

# DARA K. MOHAMMAD

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- ◆ <https://scholar.google.se/citations?user=zR1huCcAAAAJ&hl=en>

## Personal Information

Date of birth: 1981.11.06

Marital status: Married

Gender: Male

Address: Zanko city, Erbil, House 83D

## Research Interest

*Cancer cell biology, NK cell immunotherapy, signal transduction of engineered Extracellular Vesicles (EVs) and molecular basis of cancer immunotherapy.*

## Professional Summary

As biomedical lecturer and researcher professional, I can combine multidisciplinary competencies covering various research projects with groups at Salahaddin University-Erbil as PhD research scientist. I have obtained fairly broad experimental skills in the field of Immunology and cancer cell biology. Experienced molecular biologist professional with strong leadership and relationship-building skills. I also believe my academic profile; research experiences in working in different laboratories with a wide range of experimental techniques are advantageous. In addition, I bring high commitment towards my job, ability to work in a team and clear analytic way of thinking. With my experience of working and studying in different countries, I am also comfortable to work in a multicultural environment.

## Education

### Ph.D: Cancer Cell Signaling

May 2015

Karolinska Institutet

Sweden, Stockholm

- **Grade:** Distinction
- **Dissertation:** *“Role of AKT and 14-3-3 in the regulation of B cell receptor signaling and signalosome assembly”*
- **Coursework:** Antigen presentation and T cell activation, Pathology, Clinical Immunology, Cell cycle and Apoptosis, Calcium signaling, Cellular signaling, Cancer and anti-cancer targets, Electron

Microscopy in Cell Biology, Bioinformatics for Cell Biologists, Medical statistics and Proteomics by Mass spectrometry.

- Successfully completed projects of signal transduction of B cell receptor (BCR) downstream pathways; High-scale affinity purification of BTK complexes in B-cells and identify protein-protein complexes using MS-MS proteomic technology.

### **Master of Science: Hematology**

**June 2006**

Salahaddin University-Erbil

Erbil, Erbil Governorate

- **Grade:** Very good
- **Rank (1)** in a class of 10 students.
- **Thesis:** “*Effects of erythropoietin and growth hormone on hematological and biochemical parameters in 5/6 nephrectomized and cisplatin induced anemic rats*”
- **Coursework:** Clinical Biochemistry, Physiology, Cell Biology, Clinical Hematology, Biostatistics and Immunocytochemistry

### **Bachelor of Science: Biology**

**June 2004**

Salahaddin University-Erbil

Erbil, Erbil Governorate

- **Grade:** Very good
- **Rank (1)** in a class of 45 students.
- **Coursework:** Modern Biology, General Physics, Statistics, General Chemistry, Computer, Parasitology, Entomology, Invertebrates, Plant Anatomy & Taxonomy, Biochemistry, Microbiology, Histology & Embryology, Immunology, Hematology, Animal Physiology, Microtechnique, Plant Physiology, Ecology & Pollution, Mycology & plant pathology, Sewage Microbiology, Genetics, Medical Bacteriology, Cell Biology, Virology, Food & Industrial Microbiology, Molecular Biology and Endocrinology

## **Academic Work History**

### **Postdoctoral Research Scientist**

**June 2018 – August 2020**

Karolinska Institutet, *Department of Medicine Huddinge.*

Sweden, Stockholm

- Running research projects
- Molecular biology laboratory manager
- Contributing to grant application
- Co-supervising PhD and master students

### **University Lecturer**

Salahaddin University-Erbil

**September 2006 - Present**

Erbil, Erbil Governorate

- Lecture planning, preparation and research
- Contact and teaching time with students
- Supervising students for their graduation research
- Checking and assessing students' work
- Invigilating examinations
- Attending staff meetings
- General administration
- Writing research proposals, papers and other publications
- Reading academic journals

### **Director of Undergraduate Studies**

**September 2006 - January 2008**

Salahaddin University-Erbil

Erbil, Erbil Governorate

- Prepared individualized lesson plans and educational materials to structure biology curriculum to needs of each student.
- Evaluated students' academic growth, kept appropriate records and prepared progress reports to gauge performance. Received and routed business correspondence to correct departments and staff members.
- Assisted coworkers and staff members with special tasks on daily basis.
- Created and maintained detailed administrative processes and procedures to drive efficiency and accuracy.

### **Biology Laboratory Teaching Assistant**

**August 2004 - August 2006**

Salahaddin University-Erbil

Erbil, Erbil Governorate

- Kept classroom environments consistent and focused on learning by establishing and enforcing clear objectives.
- Assessed student comprehension through regular quizzes, tests and assignments.
- Assessed submitted class assignments, determined grades and reviewed work with struggling students to boost success chance.

### **Teaching Experience**

- Molecular Cell Biology, Cancer Immunology, Physiology, Biochemistry, Hematology and Biochemistry

### **Supervision**

Supervised 3 master students. Currently, co-supervising 2 PhD students from Karolinska Institutet-Sweden and one from Salahaddin University-Erbil.

## Areas of Strength and Expertise

- Higher Education & Teaching Strategies
- Research Design & Project Development
- Supervision & Leadership
- Strategic Planning and Adaptability
- Project Assessment & Academic Evaluation
- Laboratory Management
- Technology Scouting
- Time Management and Teamwork
- Public Speaking & Academic Debate
- Scientific Writing & Publication
- Scientific Instrumentation & Software Operation
- Ability to Work Under Pressure
- Technical and Laboratory Skills
- Animal Breeding & Surgery

## Accomplishments

- Certificate of Radiation safety for 5 years, June 2020, Karolinska Institutet, Stockholm, Sweden.
- Certificate of Introductory doctoral supervision course, September 24-27, 2018. Karolinska Institutet, Stockholm, Sweden
- Certificate of Animal breeding and surgery (FELASA C), 2016, Karolinska Institutet
- Awarded the first-place prize for poster presentation at B cell-net conference, Sweden, Säröhus, 14-15 October 2011, Gothenburg.
- Awarded the PhD scholarship for 5 years (2010-2015) from the Ministry of Higher Education and Scientific Research-Erbil/Iraq.
- Promotion from Assistant lecturer to Lecture on 8/12/2009 issued order no. 1/1/6946 on 10/5/2010.
- Awarded a prize for master's degree (rank first), August 2006, from the Ministry of Higher Education and Scientific Research and Salahaddin University-Erbil, Erbil/Iraq.
- Certificate of university pedagogic methods, September 2006, Salahaddin University-Erbil, Erbil/Iraq.
- Awarded a prize for bachelor's degree (rank first), June 2004, from the Ministry of Higher Education and Scientific Research and Salahaddin University-Erbil, Erbil/Iraq.

## Technical Skills

- **Molecular Biology:** Plasmid DNA preparations, total RNA preparations, cDNA libraries, Bioinformatics, Engineering EVs, DNA Primers Design, Restriction enzymes, RT-PCR, qPCR techniques, Agarose Gel Electrophoresis, DNA Sequencing, Site-Directed Mutagenesis techniques and Cloning.
- **Cell Biology:** Mammalian Cell Cultures, Cell Counting, DNA and RNA Transfections, Lentiviral vector Production, Lentiviral Transduction, Cell Activation and Starvation, Cryo-Preservation, Cell Fractionations, Immunoprecipitation Techniques, Immuno-Fluorescence Techniques, Flow

Cytometry, ELISA, Confocal Microscopy, Various Cell Assays (Differentiation, Apoptosis, Viability, Motility, EVs uptake, Wound Healing and NK cell degranulation assay ...etc.).

- **Biochemistry:** Protein Purifications with Chromatography Techniques, Gel Electrophoresis, Protein Phosphorylation (Serine, Threonine and Tyrosine), in vitro Kinase Assay and Western Blotting Techniques.
- **Analytical:** Isolation, purification and measurement of Extracellular Vesicles (EVs) using ultracentrifuge, size exclusion chromatography (SEC), Nanoparticle tracking analysis (NTA), Tangential Flow Filtration (TFF)
- **Animal breeding & surgery:** Obtained FELASA certificate, completed the full training on Rats and Mice; for example, handling, restraining, injections, Biopsy, blood collection, euthanasia and various surgery (Splenectomy, Nephrectomy, Pinealectomy...etc).

## Affiliations

- Member of American Society for Biochemistry and Molecular Biology (ASBMB)
- Member of the American Society of Hematology, ASH
- Member of Kurdistan Biology syndicate
- Member of Kurdistan Lecturers union
- GBD Collaborator, Institution of Health Metrics and Evaluation, University of Washington, Washington, USA

## Conferences and Meetings

- B cell-net, Sweden, Säröhus, 14-15 October 2011, Gothenburg, (Poster presentation)
- Future of science and medicine - NOV2k science symposium, 8-9 November 2012, Stockholm, Sweden- (Poster presentation)
- B cell development and function, Keystone conference, 10-15 February 2013, Colorado, USA- (Poster presentation).
- 15<sup>th</sup> international congress of immunology-ICI, 22-27 August 2013, Milano, Italy (Poster presentation).
- Swedish Exosome Network meeting at Skogshem & Wijk, 21-22 November 2016, Stockholm, Sweden.
- Danish Society for Extracellular Vesicles (DSEV), 1<sup>st</sup> Annual Symposium. 3-4 October 2019, Aarhus, Denmark.

## Scholarship and Travel Grant

- Received a PhD scholarship from the Ministry of Higher Education and Scientific Research, KRG, Erbil-Iraq (2010-2015)
- Karolinska Institutet travel grant to B cell development and function, Keystone Conference, Colorado, USA, 10-15 Feb 2013

## Patents:

- Submitted. A patent under the title (Plasma Membrane Embedded System for Spatiotemporal Controlled Payload Delivery of Biologics), (Application Number 63467518: EFS ID:48025866, Customer Number: 154486)

## Languages

- Kurdish, English, Arabic and Swedish

## Publications

- Schmied L, Luu TT, Søndergaard JN, Hald SH, Meinke S, **Dara K. Mohammad**, Singh SB, Mayer C, Perinetti Casoni G, Chrobok M, Schlums H, Rota G, Truong HM, Westerberg LS, Guarda G, Alici E, Wagner AK, Kadri N, Bryceson YT, Saeed MB, Höglund P. SHP-1 localization to the activating immune synapse promotes NK cell tolerance in MHC class I deficiency. *Sci Signal.* 2023 Apr 11;16(780):eabq0752. doi:10.1126/scisignal.abq0752. Epub 2023 Apr 11. PMID: 37040441.
- Rasul KH, Hussain A, Reilly H, Karvouni M, Dahlberg CIM, Al-Attar MS, Wagner AK, Alici E, **Dara K. Mohammad**. Assessment of T Cell Receptor Complex Expression Kinetics in Natural Killer Cells. *Curr Issues Mol Biol.* 2022 Aug 25;44(9):3859-3871. doi: 10.3390/cimb44090265. PMID: 36135177; PMCID: PMC9497757.
- Ishaq S, Rasheed T, **Dara K. Mohammad**. Impact of persistent antigenic challenges and splenectomy on immune cells in β-Thalassemic patients. *ZANCOJournal of Pure and Applied Sciences.* 2022, 34(4): 116-122. ISSN (print):2218-0230, ISSN (online): 2412-3986. DOI:<http://dx.doi.org/10.21271/zjpas>
- Görgens A, Corso G, Hagey DW, Jawad Wiklander R, Gustafsson MO, Felldin U, Lee Y, Bostancioglu RB, Sork H, Liang X, Zheng W, **Dara K. Mohammad**, van de Wakker SI, Vader P, Zickler AM, Mamand DR, Ma L, Holme MN, Stevens MM, Wiklander OPB, El Andaloussi S. Identification of storage conditions stabilizing extracellular vesicles preparations. *J Extracell*

Vesicles. **2022** Jun;11(6):e12238. doi:10.1002/jev2.12238. PMID: 35716060; PMCID: PMC9206228.

- GBD 2019 Ageing Collaborators. Global, regional, and national burden of diseases and injuries for adults 70 years and older: systematic analysis for the Global Burden of Disease 2019 Study. *BMJ*. **2022** Mar 10;376:e068208. doi:10.1136/bmj-2021-068208. PMID: 35273014; PMCID: PMC9316948.
- M-Amen K, Abdullah OS, Amin AMS, Mohamed ZA, Hasan B, Shekha M, Najmuldeen HH, Rahman FM, Housein Z, Salih AM, Mohammed AS, Sulaiman LR, Barzingi BT, Mahmood D, Othman HE, **Dara K. Mohammad**, Salih FM, Ali SAK, Mohamad TS, Mahmood K, Othman GO, Aali MH, Qader G, Hussen BM, Awla FA, Kareem SW, Qadir FA, Taher DM, Salihi A. Cancer Incidence in the Kurdistan Region of Iraq: Results of a Seven-Year Cancer Registration in Erbil and Duhok Governorates. *Asian Pac J Cancer Prev*. **2022** Feb 1;23(2):601-615. doi: 10.31557/APJCP.2022.23.2.601. PMID:35225473; PMCID: PMC9272643.
- GBD 2019 Adolescent Mortality Collaborators. Global, regional, and national mortality among young people aged 10-24 years, 1950-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. **2021** Oct 30;398(10311):1593-1618. doi: 10.1016/S0140-6736(21)01546-4. Epub 2021 Oct 28. Erratum in: *Lancet*. 2022 Feb 26;399(10327):802. PMID: 34755628; PMCID:PMC8576274.
- Kinyoki D, Osgood-Zimmerman AE, Bhattacharjee NV; Local Burden of Disease Anaemia Collaborators; Kassebaum NJ, Hay SI. Anemia prevalence in women of reproductive age in low- and middle-income countries between 2000 and 2018. *Nat Med*. **2021** Oct;27(10):1761-1782. doi: 10.1038/s41591-021-01498-0. Epub **2021** Oct 12. PMID: 34642490; PMCID: PMC8516651.
- Gupta D, Wiklander OPB, Görgens A, Conceição M, Corso G, Liang X, Seow Y, Balusu S, Feldin U, Bostancioglu B, Jawad R, Mamand DR, Lee YXF, Hean J, Mäger I, Roberts TC, Gustafsson M, **Dara K. Mohammad**, Sork H, Backlund A, Lundin P, de Fougerolles A, Smith CIE, Wood MJA, Vandenbroucke RE, Nordin JZ, El-Andaloussi S. Amelioration of systemic inflammation via the display of two different decoy protein receptors on extracellular vesicles. *Nat Biomed Eng*. **2021** Sep;5(9):1084-1098. doi: 10.1038/s41551-021-00792-z. Epub **2021** Oct 6. PMID:34616047.
- Bhattacharjee NV, Schaeffer LE, Hay SI; Local Burden of Disease Exclusive Breastfeeding Collaborators. Mapping inequalities in exclusive breastfeeding in low- and middle-income countries, 2000-2018. *Nat Hum Behav*. **2021** Aug;5(8):1027-1045. doi: 10.1038/s41562-021-01108-6. Epub 2021 Jun 3. PMID: 34083753; PMCID: PMC8373614.
- Luu TT, Schmied L, Nguyen NA, Wiel C, Meinke S, **Dara K. Mohammad**, Bergö M, Alici E, Kadri N, Ganesan S, Höglund P. Short-term IL-15 priming leaves a long-lasting signalling imprint

- in mouse NK cells independently of a metabolic switch. *Life Sci Alliance.* **2021** Feb 16;4(4):e202000723. doi: 10.26508/lsa.202000723. PMID: 33593878; PMCID: PMC7918643.
- Estupiñán HY, Wang Q, Berglöf A, Schaafsma GCP, Shi Y, Zhou L, **Dara K. Mohammad**, Yu L, Vihinen M, Zain R, Smith CIE. BTK gatekeeper residue variation combined with cysteine 481 substitution causes super-resistance to irreversible inhibitors acalabrutinib, ibrutinib and zanubrutinib. *Leukemia.* 2021 May;35(5):1317-1329. doi: 10.1038/s41375-021-01123-6. Epub **2021** Feb 1. PMID: 33526860.
  - Qader G, Aali M, Smail SW, Mahmood K, Hasan B, M-Amen K, Rahman DB, Qadir FA, **Dara K. Mohammad**, Najmuldeen HH, Rahman FM, Ahmad SI, Salih NS, Khidhr ZM, Mohammed BA, Majeed AM, Hasan XM, Khidhir BH, Muhammad ES, Muhamadsalih BA, Hasan SK, Hamad AJ, Esmail ZK, Ismael CM, Husaen SM, Abdulla CA, Hussen BM, Housein Z, Shekha M, Salihi A. Cardiac, Hepatic and Renal Dysfunction and IL-18 Polymorphism in Breast, Colorectal, and Prostate Cancer Patients. *Asian Pac J Cancer Prev.* **2021** Jan 1;22(1):131-137. doi: 10.31557/APJCP.2021.22.1.131. PMID: 33507690.
  - Global Burden of Cardiovascular Diseases and Risk Factors, 1990-2019: Update From the GBD 2019 Study. *J Am Coll Cardiol.* **2020** Dec 22;76(25):2982-3021. doi: 10.1016/j.jacc.2020.11.010. PMID: 33309175; PMCID: PMC7755038.
  - Mapping routine measles vaccination in low- and middle-income countries. *Nature.* **2020** Dec 16:1–10. doi: 10.1038/s41586-020-03043-4. Epub ahead of print. PMID: 33328634; PMCID: PMC7739806.
  - Global burden of 87 risk factors in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* **2020** Oct 17;396(10258):1223-1249. doi:10.1016/S0140-6736(20)30752-2. PMID: 33069327; PMCID: PMC7566194.
  - Govand Qader, Mukhlis Aali, Karwan M Amen, Kazhan Mahmood, Bestoon Hasan, Mudhir Shekha, **Dara K. Mohammad**, Hastyar H Najmuldeen, Dler Mahmood, Farhang A Awla, Karzan A Mohammed, Abbas Salihi. The status of cancer publications in the Kurdistan region of Iraq. *Journal of Cancer Policy* 24, **2020**, 100221.
  - Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* **2020** Oct 17;396(10258):1204-1222. doi: 10.1016/S0140-6736(20)30925-9. Erratum in: *Lancet.* **2020** Nov 14;396(10262):1562. PMID: 33069326; PMCID: PMC7567026.
  - Global age-sex-specific fertility, mortality, healthy life expectancy (HALE), and population estimates in 204 countries and territories, 1950-2019: a comprehensive demographic analysis for the Global Burden of Disease Study 2019. *Lancet.* **2020** Oct 17;396(10258):1160-1203. doi: 10.1016/S0140-6736(20)30977-6. PMID: 33069325; PMCID: PMC7566045.

- Five insights from the Global Burden of Disease Study 2019. *Lancet.* **2020** Oct 17;396(10258):1135-1159. doi:10.1016/S0140-6736(20)31404-5. PMID: 33069324; PMCID: PMC7116361.
- Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* 2020 Oct 17;396(10258):1250-1284. doi:10.1016/S0140-6736(20)30750-9. Epub **2020** Aug 27. PMID: 32861314; PMCID: PMC7562819.
- Local Burden of Disease WaSH Collaborators. Mapping geographical inequalities in access to drinking water and sanitation facilities in low-income and middle-income countries, 2000-17. *Lancet Glob Health.* 2020 Sep;8(9):e1162-e1185. doi: 10.1016/S2214-109X(20)30278-3. PMID: 32827479; PMCID:PMC7443708.
- Local Burden of Disease Diarrhoea Collaborators. Mapping geographical inequalities in oral rehydration therapy coverage in low-income and middle-income countries, 2000-17. *Lancet Glob Health.* 2020 Aug;8(8):e1038-e1060. doi:10.1016/S2214-109X(20)30230-8. PMID: 32710861; PMCID: PMC7388204.
- Mapping geographical inequalities in childhood diarrhoeal morbidity and mortality in low-income and middle-income countries, 2000-17: analysis for the Global Burden of Disease Study 2017. *Lancet.* **2020** Jun 6;395(10239):1779-1801. doi: 10.1016/S0140-6736(20)30114-8.
- Mapping local patterns of childhood overweight and wasting in low- and middle-income countries between 2000 and 2017. *Nat Med.* 2020 May;26(5):750-759. doi: 10.1038/s41591-020-0807-6. Epub 2020 Apr 20. Erratum in: *Nat Med.* 2020 Jul 2;; PMID: 32313249; PMCID: PMC7220891.
- Global, regional, and national burden of chronic kidney disease, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet.* **2020** Feb 29;395(10225):709-733. doi: 10.1016/S0140-6736(20)30045-3. Epub 2020 Feb 13. PMID: 32061315; PMCID: PMC7049905.
- Local Burden of Disease Educational Attainment Collaborators. Mapping disparities in education across low- and middle-income countries. *Nature.* 2020 Jan;577(7789):235-238. doi: 10.1038/s41586-019-1872-1. Epub 2019 Dec 25. PMID: 31875853; PMCID: PMC7015853.
- Amin R, He R, Gupta D, Zheng W, Burmakin M, **Dara K. Mohammad**, DePierre JW, Sadeghi B, Olauson H, Wernerson A, El-Andaloussi S, Hassan M, Abedi-Valugerdi M. The kidney injury caused by the onset of acute graft-versus-host disease is associated with down-regulation of  $\alpha$ Klotho. *Int Immunopharmacol.* 2020 Jan; 78:106042. doi: 10.1016/j.intimp.**2019**.106042. PubMed PMID: 31812067.
- Mapping 123 million neonatal, infant and child deaths between 2000 and 2017. *Nature.* 2019 Oct;574(7778):353-358. doi: 10.1038/s41586-019-1545-0. PubMed PMID: 31619795.

- Global, Regional, and National Cancer Incidence, Mortality, Years of Life Lost, Years Lived with Disability, and Disability-Adjusted Life-Years for 29 Cancer Groups, 1990 to 2017: A Systematic Analysis for the Global Burden of Disease Study. *JAMA Oncol.* **2019** Sep 27. doi:10.1001/jamaoncol.2019.2996. PubMed PMID: 31560378.
- The global burden of childhood and adolescent cancer in 2017: an analysis of the Global Burden of Disease Study 2017. *Lancet Oncol.* 2019 Sep;20(9):1211-1225. doi:10.1016/S1470-2045(19)30339-0. Epub 2019 Jul 29. Erratum in: *Lancet Oncol.* **2019** Aug 6;: PMID: 31371206; PMCID: PMC6722045.
- Narmeen N. Fathi, **Dara K. Mohammad**, Andre Görgens, Samir El-Andaloussi, Rula Zain, Beston F. Nore and C. I. Edvard Smith. Translocation-generated ITK-FER and ITK-SYK fusions induce STAT3 phosphorylation and CD69 expression. *Biochem Biophys Res Commun.* **2018** Oct 12;504(4):749-752.
- Oscar P. B. Wiklander, R. Beklem Bostancioglu, Giulia Corso, Ulrika Felldin, Manuela O. Gustafsson, **Dara K. Mohammad**, Constanze Wiek, Helmut Hanenberg, Michel Bremer, Dhanu Gupta, Mikael Björnstedt, Bernd Giebel, Joel Z. Nordin, Jennifer C. Jones, Samir EL Andaloussi and André Görgens. Systematic Methodological Evaluation of a Multiplex Bead-Based Flow Cytometry Assay for Detection of Extracellular Vesicle Surface Signatures. *Frontiers in Immunology.* **2018** June 13. doi: 10.3389/fimmu.2018.01326.
- **Dara K. Mohammad**, Beston F. Nore, C. I. Edvard Smith. Terminating B cell receptor signaling. *Oncotarget.* **2017** Dec 6;8(66):109857-109858.
- **Dara K. Mohammad**. PRIMA-1 Induces Apoptosis of Leukemic Cells via Inhibiting Bruton's Tyrosine Kinase. *Cukurova Med J.* **2017**; 42 (1):1-12.
- Manuela O. Gustafsson, **Dara K. Mohammad**, Erkko Ylösmäki, Hyunseok Choi, Subhash Shrestha, Qing Wang, Beston F. Nore, Kalle Saksela, C. I. Edvard Smith. ANKRD54 preferentially selects Bruton's Tyrosine Kinase (BTK) from a Human Src-Homology 3 (SH3) Domain Library. *PLoS One*, **2017**. Apr 3;12(4): e0174909.
- Abdulrahman Hamasy, Qing Wang, **Dara K. Mohammad**, Emelie Blomberg, Liang Yu, Mauno Viñinen, Anna Berglöf, and C. I. Edvard Smith. Substitution scanning identifies a novel, catalytically active ibrutinib-resistant BTK cysteine 481 to threonine (C481T) variant. *Leukemia*, **2017**.31: p. 177-185.
- **Dara K. Mohammad**, Beston F. Nore, Manuela O. Gustafsson, Abdalla J. Mohamed and C. I. Edvard Smith. Protein kinase B (AKT) regulates SYK activity and shuttling through 14-3-3 and importin 7. *Int J Biochem Cell Biol*, **2016**, 78: p. 63-74.

- **Dara K. Mohammad**, Raja H. Ali, Janne J. Turunen, Beston F. Nore and C. I. Edvard Smith. B Cell Receptor Activation Predominantly Regulates AKT-mTORC1/2 Substrates Functionally Related to RNA Processing. *PLoS One*, **2016**, 11 (8): p. e0160255.
- Dina Ali, **Dara K. Mohammad**, Huthayfa Mujahed, Kerstin Jonson-Videsäter, Beston F. Nore, Christer Paul and Sören Lehmann. Anti-leukaemic effects induced by APR-246 are dependent on induction of oxidative stress and the NFE2L2/HMOX1 axis that can be targeted by PI3K and mTOR inhibitors in acute myeloid leukaemia cells. *Br J Haematol*, **2016**, 174 (1): p. 117-26.
- Burcu Bestas, Pedro Moreno, Emelie M. Blomberg, **Dara K. Mohammad**, Amer F. Saleh, Tolga Sutlu, Joel Z. Nordin, Peter Guterstam, Manuela O. Gustafsson, Shabnam Kharazi, Barbara Piatosa, Thoma C. Roberts, Mark A. Behlke, Mathew J. A. Wood, MichEL J. Gait, Karin E. Lundin, Samir El Andaloussi, Robert Måansson, Anna Berglöf, Jesper Wengel and C. I. Edvard Smith. Splice-correcting oligonucleotides restore BTK function in X-linked agammaglobulinemia model. *The Journal of Clinical Investigation*, **2014**, 124, p. 4067-4081.
- **Dara K. Mohammad**, Beston F. Nore, Alamdar Hussain, Manuela O. Gustafsson, Abdalla J.Mohamed and C. I. Edvard Smith. Dual phosphorylation of BTK by AKT/PKB Provides Docking For 14-3-3 $\zeta$ , Regulates Shutting and Attenuates both Tonic and Induced Signaling in B Cells. *Molecular and Cellular Biology*, **2013**, 33, p. 3214-3226.
- Alamdar Hussain, **Dara K. Mohammad**, Manuela. O. Gustafsson, Merve Uslu, Abdulrahman Hamasy, Beston F. Nore, Abdalla J. Mohamed and C. I. Edvard Smith. Signaling of the ITK-SYK fusion kinase is dependent on adapter SLP-76 and on the adapter function of the kinases SYK and ZAP70. *The Journal of Biological Chemistry*, **2013**, 288, p. 7338-7350.
- Manuela O. Gustafsson, Alamdar Hussain, **Dara K. Mohammad**, Abdalla J.Mohamed, Vivian Nguyen, Metalnikov, P., Colwill, K., Tony Pawson, C. I. Edvard Smith and Beston F. Nore. Regulation of nucleocytoplasmic shuttling of Bruton's tyrosine kinase (BTK) through a novel SH3-dependent interaction with ankyrin repeat domain 54 (ANKRD54). *Molecular and Cellular Biology*, **2012**, 32, p. 2440-2453.
- Alamdar Hussain, Liang Yu, Rany Faryal, **Dara K. Mohammad**, Abdalla J. Mohamed and C. I., Edvard Smith. TEC family kinases in health and disease loss-of-function of BTK and ITK and the gain-of-function fusions ITK-SYK and BTK-SYK. *The FEBS Journal*, **2011**, 278, p.2001-2010.
- **Dara K. Mohammad**. Effect of Hemodialysis and peritoneal dialysis on some hematological and biochemical parameters in renal failure. **2009**, Zanco Journal of Medical Sciences (Zanco J Med Sci) 13 (2), 79-85.
- **Dara K. Mohammad** and Jamal M Aziz. Effects of erythropoietin and growth hormone on hematological and biochemical parameters in 5/6 nephrectomized male abino rats. *Journal of Duhok University*, **2009**, 12; 1, 146-160.