Rahmanian Abootaleb R, Khan F, Berka N. C3d is superior to C1q at diagnosis of humoral rejection and predicts renal allograft failure. Annual Department of Pathology and Laboratory Medicine Residents' & Graduate Students' Research Day, Diagnostic Service Center, Calgary, Alberta, Canada. 2017 May 1st

- 11) **Mostafa AA**, Gratton K, Liu J, Spurrell J, Shi Z, Thirukkumaran C, and Morris D 2016: Immune checkpoint blockade (PD-1/PD-L1): Friend or Foe?, Lung Cancer Translational Research Group Meeting hosted by AstraZeneca, Health Science Center, University of Calgary, 17th February 2016.
- 12) **Mostafa AA**, Liu P, Lawson K, Gratton K, Shi Z, Thirukkumaran C, and Morris D 2015: The use of immune checkpoint blockade and immune modulator to enhance the efficiency of oncolytic viral therapy. 9th International Conference on Oncolytic Virus Therapeutics, Boston, Massachusetts, USA. June 13-16th 2015
- 13) **Mostafa AA**: ER $\alpha$  Signaling Differentially Modulates IFN- $\gamma$  Induced HLA-class II Expression in Breast Cancer Cells. Tom Baker Cancer Centre, University of Calgary, Calgary, Alberta. May 2013
- 14) **Mostafa AA** and Drover S: Dissection of molecular pathways regulating HLA Class II expression in ER+ breast cancer cells. 25th Annual Canadian society for immunology, Sheraton, St John's, NL, 2012 June 15-18
- 15) **Mostafa AA** and Drover S: Dissection of molecular pathways regulating HLA Class II expression in breast cancer cells. Annual Immunology and Infectious Diseases retreat at the Salmonier Nature Park, Newfoundland, Canada August 2011.
- 16) **Mostafa AA**, Codner D, Lewis C, Hirasawa K, Christian S, Steimle V and Drover S: Estrogen receptor downregulates HLA class II expression in breast cancer cells by interfering with CIITA. 4th Annual Cancer Immune Therapy Symposium Fairmont Chateau Lake Louise Lake Louise, AB. April 7-8, 2011
- 17) **Mostafa AA** and Drover S: The Estradiol-Estrogen Receptor Pathway is implicated in the Regulation of HLA Class II Expression in Breast Cancer Cells. 2nd Annual Canadian Cancer Immune Therapy Symposium at the Telus Whistler Conference Centre, Vancouver, April 6, 2009.
- 18) **Mostafa AA**, Randell EW, Vasdev SC: Protein associated carboxymethyl-cysteine correlates with glyoxal levels in the plasma of young adults with diabetes mellitus Faculty of Medicine Memorial University Scientific Meeting 2006.

### 15.3 Poster Presentations

- 1) Wang E, Wu F, **Mostafa A\***. Eplet Mismatch Thresholds: A High-Resolution Approach for Risk Assessment and Prognosis in Renal Transplant Patients. 2024 CST Annual Scientific Meeting held at the Le Westin Montréal, in Montreal, Quebec, October 14 - 18, 2024.  
\*Senior Author
- 2) Kakodkar P and, **Mostafa A\***. Shekari N, Johnston B, Webster D, Pearce T, Wu F, Case Report: Emergence of de novo Donor-Specific HLA antibodies post Pneumococcal & Varicella Zoster Vaccinations in Waitlisted Renal Transplant Candidate. American Society of Clinical Pathology (ASCP) 2024 annual Meeting, Chicago, IL, USA, September 3-6 2024  
\*Senior Author
- 3) Wang E, Wu F, Mostafa A\*. Unveiling Precision in Kidney Transplantation: Harnessing the Utility of High-Resolution HLA Typing by Applying Molecular Mismatch for Post-Transplant Risk Assessment. Alberta Transplant Institute (ATI) Research Day 2024, University of Alberta, Edmonton, Alberta Canada, May15, 2024.  
\*Senior Author

- 4) Kakodkar P and, **Mostafa A\***. Harnessing the Power of Cell Lineage Analysis for Captivating Insights into Engraftment Monitoring and Clinical Outcome in Allogeneic Hematopoietic Transplant. AMP (Association for Molecular Pathology) EUROPE 2024 June 24-26 Madrid, Spain.  
\*Senior Author
- 5) Pan H, Zhao Y, Kakodkar P, Zhu R, Musa K, Hassan A, Shoker A, Mainra R, Webster D, Pearce T, Wu F, Dokouhaki P, **Mostafa A\***. Cracking the code: exploring the connection between COVID-19 vaccines and HLA antibodies in kidney transplant candidates. 2023 ASHI Annual Meeting held at San Antonio Marriott River Center, San Antonio, Texas, October 16 - 20, 2023  
\*Senior Author
- 6) Kakodkar P, Zhao Y, Henry Pan, Pearce T, Webster D, Kwan L, Elemary M, Sabry W, Pelzer L, and **Mostafa A\***. Improving monitoring and detection of engraftment in hematopoietic stem cell transplantation through next-generation sequencing (NGS) based Chimerism testing: a robust validation study. 2023 ASHI Annual Meeting held at San Antonio Marriott Rivercenter, San Antonio, Texas, October 16 - 20, 2023  
\*Senior Author
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- 7) Kakodkar P, Zhao Y, Henry Pan, Pearce T, Webster D, Kwan L, Elemary M, Sabry W, Pelzer L, and **Mostafa A\***. Validation of Next-Generation Sequencing (NGS) Based Chimerism Testing for Accurate Detection and Monitoring of Engraftment in Hematopoietic Stem Cell Transplantation. 7th Annual REACH - Resident Research Day, College of Medicine, at the University of Saskatchewan, June 22<sup>nd</sup> 2023.  
\*Senior Author
- 8) Pearce T, Webster D, Gorkoff K, Shanofer C, **Mostafa A\***. Mixed Chimerism identified by SureTyper analysis software during validation of LinkSeq HLA Typing 48th American Society of Histocompatibility and Immunogenetics annual meeting at Bally's Las Vegas, Las Vegas, Nevada, United States of America. Oct 23 - 28, 2022  
\*Senior Author
- 9) Kakodkar P, Webster D, Sawyer T, Wu F, Dokouhaki P, **Mostafa A\***. The role of the HLA allelic repository on the clinical severity of COVID-19 48th American Society of Histocompatibility and Immunogenetics annual meeting at Bally's Las Vegas, Las Vegas, Nevada, United States of America. Oct 23 - 28, 2022  
\*Senior Author
- 10) Mujtaba I, Wu F, Dokouhaki P, **Mostafa A\***. Cytokine Assay at Presentation Could Help Triage Patients with COVID-19. Virtual Undergraduate Summer Research Showcase, College of Medicine USASK. October 19th 2022.  
\*Senior Author
- 11) Zhao Y, Wu F, Dokouhaki P, **Mostafa A\***. SARS-COV2 Vaccination could induce HLA antibodies and impact the renal transplant. Joint Meeting on Transplantation: Canadian Society of Transplantation and Banff Foundation of Allograft Pathology, Banff, Alberta, Canada. September 19-23, 2022.  
\*Senior Author

- 12) Kakodkar P, Webster D, Sawyer T, Wu F, Dokouhaki P, **Mostafa A\***. The role of the HLA allelic repository on the clinical severity of COVID-19. Department of Pathology and Lab Medicine Resident Research Day, College of Medicine, University of Saskatchewan. June 19th, 2022  
\*Senior Author
- 13) Murthy S I, Dokouhaki P, **Mostafa A\*** Wu F. Thyroid Function Testing: Choosing Unwisely in Saskatchewan. Virtual Undergraduate Summer Research Showcase, College of Medicine USASK. October 15th 2021.  
\*Co-Supervisor
- 14) Davidovic F, **Mostafa A\***, Dokouhaki P, Wu F. Overutilization of HLA Testing for Celiac Disease Screening. Virtual Undergraduate Summer Research Showcase, College of Medicine USASK. October 15th, 2021.  
\*Co-Supervisor
- 15) Davidovic F, Dokouhaki P, Pearce T, **Mostafa A\***. Overutilization of HLA Testing for Celiac Disease Screening. 1st, 47th American Society of Histocompatibility and Immunogenetics annual meeting, Orlando, FL, USA, September 27-October 2021.  
\*Senior Author
- 16) **Mostafa A**, Webster D, Twyla Pearce T, Gorkoff K, Shanofer C, Seasonal Influenza vaccine impacted HLA antibody formation in a kidney transplant recipient with history of blood transfusion: A case study, 47th American Society of Histocompatibility and Immunogenetics annual meeting, Orlando, FL, USA, September 27-October 2021.
- 17) **Mostafa AA**, Stamm L, Galaszkiwicz I, Hobden C, Abootaleb R, Khan F, Berka N. Application of Automated HLA Next Generation Sequence Typing for Solid Organ Transplantation., Alberta Transplant Institute Research day, Edmonton Alberta. June 2019.
- 18) **Mostafa AA**, Berka Y, Berka N and Khan F. The significance of the monocyte crossmatch in solid organ Transplantation. Annual Department of Pathology and Laboratory Medicine Residents' & Graduate Students' Research Day, University of Calgary, Alberta, Canada. 2018 August 31st
- 19) Berka Y, Akhter A, Faridi R, **Mostafa AA**, Berka N, Shabani-Rad M, Storek J, Stewart D, Khan F. Influence of NK cell receptors on rituximab-mediated ADCC against different types of lymphomas Annual Department of Pathology and Laboratory Medicine Residents' & Graduate Students' Research Day, University of Calgary, Alberta, Canada. 2018 August 31<sup>st</sup>.
- 20) **Mostafa AA**, Khan F, Berka N. The Significance of the Non-HLA Autoantibodies in Kidney Transplant Complications, Canadian Transplant Summit, the Westin, Ottawa 2018, Canada. October 16-20, 2018
- 21) **Mostafa AA**, Gratton K, Liu J, Spurrell J, Shi Z, Thirukkumaran C, and Morris D 2016: The efficacy of oncolytic reovirus therapy in breast cancer is enhanced by PD-1 blockade. 9th annual Canadian Cancer Immunotherapy Consortium (CCIC) Symposium and the 1st annual scientific meeting of BioCanRx: Biotherapeutics for Cancer Treatment, taking place at the Westin Nova Scotian Hotel in Halifax, Nova Scotia, June 26-29, 2016
- 22) **Mostafa AA**, Gratton K, Liu J, Spurrell J, Shi Z, Thirukkumaran C, and Morris D: PD-1 blockade and Reovirus enhance the efficiency of oncolytic viral therapy in breast cancer. Second Annual

Arnie Charbonneau Cancer Institute Research Symposium, University of Calgary, Calgary, AB, Canada. , February 5<sup>th</sup> 2016.

- 23) **Mostafa AA**, Gratton K, Spurell J, Shi Z, Thakur S, and Morris D: Combination of Oncolytic Reovirus and Dendritic Cell Therapy Improves Immunotherapeutic Strategies for Breast Cancer. 9th International Conference on Oncolytic Virus Therapeutics, 2015, Boston, Massachusetts, USA. June 13-16<sup>th</sup> 2015.
- 24) **Mostafa AA**, Liu P, Lawson K, Grattan K, Shi Z, Thirukkumaran C, and Morris D: The use of immune checkpoint blockade and immune modulator to enhance the efficiency of oncolytic viral therapy. 9th International Conference on Oncolytic Virus Therapeutics, Boston, Massachusetts, USA. June 13-16<sup>th</sup> 2015,
- 25) **Mostafa AA**, Spurell J, Shi Z, Gratton K, and Morris D: Oncolytic Reovirus Improves Immunotherapeutic Strategies for Breast Cancer. University of Calgary, Biochemistry & Molecular Biology Advance annual meeting, Banff Center, Banff, AB, Canada. April 24-25<sup>th</sup>, 2015
- 26) Abdelfatah N, **Mostafa AA**, Stanton S.G, Lucas M.B., Griffin A., Booth V., Rowley C., Besaw J.E., Tranebjærg L., Dahl Rendtorff N., Hodgkinson K.A., Little L.A., Sangamanatha A., Agrawal S., Parnes L., Batten A., Houston J., Galutira D., Benteau T., Penney C., Negrijn C. and Young T.L. An in-frame deletion in FOXL1 identifies the first gene causing autosomal dominant otosclerosis. European Society of Human Genetics, Glasgow, Scotland, UK, June 6-9, 2015
- 27) **Mostafa AA**, Spurell J, Shi Z, Gratton K, and Morris D: Oncolytic Reovirus Improves Immunotherapeutic Strategies for Breast Cancer. Annual Calgary Cancer Research Symposium, - Southern Alberta Cancer Research Institute (SACRI), University of Calgary, Calgary, AB, Canada. January 30<sup>th</sup>, 2015.
- 28) **Mostafa AA**, Rasmussen A, and Drover S: ERK signaling is required for cell surface expression of HLA Class II molecules on breast cancer cells. 27<sup>th</sup> Annual Canadian society for immunology, Fairmont Le Chateau Frontenac, Quebec City, PQ March 6 – 9 2014.
- 29) O'Reilly D, Uddin M, **Mostafa AA**, Codner D, Hackett D, Haroon N, Inman R, Rahman P: Sec16a gene deletion in a large axial spondyloarthritis family. EULAR the European League Against Rheumatism annual European Congress of Rheumatology., Paris, France. 11-14 June 2014
- 30) **Mostafa AA**, Codner D, Hirasawa K, Yumiko Komatsu, Steimle V, and Drover S: Dissection of molecular pathways regulating HLA Class II expression in ER+ breast cancer cells. 25<sup>th</sup> Annual Canadian society for immunology, Sheraton, St John's, NL June 15-18 2012.
- 31) **Mostafa AA**, Codner D, Lewis C, Hirasawa K, Christian S, Steimle V, and Drover S: Estrogen receptor downregulates HLA class II expression in breast cancer cells by interfering with CIITA. 24<sup>th</sup> Annual Canadian society for immunology, Fairmont Chateau Lake Louise, AB April 8-11 2011
- 32) **Mostafa AA**, Codner D, Lewis C, Hirasawa K, Christian S, Steimle V, and Drover S: Estrogen receptor downregulates HLA class II expression in breast cancer cells by interfering with CIITA. 4<sup>th</sup> Annual Cancer Immune Therapy Symposium, Fairmont Chateau Lake Louise Lake Louise, AB, April 7-8, 2011
- 33) **Mostafa AA**, Codner D, Lewis C, Hirasawa K, Christian S, Steimle V, and Drover S: Class II transactivator (CIITA) transcription is reduced by the ER-E2 signaling pathway in breast cancer

cells. 102nd American Association for Cancer Research annual meeting, Orlando-Florida USA. April 2nd- April 6<sup>th</sup> 2011.

- 34) **Mostafa AA**, Codner D, Lewis C, Hirasawa K, Christian S, Steimle V, and Drover S. 2010: Estrogen receptor downregulates HLA class II expression in breast cancer cells by interfering with CIITA. 21st annual Immunology and Infectious Disease Graduate Student Research Forum, Memorial University of Newfoundland St. John's Canada November 19, 2010.
- 35) **Mostafa AA**, Codner D, Lewis C, Hirasawa K, Christian S, Steimle V and Drover S: Estrogen receptor downregulates HLA class II expression in breast cancer cells by interfering with CIITA. BHCRI CRTP annual symposium at Halifax, Nova Scotia, November 8-9 2010.
- 36) Lewis C, Codner D, **Mostafa AA**, Dyer T, Drover S: HER2 and HLA Class II Regulation in Breast Cancer Cells. BHCRI CRTP annual symposium at Halifax, Nova Scotia, November 8-9 2010.
- 37) **Mostafa AA** and Drover S: Mechanism involved in modulation of HLA class II expression in breast cancer. CIHR Research Poster Competition in Winnipeg, June 2, 2010,
- 38) **Mostafa AA** and Drover S: Mechanism involved in modulation of HLA class II expression in breast carcinoma. 2009 CRTP Cancer Symposium at Halifax, Nova Scotia, November 16-17 2009
- 39) **Mostafa AA** and Drover S: The Estradiol-Estrogen Receptor Pathway is implicated in the Regulation of HLA Class II Expression in Breast Cancer Cells. 22nd Annual Canadian Society for Immunology Meeting Whistler, British Columbia, April 3 - 6, 2009.
- 40) **Mostafa AA** and Drover S: Estrogen receptors and immune markers on breast carcinoma cells. Aldrich Interdisciplinary Conference, Memorial University of Newfoundland St John's NL, March 21st-22nd, 2009.
- 41) **Mostafa AA** and Drover S: The estradiol-estrogen receptor pathway is implicated in the regulation of HLA Class II expression in breast cancer 19th annual immunology and infectious disease graduate student research forum Memorial University of Newfoundland St. John's Canada November 14, 2008.
- 42) Drover S, **Mostafa AA**, Andrew M, Codner D, Oldford SA: Estrogen receptor (ER $\alpha$ ) down-regulates HLA-class II expression in breast carcinoma cells. Canadian Breast Cancer Research Alliance, reasons for hope, fifth scientific conference, Vancouver BC April 25-27 2008.
- 43) **Mostafa AA** and Drover S: Mechanisms involved in HLA-DR expression in ER- and ER+ breast cancer. 18th annual Immunology and Infectious Disease Graduate Student Research Forum Memorial University of Newfoundland St. John's Canada October 19, 2007.
- 44) Han Y, Randell EW, Vasdev SC, Gill VD, Gadag V, and **Mostafa AA**: Elevated levels of plasma methylglyoxal and glyoxal in young patients with type 1 diabetes as early markers of diabetic complications. Canadian Society of Clinical Chemist 51st annual meeting Toronto ON June 9-13 2007.
- 45) **Mostafa AA**, Randell EW, Vasdev SC, Gill VD, Han Y, Gadag V. 2007: Plasma protein advanced glycation end products, carboxymethyl cysteine, and carboxyethyl cysteine, are elevated and related to nephropathy in patients with diabetes. Canadian Society of Clinical Chemist 51st annual meeting Toronto ON June 9-13 2007.

- 46) **Mostafa AA**, Randell EW, Vasdev SC: Evidence for significant modification of albumin arginine residues in diabetes mellitus and its relationship with risk factors for diabetic complication. Faculty of Medicine research days, Memorial University of Newfoundland, St John's, NL, Canada. June 2006.
- 47) **Mostafa AA**, Randell EW, Vasdev SC: Evidence for significant modification of albumin arginine residues in diabetes mellitus and its relationship with risk factors for diabetic complication. Canadian Society of Clinical Chemist 50th annual meeting Victoria BC June 4-7 2006.

## 16. REPORTS AND OTHER OUTPUTS

- 1) **Mostafa (2022)**, Directors' Affairs Committee — NGS Survey report. ASHI Quarterly Volume 46, Number 1 (2022) page 46 [https://cdn.ymaws.com/www.ashi-hla.org/resource/resmgr/docs/ashi\\_quarterly/2022/ashi\\_q1\\_quarterly\\_updated.pdf](https://cdn.ymaws.com/www.ashi-hla.org/resource/resmgr/docs/ashi_quarterly/2022/ashi_q1_quarterly_updated.pdf)
- 2) **Mostafa (2021)**, Transforming Diagnostics for Tissue Transplantation 2021. One Lambda, Community spotlight. <https://www.thermofisher.com/onelambda/wo/en/news/transforming-diagnostics-for-tissue-transplantation.html>
- 3) **Mostafa (2020)**, Laboratory Medicine SHA/PaLM annual report 2020-2021. Dr. Marc Baltzan Histocompatibility & Immunogenetics Laboratory (HIL) Page 39-41. <https://medicine.usask.ca/documents/pathology/annual-report-2020-2021.pdf>
- 4) **Mostafa (2009)**, MunMed faculty of Medicine Magazine Vol.21 No.2 Spring 2009 Page 10 "The role of ER in breast cancer"  
<http://liblespaul.library.mun.ca/PDFs/munmed/MUNMED2009Vol21No02Spring.pdf>

## 17. BOOK REVIEWS

## 18. INTELLECTUAL PROPERTY

## 19. RESEARCH FUNDING HISTORY

- 1) A National prospective eplet-compatibility matching program for Canadian renal transplant patients (GENOMIC APPLICATIONS PARTNERSHIP PROGRAM (GAPP) 26-2022 grant submission). **My role is a collaborator. Budget \$10,834,538**
- 2) Principal Investigator (PI) **Mostafa A.** Wu, F Lewis C. Dean's Research Project Awardee. Eplet Mismatches in Organ Transplantation Bridging the Knowledge Gap. College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. January 2024.
- 3) Principal Investigator (PI) **Mostafa A.** Wu, F Lewis C. Dean's Research Project Awardee. Enhance The Identification Of Potential Immunological Mismatches in Kidney Transplantation By Using Computational Algorithm. College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. January 2024.
- 4) Principal Investigator (PI) **Mostafa A.** Wu, F Dokouhaki P. Dean's Research Project Awardee. Epitope analysis as a tool for prediction of graft failure. College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. January 2023.

- 5) Principal Investigator (PI) **Mostafa A.** Wu, F Dokouhaki P. Dean's Research Project Awardee. Vitamin Testing: Do We "Choose Wisely" in Saskatchewan? College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. January 2023.
- 6) Principal Investigator (PI) **Mostafa A.** Wu, F Dokouhaki P. Applicant: Yayuan Zhao (PGY3. CAP Foundation Rippey Grant for Expedited Research - The Impact of Laboratory Testing for SARS-CoV-2 on Quality and Patient Safety. Investigation of COVID-19 Vaccines on Kidney Transplant. College of American Pathologists (CAP). A grant amount of USD\$17,500. April 2022.).
- 7) Principal Investigator (PI) **Mostafa A.** Wu, F Dokouhaki P. Dean's Research Project Awardee. Cytokine profile and disease severity in patients with COVID-19. College of Medicine, University of Saskatchewan. CAD\$5000 to support a medical student stipend. February 2022.
- 8) Applicant: **Mostafa, A.**, &co-applicant: Wu F, Dokouhaki, (Project term: 01-07-2020 to 31-03-2021), Title of project: Modeling for Risk Stratification of Patients Infected with COVID-19 Based on Cytokine Profile and Other Immune-Related Biomarkers. \$10,000 (CAD), College of Medicine, Respiratory Research Centre, and the University of Saskatchewan. March 2021
- 9) Principal Investigator (PI) **Mostafa A.** Wu, F Dokouhaki P. 2021 May-August, Dean's Research Project: Choosing Wisely: Thyroid Function Testing. College of Medicine, University of Saskatchewan. January 2021.
- 10) Principal Investigator (PI) **Mostafa A.** Berka N, Calgary Laboratory Services Health Service Research Funding Competition. "Improvements of crossmatching technique to eliminate interference by Rituximab therapy". \$15,000 for two years January 2019.

## 20. PRACTICE OF PROFESSIONAL SKILLS

### Editor in Chief Activities

- Arabian Society of Histocompatibility and Immunogenetics Newsletter.2020- Present

### Associate Editor

- Frontiers of Genetics Journal, 2023- Present

### Editorial Board Members

- American Journal of Immunology, 2023-Present

### Article Review Activities

- Journal of Clinical Laboratory Analysis 2023 to present Review 1 manuscript)
- Transplantation Journal, 2021 to present (official Journal for the Transplantation Society) (Review 1 manuscript)
- Human Immunology Journal, 2017 to present (Official Journal of ASHI) (Review 5 manuscripts)
- Frontiers of Oncology Journal, 2014 to present (Review 3 manuscript)
- Frontiers of Genetics Journal, 2023

### Conference Abstract Review Activities

- American Society for Histocompatibility and Immunogenetics (ASHI) research and abstract review committee 2021-present
- Canadian Society of Transplantation (CST) research and abstract review committee 2021-present

#### Grant Review Activities

- AstraZeneca grant for transplant Infectious Disease – reviewers, Canadian Society of Transplantation, 2023
- Deans Projects Review, Office of Vice Dean Research (OVDR), USASK, 2023
- Deans Projects Review, Office of Vice Dean Research (OVDR), USASK, 2022
- Deans Projects Review, Office of Vice Dean Research (OVDR), USASK, 2021
- Deans Projects Review, Office of Vice Dean Research (OVDR), USASK, 2020
- Rapid Response COVID-19 Research Funding operating grants, OVDR, USASK, 2020
- Review student applications for the Biomedical Summer Research Project, Office of Vice Dean Research (OVDR), USASK 2020

#### Academic Judge Review Activities

- Poster Judge for College of Medicine Summer Research for undergraduate student Deans Research Symposium 2022
- Poster Judge for College of Medicine Summer Research for undergraduate student Deans Research Symposium 2021
- Poster Judge for College of Medicine Summer Research for undergraduate student Deans Research Symposium 2020
- Poster Judge for College of Medicine Summer Research for undergraduate student Deans Research Symposium 2019

#### Clinical Practice (Please refer to category 5 in my teaching dossier for associated details)

- I am a full-time Histocompatibility and Immunogenetics ASHI certified Laboratory Director (1.0 FTE). I have held this position for approximately four years since I arrived at the Saskatchewan Health Authority. I oversee and do clinical consultation for various immunological risk assessments, including solid organ transplantation and stem cell transplantation for the whole of Saskatchewan province. In addition, our program is part of the Canadian transplant registry which is a national transplant program that helps the difficult to transplant cases
- My daily responsibilities include but are not limited to 1) provision of consultative interpretation of patient laboratory tests for screening, diagnosis, management, and monitoring of disease process. 2) development of testing algorithms and practice guidelines for other healthcare professionals utilizing HIL service through the selection and validation of reference intervals, interpretative comments, and critical values. 3) Assessment of the clinical utility and implementation of new tests. 4) Monitoring the quality assurance processes and procedures for four hospitals in Saskatoon to ensure that the laboratory generates high-quality information and meets regulatory requirements and standards of practice.

- I perform 365 days of Histocompatibility and Immunogenetics on-call service regionally and nationally. During those on-call weeks, I answer all clinical calls 24 hours a day, throughout a 7-day block of duty. These calls are usually extremely urgent and frequently occur after midnight.

## **21. ADMINISTRATIVE SERVICE**

### **21.1 University Committees**

- Chair of CIHR Awards & Scholarships Committee, College of Graduate Studies, University of Saskatchewan, 2022- present.
- Awards & Scholarships Committee member, College of Graduate Studies, University of Saskatchewan, 2022- present.
- Assessor at College of Medicine virtual Multiple Mini Interviews for future medical students at the University of Saskatchewan, 2022-present
- Accreditation Review Medical School Survey (MSS) Working Group member, College of Medicine, University of Saskatchewan. 2020-2021.

### **21.2 College and Departmental Committees**

- Department of Pathology and Laboratory Medicine Research Day Planning Committee, College of Medicine, University of Saskatchewan, January 2024 to present
- Member of the Student Academic Management Committee, College of Medicine, University of Saskatchewan, January 2024 to present
- Member of the search committee for new biochemist candidates, Department of Pathology & Lab Medicine, University of Saskatchewan, January 2022 to present
- Wellness Committee Member, Department of Pathology & Lab Medicine, University of Saskatchewan, January 2021 to 2023

### **21.3 Other Administrative Service**

- Member, Provincial Lab Medicine & Pathology Executive Committee, SHA, July 2022 to Present
- Member, Provincial Genomics Executive Committee, SHA, July 2022 to Present

## **22. PROFESSIONAL OR ASSOCIATION OFFICES AND COMMITTEE ACTIVITY OUTSIDE U OF S**

- Co-Chairs for the North American Chinese Clinical Chemist Association (NACCCA) Awards and Nomination Committee, April 2024- Present

- Vice Chair of the Clinical Laboratory Directors' Affairs Committee, American Society of Histocompatibility and Immunogenetics, 2023-2024
- Egyptian deceased donor for Kidney transplantation professional guidelines committee, 2023-present
- Member of Canadian Society of Transplantation (CST) Annual Scientific Meeting Planning Committee 2023 to present
- Member of Canadian Society of Transplantation (CST) Research Webinar Working Group, 2023 to present
- Member of ASHI Proficiency testing committee, American Society of Histocompatibility and Immunogenetics, 2023-present
- Member of Education committee, American Society of Histocompatibility and Immunogenetics, 2023-present
- Member of ASHI University committee, American Society of Histocompatibility and Immunogenetics, 2022-present.
- International Clinical Laboratory Inspector, Accreditation and Review Board, American Society of Histocompatibility and Immunogenetics, 2021-present
- Member of the Clinical Laboratory Directors' Affairs Committee, American Society of Histocompatibility and Immunogenetics, 2021-2023
- Member of the Canadian National HLA Advisory Committee, Canadian Transplant Registry (CTR), Canadian Blood Service subcommittee, 2019-present.
- Member of the Canadian HLA Dictionary updates committee Canadian Blood Service subcommittee, 2019-present.
- Member of Interprovincial and Organ Sharing (IPOS) & Canadian Transplant Registry (CTR) National Stakeholder Working. Canadian Blood Service subcommittee, 2022-present.

## **23. PUBLIC AND COMMUNITY CONTRIBUTIONS**

### **23.1 University Related:**

- Poster Judge for 7th Annual REACH - Resident Research Day, College of Medicine, at the University of Saskatchewan, 2023-present.
- Assessor at College of Medicine virtual Multiple Mini Interviews for the future medical students at the University of Saskatchewan, 2022-present
- Poster Judge for College of Medicine Summer Research for undergraduate student Deans Research Symposium 2022
- Poster Judge for College of Medicine Summer Research for undergraduate student Deans Research Symposium 2021

- Poster Judge for College of Medicine Summer Research for undergraduate student Deans Research Symposium 2020
- Poster Judge for College of Medicine Summer Research for undergraduate student Deans Research Symposium 2019
- Departmental Journal club organizers, Tom Baker Cancer Centre, University of Calgary, Canada, 2014-2016.
- Memorial University of Newfoundland Unit Representative for the Canadian Society for Life Science Research 2010-2011.
- Medicine representative for the graduate student union board of director committee, Memorial University of Newfoundland St. John's Canada, 2008-2009.
- Graduate student representative for the academic council meetings Memorial University of Newfoundland St. John's Canada, 2008-2009.
- Representative in the "Appeals Committee – Student Code of Conduct" Graduate Student Union-Memorial University of Newfoundland St. John's Canada, 2007-2008.

### **23.2 Non-University Related:**

- Member at large at the Arbor Creek Community Association, Saskatoon, SK. 2022-present
- Awards and Scholarship Director, Canadian Air Cadets NW, Calgary, Alberta 2015 - 2016.
- Organizer for the CIBC run for the cure of breast cancer 2015.
- Judge for the Calgary-Alberta Regional Science Fair for junior high and high school students in 2015.
- Judge and team leader for the Eastern Newfoundland Regional Science Fair for junior high and high school students. 2012-2014.
- Egyptian Student Association in North America (ESANA): President in NL-Canada Unit, 2007-2009.

## **24. OTHER ACTIVITIES**

### Membership in Professional Societies

- The Transplantation Society (TTS) 2024-Present
- North American Chinese Clinical Chemist Association (NACCCA) 2024-present
- The Egyptian Society of Nephrology and Transplantation (ESNT) 2023-present
- Arab Society of Nephrology and Renal Transplantation (ASNRT) 2021- present
- European society of workers in the field of Immunogenetics and histocompatibility 2021-present
- Canadian Society of Transplantation (CST) 2018-present

- Arab Society for Histocompatibility and Immunogenetics (ARSHI) 2017-present
- Alberta Transplant Institute (ATI) 2017-2019
- American Society for Histocompatibility and Immunogenetics (ASHI) 2016- present
- Canadian Society for Immunology 2007- 2018
- Beatrice Hunter Cancer Research Institute 2008- 2014
- European Association of Cancer Research 2010- 2018
- American Association of Cancer Research 2010- 2018
- Canadian Society for Life Science Research 2010- 2011
- Tumor Microenvironment Working Group 2010- 2014
- American Society of Clinical Oncology 2011-2017