

Full Name Prof Dr Essra Ghanim Hazim Alsammak

Phone no: +9647701635606
esrbio19@uomosul.edu.iq
essra_alsammak@yahoo.com

Ex: Lecturer in microbiology / bacterial taxonomy

University of Mosul, Nineveh Governorate, IRAQ

DATE / PLACE OF BIRTH

1974/01/28

IRAQ

Social Profiles

ResearchGate

<https://www.researchgate.net/profile/Essra-Alsammak/research>

ORCID

<https://orcid.org/0000-0003-0209-7945>

Rike gate

<https://rike.isnra.com/showProfile/738>



Languages

Arabic

English

Hobbies



Ex: reading ,traveling

Profile

More than 20 years as a knowledgeable and effective in bacterial taxonomy (numerical classification) and physiology working with individual, group, and facilities, with extensive experience in phenetic and genetic diagnosis of bacteria ,bioinformatics . Strong written and oral communication skills in English, supervisory and teaching experience .

Employment History

EX: Lecturer at University of Mosul, IRAQ
Dec 1999 – Present

EX: management of natural museum at University of Mosul, IRAQ
Jun 2020 – present

Education

EX: Doctor of Philosophy, at University of Mosul, IRAQ
Sep 2002 – Apr 2006

Taxonomic Study of Actinomycetes group

The study involved the isolation, identification and classification of several genera belonging to Actinomycetes. A total of (334) samples were collected from the humans, animals, plants, soil, air and water. Numerical taxonomy by cluster analysis was carried out and five methods of clustering compared in which the weighted average linkage method proved the most convenient

EX: Master of Science (M.Sc.) in bacterial taxonomy , University of Mosul, IRAQ
October 1996 – Nov 1998

Study of phenetic diversity of Bacillus species using numerical analysis

Isolation, identification & classification of all Bacillus spp. were carried out, including pathogenic species as B.anthraxis & opportunistic species as B.cereus, B.subtilis & B.macerans & other industrially & economically important alkaliphilic group, in addition to other species isolated from the environment were obtained from different sources (Human, animal, drugs, soil, air & hospital environment). Classification was based upon the morphological, biochemical, ecological, physiological & environmental characteristics using conventional numerical taxonomy, cluster analysis and Nearest Neighbor Single Linkage (NNSL) methods.

The similarity levels between species were determined and compared using (NNSL) & Unweighted Pair Group Method with Averages (UPGMA) and Simple matching coefficient (Ssm) & Jaccard's coefficient (SJ). The species were identified according to the distribution of control strains among clusters. The chosen species were differentiated into (25) sub. clusters and three main clusters A, B, C.

EX: Bachelor of Science (B.Sc.), University of Mosul, IRAQ
October 1991 – Jun 1995

Skills

numerical taxonomy of bacteria ,Isolation and diagnosis of pathogenic & non pathogenic bacteria , genetic diagnosis of bacteria ,PCR ,DNA sequence analysis , nanoparticles , study and diagnostic of Secondary metabolites of bacteria

References

Ex: Professor **basima ahmed abdulla** from University of Mosul
basimaaa138@yahoo.com

Conferences

Oral presentation in The eight Mosul Medical Conference, Medical College, 2000.

Participation in The first National Scientific Conference for Medical and Basic Medical Science of Babylon University- College of Medicine from 7-9 November, 2000.

Participation in The Fourth Scientific Conference, Al-Qadisiya University, 28-29 April 2001

Oral talk in Arab Congress of Plant Protection congress` palace, Damascus, Syria, 19-23 November, 2006.

6-1st International Conference for Biological and Environmental sciences, Hurghada, Egypt, March 13-16, 2008.

The First Scientific Conference, Karkuk University, 24-25 February 2009.

The First Scientific Conference, college of science\ Mosul University 22-23 /4/2009.

The 7th scientific conference proceeding/ college of Nursing\ university of Mosul 27-28\9\2010.

The first international Conference of Biological Sciences 27-29-Sep. 2010 Cairo – Egypt

The First Scientific Conference, Karkuk University, 20-21 April 2011.

The second Scientific Conference, college of science\ Mosul University .16-17/11/2011.

the extensive national conference of nanotechnology \ university of technology \ Baghdad\ 25-12-2012.

the 1st scientific conference for applied biotechnology from 30-31/10 / 2013 .alnahrain university / Baghdad – Iraq.

6th national conference on environmental & natural resources . from 29-31 /10/2013 . university of Basra – college of science department of ecology .

The first international scientific conference for the university college book in cooperation with the Swedish University of Lund, which was held in Baghdad 12-14 / 12/2017.

The Fourth International Scientific Conference of Cihan University / Erbil The 4th international scientific conference of Cihan university - Erbil. April 26-27 2017.

The first international conference, Koya University, for the period from 23-24 / 4/2018 .

The Third Scientific Conference, College of Science, Mosul University, for the period from 21-22 / 11/2018.

The Third International Scientific Conference \ College of Basic Education at the Universities of Mosul and Duhok for the period from 10-11 April 2019.

1st international conference for pathological analysis 25-26 October 2019 Basra – Iraq. University of Basra – college of science –department of pathological analysis .

1st scientific conference(e) in college of Nursing \ Maysan university \ 15-16 \04\2021.



Workshops

1. Forensic DNA course at the University of Mosul / College of Science for the period 16-20 / 5/2010.
2. Forensic DNA course at the University of Mosul / College of Science for the period from 9-13 / 1/2011.
3. The first training course in life informatics and its applications. For the period from 23-27 March 2014 / College of Science / Department of Life Physics / University of Mosul
4. A course in chromatographic techniques and its role in diagnosing active compounds in living organisms. For the period from May 13-15, 2014 / College of Science / Department of Life Sciences / University of Mosul.
5. The workshop on the demarcation borders between the study and theft on 3/28/2018. College of Basic Education \ Continuing Education Unit.
6. Arabic Language Safety Workshop for the period 6-10 / 5 / 2018. University of Mosul.
7. Holding a five-day training course on bioinformatics in molecular phylogenetic (level 1) for the period 4-8 / 11/2018. College of Science / University of Mosul.
8. Faculty of Dentistry course, basic dental sciences branch, entitled International Antibiotic Education Week, held on November 19, 2018.
9. Holding a 4-day training course for Gene sequence analysis and primer design: level 2 for the period from 25-28 / 3/2019. College of Science \ University of Mosul.
10. Electronic tools for academic and scientific researcher 14-15 October 2019 college of science – biology department –university of Mosul.
11. Classification and management of journals level -1 from 7-15 July 2020Jadara university , Swedish Iraqi studies net work.
12. Let's break the chain of COVID-19 infection, 10\4\2020 university of Mohamed Ben Rashid for medicine and health sciences .
13. Arid scientific platform and its importance for the Arabic researchers,11\4\2020 Baghdad university .
14. Crispr technology, 22 April 2020 , Theqar university.
15. Bioinformatics database, 4\may\2020,Mysan university .
16. Microbial gene databases ,13\ April \2020 university of Mosul.
17. Current trends in e-learning implementation ,1 \ April \ 2020 , ministerial team for e-learning in the university of Iraq\ Baghdad .



Resent Publications

- 1-Al-Sammak E. G. and Abdulla B. A. (2000). Phenetic Taxonomy of Bacillus Species Using Numerical Analysis, Rafidain Journal of Science, Vol(11), No.(1): 1-14.
- 2-Al-Sammak E. G. and Abdulla B. A. (2001). Phenetic Taxonomy of Alkaliphilic Bacillus Group, Rafidain Journal of Science, Vol(12), No(4):1-10.
- 3-Abdullah, B.A.,Al Deersi,N and Al-Sammak E.G.(2002).Prevalence of micro-organisms in Cervicitis and micro-organismsVaginitis of Females in Nineveh Governorate, Rafidain Journal of Science,13(1):37-48,Biology,Special Issue .
- 4- Alsammak ,E.G.(2003) The antibacterial activity of the honey and waxy material on some pathogenic bacteria of burns and wounds. Rafidain Journal of Science,14(1): 7-13.
- 5- Abdullah, B.A., Al-Daod A.Ch.and Al-Sammak E. G.(2005).Chemhical and Biological study on Mastic Resin Plant (*Pistatia lentiscus*) Growing in Iraq. Tikrit J. of Pure Science.13(1):46-51.
- 6- Alsammak,E.Gh.(2005).Inhibitory effect of alcohol extract of propolis from honey bees on some pathogenic bacteria.Tikrit journal of pure science.10(2) 72-74.
- 7- Abdullah, B.A., Abdul-Majeed N. F. and Al-Sammak E. Gh.(2006).Numerical Classification by Cluster Analysis of Gram Negative on-Fermentative Aerobic Bacilli from Clinical Specimens.Rafidain Journal of Science,17 (9):251-261. Biology, Special Issue .
- 8- Al-Sammak E. Gh.(2008)Numerical Classification by Cluster Analysis of *Thermoactinomyces* Species as Compared with Some Species of Two Genera *Bacillus* and *Paenibacillus*. Rafidain Journal of Science,19(3):57-69.
- 9-Al-Sammak E. Gh. and Abdulla B. A. (2008). Bioinsecticide activity of some strains of *Bacillus sphaericus* & *B.thuringiensis* species on *Culex pipiens* larvae .Tikrit journal of pure science.15(1).
- 10-Faisal, R.M.,Ahmed,K.D., Alsammak,E.Gh.(2009) Determining the location of some antibiotic- coding genes in *Streptomyces* spp. Rafidain Journal of Science,20 (1):11-22.
- 11-Al-Sammak E. Gh. and Abdulla B. A. (2009). Numerical classification by cluster analysis to species of genus *Streptomyces*. Rafidain Journal of Science, first scientific conference for biological sciences.
- 12- Al-Sammak E. Gh. and Abdulla B. A. (2009). The ability of some species of the genus *Streptomyces* and one isolate of the genus *Streptoverticillium* to produce antibiotic against some gram positive and gram negative bacteria and some fungus and yeast. Karkuk university journal.4:(3).
- 13- Al-Sammak E. Gh.and Al-Esayad R.S.(2010). Identification of some Actinomycetes species that my have a role in hypersensitivity pneumonitis in animal farms workers.The 7th scientific conference proceeding college of nursing\ university of mosul 27-28\9\2010.

14- Abdullah, B.A., Al-Sammak E.Gh. and Al-Taei,H.A (2010). Numerical classification of *Rhodococcus equi* strains. Tikrit journal of pure science.10(2),62-67.

15- Abdulla B. A. Al-Sammak E. Gh. Al-Tae A.A.(2010) Serological Detection of the *Thermoactinomyces vulagris* Antigen in Farmer's lung disease Patients using ELISA method. Egypt. Acad. J. biolog. Sci., 2(2): 1-6

16- Al-Sammak E. Gh. and Suliman,A.I (2010).The ability of some endospore forming actinomycetes and rod bacteria to produce antibiotic. Mesopotamia J.Agriculture.,38(4).

17 - Abdulla B. A. Al-Sammak E. Gh (2011).Separation of mycolic acid from some Numerically classified genera of actinomycetes.the kar university ,college of science first conference for chemistry 29-30/4/2010.spesial number volume .1

18- Al-Sammak E. Gh. and Al-tae K M.(2011). Isolation and identification of bacterial species from house fly *Musca domestica* wings. Rafidain Journal of Science,22(3).

19 - Al-Sammak E. Gh.and Al-Esayad R.S.(2011) Some actinomycetes species associated with sputum of hypersensitivity pneumonitis. Karkuk university journal. Special number First part .

20- Abdulla B. A. Al-Sammak E. Gh. Al-Tae A.A.(2011) Test The Inhibition Activity of Local *Streptomyces* spp. By used Sawdust as a Carbon Source . second scientific conference for biological sciences 16-17/11/2011.

21- Alhayaly Nadia Huseein., Al-Sammak E. Gh.(2012) Isolation and Identification of *Brevibacterium* Species from Dairy Product and some Clinical Specimens. Rafidain Journal of Science,23(3).

22- Al-Esayad R.S; Al-Sammak E. Gh.(2012) - Hypersensitivity pneumonitis caused by actinomycetes and its relation to level of IgE & IgG. Iraqi journal of veterinary sciences. Vol .26 supplement 4.,329-338.

23- Almosawy S.A., Al-Sammak E. Gh. (2013) Numerical taxonomy of Micrococcaceae. al- Rafidain Journal of Science., 24(4).11-34.

24- Al-Sammak E. Gh.(2013). Numerical classification of *Brevibacterium* and related genera using linocin M18 Bacteriocin . J. of life science, volume 7 (4).382-389.

25- Al-Sammak E. Gh.(2014). Phylogenetic analysis of heavy metal resistant *Streptomyces* spp. isolated from soil in Mosul / Iraq. International Journal of Advanced Research ., Volume 2, Issue 2, 168-177.

26- Alsafar, Suheer E., Al-Sammak E. Gh.(2014). Biochemical and genotyping comparative between native strains of *Pseudomonas aeruginosa* with identical standard strains. International Journal for Sciences and Technology (IJST) in Vol. (9) NO.(1) March (2014).

27-Al Sammak, Essra Ghanim. (2017). The phenotypic and genetic relationship of the species *Streptomyces* spp .. isolated from soil contaminated with hydrocarbons. Journal of Biotechnology .(Research Center / Al-Nahrain University. Volume 11 (2

28 - Byman Ali Kareem, Essra Ghanim Al-Sammak (2017). The effect of nanoparticles of a silver and zinc oxide silver on some strains of type *Staphylococcus aureus* that are resistant to antibiotics and observed by scanning electron microscopy. Tikrit Journal of Pure Sciences, 22 (4).

29 -Mohsen A. A. Al Bayatee and Essra Gh. Alsammak. (2018) Phenetic and Phylogenetic Analysis of *Kocuria palustris* and *Kocuria rhizophila* Strains isolated from Healthy and Thalassemia Persons. SCIENTIFIC JOURNAL OF MEDICAL RESEARCH. Vol. 2, Issue 7, pp 135-146.

30 -Phenetic and Molecular Identification of *Micrococcus yunnanensis* Isolates Mohsen Ali Ahmed and Essra Ghanim Al-Sammak from Skin of Thalassemia and Burned Patients and the Air. Journal: ARID International Journal for Science and Technology Researches (AIJSR) Issue 2 Volume 1 2018.

31 - Al-Hayali, Nadia Hussein, Al-Sammak Essra Ghanim (2019) Molecular Diagnosis of *Streptomyces rochei* Isolates and a Study of their ability to produce antibiotics against the isolates of *Staphylococcus aureus* and *Pseudomonas aeruginosa* antibiotic-resistant. College of Basic Education Research Journal, Volume 15, No. (4).

32- Reyam Th. Ghazi Essra Gh. Alsammak (2021) . Synergistic Effect of Zinc Oxide Nanoparticles and Erythromycin on Methicillin Resistant *Staphylococcus aureus* Isolated from Different Infections. Rafidain Journal of Science Vol. 30, No. 1, pp.54-67. <http://dx.doi.org/10.33899/rjs.2021.167686>.

33-Al-Hayali, Nadia Hussein, Al-Sammak Essra Ghanim (2021). GC- mass technique for diagnosis of biosurfactant producing from *Streptomyces misionensis* 30 strain. Alutroha journal.1.77

Scientific research published in Arabic and international journals:

1. Abdullah, Basima Ahmed; Al-Sammak, Essra Ghanim; Al-Taei, Anmar Ahmed (2010) serologically investigating *Thermoactinomyces vulgaris* antigen in pneumoniae allergy in Mosul. The Egyptian Academy of Biological Sciences within the First International Conference on Biological Sciences. 2 (2): 1-6.
2. Al-Sammak, Essra Ghanim (2013). The numerical classification of the genus *Brevibacterium* and similar species by investigating the gene that produces bacteriosin. Linocin M18. American Journal of Life Science. United States of America . Vol 7 (4) .382-389.
3. Al-Sammak, Essra Ghanim (2014). The evolutionary relationship of the species *Streptomyces* spp. Resistance to heavy metals insulated from the soil of Mosul / Iraq. International Journal of Advanced Research. India. Volume 2 (2), 168-77.
4. Al-Saffar, Suhair Imad, Al-Sammak, Essra Ghanim. (2014). Biochemical and genetic comparison of local strains of the species *Pseudomonas aeruginosa* with their standard analogues. International Journal of Science and Technology. Jordan., IJST, Volume 9 (1).
5. Toshi, Saad Sami Saeed., Al-Sammak, Essra Ghanim (2015) The physiological properties of saline-loving nematode bacteria. International Journal of Science and Technology. journal for sciences and technology. Jordan, IJST, Volume 10 (3), 102-114.

6. Kareem .P.A ., Al-Sammak E. G. The Effect of Silver and zinc oxide nanoparticles on Escherichia coli isolates multi resistant to Antibiotics. International Journal for Sciences and Technology (IJST). Jordan. Volume 9 (4).2014.
7. Kareem, payman, A., Al sammak, Essra, Gh. (2014). The effect of silver and 7- zinc oxide nanoparticles on multi drug resistance Staphylococcus aureus international journal of advanced research. 2 (12), 405- 417.
8. Kareem, payman, A., Al sammak, Essra, Gh. Younus J. Abdullah , Qasim M. Bdaiwi (2019) Estimation of antibacterial activity of zinc oxide, titanium dioxide, and silver nanoparticles against multidrug-resistant bacteria isolated from clinical cases in Amara City, Iraq. Drug Invention Today | Vol 11 • Issue 11 .
9. Reyam Thamer & Essra Gh Alsammak .(2021) Synergistic Effect of Zinc Oxide Nanoparticles and Vancomycin on Methicillin resistant Staphylococcus aureus . JOURNAL OF LIFE AND BIO-SCIENCES RESEARCH. Vol. 01, No. 03, pp. 93 – 98 .
10. Reyam Th. Ghazi Essra Gh. Alsammak (2021) . Synergistic Effect of Zinc Oxide Nanoparticles and Erythromycin on Methicillin Resistant Staphylococcus aureus Isolated from Different Infections. Rafidain Journal of Science Vol. 30, No. 1, pp.54-67.
<http://dx.doi.org/10.33899/rjs.2021.167686> ;
- 11.