

CURRICULUM VITAE

I- Personal information:

1. **Name:** Hastyar H. Najmuldeen
2. **Email addresses:** hastyar.najmuldeen@univsul.edu.iq
hastyar.najmuldeen@sulicihan.edu.krd
3. **Contact number:** +9647736990570 (Viber, WhatsApp, Telegram), +9647701576712
4. **Address:**
67 Kamy Haware Zanko, Bakrajo, Sulaymaniyah, Kurdistan region, Iraq.

II. Educational qualifications: (beginning with most recent).

- 2017** **PhD**, Infection, Immunity and Inflammation department, University of Leicester, UK. Thesis title: Functional Characterization of SOD's Isozymes in *Klebsiella pneumoniae* KR3167.
- 2006** **M.Sc. in Medical Microbiology**, Biology department, College of Science, University of Baghdad, IRAQ. Project title: Prevalence of *Klebsiella* spp. as a nosocomial bacterium and the role of capsule in its pathogenicity.
- 2001** **B.Sc. in Microbiology**, First class honors, Biology department, College of Science, University of Salahaddin, Erbil, Kurdistan region, IRAQ.
- 1997** **Technical Diploma**, Third class honors, Community health department, Sulaimani technical Institute, Sulaimaniyah, Kurdistan region, IRAQ.
- 1995** **Baccalaureate degree**, Secondary school, Preparatory of Roshnberi for boys, Sulaimaniyah, Kurdistan region, IRAQ.

III. Skills and Experience:

A. Work Experience:

2022-ongoing: Dean of College of Health Sciences at Cihan University of Sulaimaniya.

- Given lectures to undergraduate students in Microbial physiology, Soil Microbiology, Body fluid analysis and Lab)
- Given lectures to postgraduate students in Biostatistics and experimental design, antimicrobial activity of synthetic compounds)
- Head of Medical and Laboratories Research Unit in Research consulting center at Cihan University Sulaimaniya.(<https://sulicihan.edu.krd/research-consulting-center/>)
- Adviser at Student research center at Cihan University Sulaimaniya. (<https://sulicihan.edu.krd/student-research-center/health-science-group-one-team/>)
- Coauthor in many research projects supervised by the Global Burden of Diseases, including publications in The Lancet.

2021-2022: Assistant professor and Head of Medical Laboratory Analysis (MLA) department at Cihan University of Sulaimaniya.

- Given lectures to undergraduate students in Medical Terminology, Academic Debate, Body Fluid Analysis, Soil Microbiology, Microbial Physiology, and Immunology.
- Supervised B.Sc., M.Sc., and Ph.D. projects.
- Served as a peer reviewer and editorial board member for international and local journals.

2017-2021 Lecturer at University of Sulaimnai / College of Science / biology department (full-time)

2018-2021 Lecturer at University of Komar for technology and science/ Sulaimani/ Kurdistan region/ Iraq.

- Taught a range of courses for under- and post-graduate students, including Biostatistics and Experimental Design, Microbial Physiology, Bioremediation, Insect Microbiology, Water Microbiology, and Advanced Biostatistics for both undergraduate and postgraduate students.
- Acted as a member of committees for project evaluation, thesis discussion, and scientific evaluation.
- Peer reviewer in many international and local journals

1. *Polish Journal of Veterinary Sciences* with 0.89 Impact Factor

2. *RSC Advances* with 4.03 Impact factor

3. ARO journal: *The scientific journal of Koya University*

4. Passer journal: *Passer journal of basic and applied sciences*

5. *Journal of Zankoy Slaimani (JZS-A)*

6. ZJPAS journal: *Zanco Journal of Pure and Applied Sciences; The Scientific Journal of Cihan University – Sulaimaniya (SJCUS)*

➤ **Editorial board in:**

1. The Scientific Journal of Cihan University-Sulaimaniya

<https://journal.sulicihan.edu.krd/index.php/sjcus/about/editorialTeam>

2. Passer Journal of Basic and applied Sciences

<https://passer.garmian.edu.krd>

➤ **B.Sc., M.Sc., and Ph.D. projects supervisor**

1. Supervising 14 undergraduate projects (from 2017- to 2020) at both Universities on different subjects of microbiological projects.

2. Co-supervisor with Dr. Shwan Rachid on a Ph.D. project for finding novel antibiofilm biomolecule in actinomycetes secondary metabolite against some pathogenic bacteria.

3. Master project supervisor (Survey and Molecular Detection of Honeybee Microbial Pathogens Among Different races in Sulaimani Governorate).

4. Master project supervisor (Evaluation the Impact of Chlorination on Development of Chlorine and Antibiotic Resistant Bacterial Isolates in Swimming Pools of Sulaymaniyah City-Iraq).

2013-2017 During my PhD, in addition to my project experiments, I have also done academic related jobs.

- 2013-2015, Demonstrator, for Dr. Primrose Freestone for Year-1 undergraduate practicals.
- 2014, MSc. Student supervision with Dr. Hasan Yesilkaya.
- 2014, Supervision of a visiting scientist in Dr.Hasan Yesilkaya's group.
- 2014 Demonstrator, for Professor Peter Andrew for Year-2 undergraduate Microbiology practicals (BS1009-practical classes)
- 2015-2017, Temporary Laboratory technician.
- 2016, Demonstrator for Dr Shaun Heaphy and Dr Hasan Yesilkaya for Year-2 undergraduate Microbiology practicals
- 2017, Research Technician for 2 months to test the protective role of proteins and polymer in controlling Pneumococcal infection in mice model pneumonia in Dr.Hasan Yesilkaya's group.

2006 – 2012 Lecturer at University of Sulaimani /College of Science/Biology Department. Lectures given included:

- Taught courses in Practical Soil Microbiology, Practical Water Microbiology, Practical Immunology, Practical Medical Microbiology, and undergraduate research supervision.
- Organized field and laboratory training for undergraduate students.
- Served as an exam invigilator.

2004- 2005 Part-time Teaching General Science and Biology subjects at Private Shahed Jabar High school and Private Sulaimnai Girl High school.

2002-2003 Lab Assistant at University of Sulaimani, College of Science, Biology Department. Lectures given included:

- Practical Food & Industrial microbiology (Year four)
- Practical Medical Microbiology (Year two)
- Practical Microbial physiology (Year four)
- Practical Immunology (Year four)

B. Conferences attendance:

- 1- Attending to cancer and oncology research endeavor symposium 2020, 20th February, Erbil / Iraq.
- 2- First International symposium of medicine on dermatology, oncology, and diet (food). Komar University of science and technology and Hiwa hospital, from 11-13 May 2019 at Ramada hotel, Sulaimani / Iraq.
- 3- Poster presentation: The Microbiology Society Annual Conference 2016, from 21–24 March at the Arena and Convention Centre (ACC), Liverpool, UK.

- 4- Poster presentation: 30 May- 2 June 2015. American Society for Microbiology 115th General Meeting, New Orleans, Louisiana.
- 5- Oral presentation: Joint Respiratory Research Day, held in conjunction with the Nottingham center for respiratory research and the Leicester respiratory biomedical research unit. City hospital campus, University of Nottingham, 6th May 2015.
- 6- Oral presentation at 7th Annual Postgraduate Students Conference. Held on 13th – 15th April 2015.
- 7- Poster presentation: The Society for General Microbiology Annual Conference, 30 March to 2 April 2015 at the ICC, Birmingham, UK.
- 8- Attended 1st Midlands Molecular Microbiology Meeting. University of Birmingham, 15th and 16th September 2014.
- 9- Poster presentation: 6th Joint meeting between ILH and Nottingham respiratory research unit. Holywell Park, Loughborough, 7th May 2014.
- 10- Oral presentation at 6th Annual Postgraduate Students Conference. Hold on 1st-2nd April 2014.
- 11- Oral presentation at 1st scientific conference for pure science that hold at University of Kirkuk, Kurdistan regional, Iraq (24-25 /2/ 2009).
- 12- Oral presentation at 2nd Kurdistan Conference on Biological Science that hold at University of Dohuk, Kurdistan regional, Iraq (6-8/04/2008).

C. Laboratory Skills and Experience: Expertise in a wide range of scientific techniques, including:

1. Bacterial isolation and identification from both environment and clinical samples.
2. Screening for antibacterial and antifungal activities.
3. Chlorine and antibiotic resistance mechanisms in Enterobacteriaceae.
4. Gene cloning and expression.
5. Protein extraction, purification, and enzymatic activity.
6. Electrophoresis techniques (Native and SDS-PAGE).
7. Primer design and PCR analysis.
8. Bacterial mutagenesis and genetic manipulation in Gram-negative (*Escherichia coli*, *Salmonella spp.* and *Klebsiella pneumoniae*) and Gram-positive bacteria (*Streptococcus pneumoniae*).
9. Immunological assays (ELISA, haemagglutination, Cytokine assays).
10. Microbial physiology and fermentation pathway analysis.
11. Tissue sectioning and lung histopathology analysis.
12. Gene expression analysis by Quantitative reverse transcriptase PCR assays.
13. Data analysis using SPSS and Prism GraphPad software.
14. *In vivo* work with albino rats and mice for studying colonisation and chronic pulmonary infection by Gram-positive and –negative bacteria.
15. Bioinformatics, Genomics, Proteomics, and Metabolomics.

D. Research and Publications:

1. Postgraduate research projects supervision (2020-2023):

❖ **PhD. Student supervisor:**

Characterization and Regulation of Pharmaceutically Important Compounds from Terrestrial Actinomycetes.

❖ **MSc. Student supervisor:**

Evaluation the Impact of Chlorination on Development of Chlorine and Antibiotic Resistant Bacterial Isolates in Swimming Pools of Sulaymaniyah City-Iraq

❖ **MSc. Student supervisor:**

A survey and Molecular detection of Honeybee Microbial Pathogens Among Different Races in Sulaymaniyah-Iraq.

2. Undergraduate research projects supervision (2019-2020):

- ❖ The Emergence of Antibiotic resistance Gram-negative Bacterial Strains from Poultry Production Farm. (2020).
- ❖ An Investigation on Correlation Between Chlorine and Antibiotic Resistance in Gram-negative Bacteria isolated from Water. (2020).
- ❖ Evaluation the Effects of Cigarette Smoke and Hookah on Oral Microbial Profile and population. (2020).
- ❖ Evaluation the Effects of Diabetes Miletus on Alteration of Oral Microbial Profile and Community. (2020).
- ❖ The Effect of Cancer Chemotherapy on Alteration of Oral Microbial Profile and Population. (2020). Analysis of Microbial Profiles and Their Resistance Pattern in Pleural Effusion. (2020).
- ❖ Microbiome and Antibigram Profile Associated with Ascites in Sulaimani Hospitals. (2020). Evaluation the Antibacterial Activity of Different Yogurts Whey proteins on Some Clinical Isolates. (2020).
- ❖ Bacteriological Assessment of Different water Resources in Sulaimani City-Iraq. (2019)
- ❖ Tolerance to Antibiotics Between Planktonic and Biofilm Former Cells of Some Pathogenic Gram-negative bacteria. (2019)
- ❖ The Use of Crude bacterial Culture Supernatant as Anti-biofilm Products Against Some Gram-negative Bacteria. (2019)
- ❖ Bacteriological Study on Catheter Associated Urinary tract infection in Hospitalized patients in Sulaimani City. (2019)
- ❖ A Study on Prevalence of Microbiological Infection in Women with Abnormal Vaginal Discharge. (2019).
- ❖ Prevalence and Associated Risk Factors on Human Brucellosis in Sulaimani City. (2019)

3. Undergraduate research projects supervision (2007-2010):

- ❖ Isolation of *Aeromonas* spp. From Different Water Resources in Sulaimani Governorate. (2010)
- ❖ Optimization of Some Physiological Factors for Protein Degradation by *Bacillus* spp. Isolated From Soil. (2010)
- ❖ Comparative Evaluation of Vinegars and Some Commonly Used Disinfectants on Nosocomial Isolated Bacteria. (2008).
- ❖ Effect of Some Locally Used Herbicides on Mineralization Process in Soil. (2008)

- ❖ Effect of Different Temperatures and Humidity on Decomposition of Plant Residue by Soil Microorganisms. (2008).
- ❖ Antibioqram Study of Gram-Negative Bacteria Isolated from Burnt Wound. (2007).

4. Publications: Excellent skills in writing scientific papers for publication in reputable journals, samples are listed below.

Complete list of publications, including titles, journal names, and publication years

1. Global age-sex-specific mortality, life expectancy, and population estimates in 204 countries and territories and 811 subnational locations, 1950–2021, and the impact of the COVID-19 pandemic: a comprehensive demographic analysis for the Global Burden of Disease Study 2021. 2014, *The Lancet*.
2. Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. 2024, *The Lancet Neurology*.
3. Global burden of 288 causes of death and life expectancy decomposition in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. 2024, *The Lancet*.
4. Global incidence, prevalence, years lived with disability (YLDs), disability-adjusted life-years (DALYs), and healthy life expectancy (HALE) for 371 diseases and injuries in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. 2024, *The Lancet*.
5. Global, regional, and national burden of diabetes from 1990 to 2021, with projections of prevalence to 2050: a systematic analysis for the Global Burden of Disease Study 2021. 2023, *The Lancet*.
6. The first report on the prevalence of *Nosema* spp. disease in Honeybee (*Apis mellifera* L.) from Sulaymaniyah, Kurdistan region -Iraq. 2023, *The Scientific Journal of Cihan University*. 7(2): 1-12.
7. Evaluating the Role of Capsular Polysaccharide K and Lipopolysaccharide O antigens in the pathogenesis of *Klebsiella pneumoniae* Using a Rat Model of Pneumonia. 2023, *Journal of Population Therapeutics and Clinical Pharmacology*. 30 (15): 506-515.
8. Evaluation the Impact of Chlorination on the Development of Chlorine and Antibiotic-Resistant Bacterial Isolates in Public Swimming Pools. 2023, *Passer Journal of Basic and Applied Sciences* 5 (1), 110-120. DOI: [10.24271/PSR.2023.379749.1218](https://doi.org/10.24271/PSR.2023.379749.1218)
9. Evaluating the Role of Capsular Polysaccharide K and Lipopolysaccharide O antigens in the pathogenesis of *Klebsiella pneumoniae* Using a Rat Model of Pneumonia. 2023, *Journal of Population Therapeutics and Clinical Pharmacology* 30(15) 506-515.
10. Physiological Regulation for Enhancing Biosynthesis of Biofilm-inhibiting Secondary Metabolites in *Streptomyces Cellulosae*. *Cell Mol Biol*. 2022. 68(5):33-46. <https://doi.org/10.14715/cmb/2022.68.5.5>
11. Human cytomegalovirus UL24 and UL43 products participate in SAMHD1 subcellular localization. 2022, *Virus Disease* 33 (4), 383-396.

12. Human Cytomegalovirus UL24 and UL43 Cooperate to Modulate the Expression of Immunoregulatory UL16 Binding Protein 1. 2022, *Viral Immunology* 35 (8), 529-544.
13. Cancer Incidence in the Kurdistan Region of Iraq: Results of a Seven-Year Cancer Registration in Erbil and Duhok Governorates. 2022, *Asian Pac J Cancer Prev: APJCP* 23 (2), 601-615
14. Host Stress Signals Stimulate Pneumococcal Transition from Colonization to Dissemination into the Lungs. *mBio*. 2021, 12 (6): <https://doi.org/10.1128/mBio.02569-21>.
15. Assessment of Chlorine Resistance Enterobacter cloacae Isolated from Water Storage Tanks in Sulaimaniyah City-Iraq. 2021, *Passer* 3 (2021) 87-94.
16. Cardiac, Hepatic and Renal Dysfunction and IL-18 Polymorphism in Breast, Colorectal, and Prostate Cancer Patients. 2021, *Asian Pac J Cancer Prev* 22 (1), 131-137
17. Functional assessment of microbial superoxide dismutase isozymes suggests a differential role for each isozyme. *Free Radical Biology and Medicine*. 2019, (134).
18. *Streptococcus pneumoniae* Cell Wall-Localized Trigger Factor Elicits a Protective Immune Response and Contributes to Bacterial Adhesion to the Host. *Scientific Reports*. 2019, 9:4295
19. Flavin Reductase Contributes to Pneumococcal Virulence by Protecting from Oxidative Stress and Mediating Adhesion and Elicits Protection Against Pneumococcal Challenge. *Scientific Reports*. 2018, 8(1): 314
20. Antibiotic susceptibility of vancomycin and nitrofurantoin in *Staphylococcus aureus* isolated from burnt patients in Sulaimaniyah, Iraqi Kurdistan. *New Microbiol*. 2012, 35(4):439-46.
21. Effects of Soil Organic Matter, Total Nitrogen and Texture on Nitrogen Mineralization Process. 2011, *Al-Nahrain University Journal for Science*. 4 (12)
22. Effects of Soil Texture on Chemical Compositions, Microbial Populations and Mineralization of Carbon in Soil. 2010, *Egypt. J. Exp. Biol. (Bot.)*. 6 (1): 59 – 64.
23. Antimicrobial Activity of Propolis Collected in Different Regions of Sulaimani Province-Kurdistan region/Iraq. 2009, *J. Duhok Univ*. 12 (1): 233-239.

IV. PROFESSIONAL SOCIETIES:

1. Member of Biology Syndicate of Kurdistan.
2. Member of Kurdistan Health Staff Syndicate.
3. Society of General Microbiology (SGM), 2014-2016
4. Society for Applied Microbiology (SfAM), 2014-2016
5. American Society of Microbiology (ASM), 2014-2016

V. Computer and Other Equipment Skills:

- Proficiency in MS-DOS & Windows (Microsoft Word, Excel, and PowerPoint).
- Experience with Prism and SPSS software for statistical analysis.

VI. Other Qualifications:

Detailed list of certificates, training courses, and workshops attended during Ph.D. study at the University of Leicester between 2013 and 2017.

1. Certificate of proficiency in computer by the university of Sulaimani /Iraq (2005).
2. Conversational English training course is given by Millennium Relief & Development Services (MRDS) at the University of Sulaimani (2009).
3. Training in Home Office license (Module 1-4) for animal experimentation, January 2013 to March 2016.
4. "Introduction to Flow Cytometry Course" at the University of Nottingham 3rd May 2016. Run by Dr. David Onion, University of Nottingham Flow Cytometry Facility.
5. Preparing to Teach in Higher Education, University of Leicester, January 2017.
6. **Exact Vocal Training Course:** 19th May 2017, Held in Curve theatre, Leicester: **Course:** Exact Vocal Training: enabled researchers to realize their authentic voice which can improve how to engage the audience in a range of situations including conferences, viva, presentations, and job interviews.
7. Participation in a training course (Using Packages in Statistical Analysis), Held at Cihan University-Sulaimaniya, 2020-2021.
8. Two-days National workshop on (Machine Learning for Biomedical Data Analysis). Held at Cihan University-Sulaimaniya, 20-21/05/2023.

VII. Workshops attendance during PhD study in Leicester University between 2013 and 2017:

1. Preparing a Poster – Deciding Content and Design
2. Publishing Your Research
3. Oral Presentation Skills
4. Academic writing skills and avoiding plagiarism
5. Copyright and your thesis
6. Organizing Academic Conferences
7. EndNote for scientists
8. Protein Expression and Purification
9. Preclinical Imaging
10. Who is Citing Who? Who is Citing You?
11. DNA Sequence Compilation and Analysis
12. Basic Stats: The Methodology of Hypothesis Testing
13. Academic English for Medicine, Biological Sciences and Psychology Postgraduate Research Students.
14. Academic English for Medicine, Biological Sciences and Psychology Postgraduate Research Students.
15. Writing Successful CVs, Cover Letters and Job Applications.
16. Fundamentals of an Effective Presentation.
17. Statistics.
18. Copyright and your thesis.
19. Leadership in Research and other Work Environments.

20. How to succeed in Employment Interviews.
21. Managing your Research Project.
22. Introduction to Prezi.
23. Interviewing skills for researchers.
24. Introduction to Microsoft Access 2013 for Researchers.

I hereby certify that all the information presented in this curriculum vitae is accurate, and I am prepared to provide supporting documentation for each item.

Hastyar H. Najmuldeen, 2024