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EDUCATION

Doctorate of Philosophy in Regulatory Biology with Major in Microbiology, Cleveland State University, Cleveland, Ohio. U.S. 2006

B.S. in Science with Botany and Microbiology
King Saud University, Saudi Arabia, Riyadh. 1998

ACADEMIC POSITION

2017 Professor, Department of Botany & Microbiology, King Saud University
2012 Associate Professor, Department of Botany & Microbiology, King Saud University
2007 Assistant Professor, Department of Botany & Microbiology, King Saud University

PROFESSIONAL ACADEMIC MEMBERSHIP

2022 member of High School Talent Program/ Education and Training Evaluation Authority/ Riyadh, Saudi Arabia
2021 - (until now) member of International Cooperation Unit/ College of Science/ King Saud University
2020 - (until now) member of Executive Master's Program in Pure Criminal Sciences/ College of Science/ King Saud University

2018 member of Graduate program Committee, Department of Botany & and Microbiology/King Saud University
2017- (until now) member of Study Plans Committee, Department of Botany & and Microbiology/King Saud University
2016 - (until now) member of the Promotions Committee Department of Botany & Microbiology/King Saud University
2015-2016 Member of the Coordinating Council Committee Center for University Studies/Alisha King Saud University
2014-2016 Member of the ISO Committee for College of Applied Studies and Community Services /King Saud University
2013-2016 Member of the Advisory Council Committee for College of Applied Studies and Community Services /King Saud University
2012-2016 Vice Dean of College of Applied Studies and Community Services
2012-2016 Member of the higher Supervisory Committee Faculty of Applied Studies and community service, King Saud University
2012-2015 Member of the Graduate Studies Committee, Department of Botany & Microbiology/College of Science, King Saud University
2010 Head of talent program for students/King Saud University
2009 Member of the team of His Excellency the Minister of Education to visit International Universities
2008-2010 Vice Dean of College of Applied Studies and Community Services
2008 Member of the job interview committee for faculty /King Saud University
2008 Member of American Society of Microbiology/U.S. A
2008 Member of the Community College team for twinning with the University of Texas, U.S.A
2007 Member of the Study Plans Committee department of Plant and Microbiology/King Saud University

Professional activities and workshops

2022 Workshop of mechanical reasoning scientific
2016 Academic leadership and challenges course/King Saud University
2009 Meeting management Skills Course/King Saud University
2009 Project Workshop of the Strategic Plan for scientific research/King Saud University
2008 Academic leadership and quality course for the 12th century/Bradford/London

2008 The first workshop of the Centre of Excellence for Biodiversity Research/King Saud University
2008 Science and Mathematics Education Development Workshop: Vision and Global and ongoing partnership from King Saud University
2008 King Saud University's strategic plans workshop
2008 Planning workshop in building quality system in higher education, King Saud University
2007 Workshop on evaluation and quality assurance/King Saud University
2007 Foundation course for new faculty members/King Saud University
2007 Workshop on Strategies and methods of Learning/King Saud University

PRESENTATION AND CONFERENCES

2022 AlgaEurope Conference, Rome, Italy
2017 World Congress: Scout and Environmental Protection, Riyadh, Saudi Arabia
2015 Integration Metabolism and Tumor Biological Conference, Vancouver, Canada
2015 Lack of DNA and Genomic Instability, British Colombia, Canada
2015 Immunity and Microbial determinants World Conference, California, U.S.
2015 Twentieth Annual Meeting of the Society Ribosome, Wisconsin, U.S
2014 The International Federation of Microbiological, Montréal, Canada
2014 The First Conference in Microbial Evolution Lab, Washington, U.S.
2014 World Congress of Multiple Disciplines in Science, Las Vegas, U.S.
2014 One-Hundred Twenty-Four Annual Meeting of American Society of Microbiology, Boston, U.S.
2013 Sixty-Third Annual Conference of the Canadian Association of Microbiology. Ottawa, Canada
2012 Fourth Meeting of the American Society for accurate Intimation about the Cellular and Developmental Studies of Objects Structural Nucleus, Montreal, Canada.
2012 International Conference of Coastal Areas, Canada.
2012 Annual Meeting of the Society of Biology Industrial Minute and Biotechnology, Washington, U.S.
2009 The Annual Scientific Conference, Honolulu, U.S.

PRIZES AND RESEARCH FUNDINGS

2019- (Until now) Visiting Professor Research Program fund/ King Saud University
2015 Research support worth (150000) SR Scholarship deanship of scientific research/King Saud University
2012 Excellence Research Award for botany & and Microbiology department/King Saud University
2012 Research support Worth (150000) SR Scholarship deanship of scientific research/King Saud University
2011 Research support Worth (200,000) SR Scholarship deanship of scientific research/King Saud University
2009 Research support Worth (40000) SR Research Center Scholarship/King Saud University

GRADUATE SUPERVISIONS

2016 Ph.D. student: Sabiha Alansari Dissertation Tile: Green synthesis of nanoparticles by marine macro-algae with assessment of their anticancer and antimicrobial potential
2013 M.S. Student: Sarah Alhaqbani Thesis Title: In vitro Efficacy of Bioactive Plant Extracts against Multi-Drug Resistant (MDR) Clinical Isolates of Human Pathogenic Bacteria
2013 M.S. Student: Taghreed Aldayl Thesis Title: The Challenges of Overcoming Antibiotic Resistance and Antimicrobial Activity of Five Herb Extracts against Human Pathogenic bacteria
2013 M.S. Student: Khawlah Alhrbey Thesis Title: Antimicrobial Screening of Selected Saudi Medicinal Plants against Some Pathogenic Bacteria
2009 M.S. Student: Abeer Alshamery Thesis Title: Molecular characterization of hospitals acquired methicillin *S.aureus* (MRSA) recovered from hospitals in KSA

PUBLICATIONS

BOOKS AND MONOGRAPHS:

2013 BOOKS AND MONOGRAPHS 2013 Christopher Rensing, H. A. Alwathnani, and Sylvia F.McDevitt, (2016) the copper metallome in prokaryotic cells, JohnWiley & Sons, Inc, JWST686-c02-12

PUBLICATIONS:

1. Yanshuang Yu , Zhenchen Xie, Jigang Yang , Ruixiang Yang , Yuanping Li, Yongguan Zhu, Yanlin Zhao, Qiue Yang , Jichen Chen, Hend A. Alwathnani , Renwei Feng, Christopher Rensing, Martin Herzberg, *Citrobacter portucalensis* Sb-2 contains a metalloid resistance determinant transmitted by Citrobacter phage Chris1, Journal of Hazardous Materials 443 (2023) 130184
2. Xiaojun Yang , Yuanping Li , Renwei Feng , Jian Chen , Hend A. Alwathnani , Weifeng Xu and Christopher Rensing, Characterization of Two Highly Arsenic-Resistant Caulobacteraceae Strains of *Brevundimonas nasdae*: Discovery of a New Arsenic Resistance Determinant, *Int. J. Mol. Sci.* 2022, *23*(10), 5619; 10.3390/ijms23105619
3. Ping Li , Martin Herzberg , Jin Lin Zhang , Hend Alwathnani , Cheng-Kang Zhang , RenWei Feng , Hong Liu , Christoper Rensing, Potential of cadmium resistant *Burkholderia* contaminans strain ZCC in promoting growth of soy beans in the presence of cadmium, Ecotoxicology and Environmental Safety 211 (2021) 111914
4. Quaiser Saquib, Maqsood A. Siddiqui, Sabiha M. Ansari, Hend A. Alwathnani, Abdulaziz A. Al-Khedhairy, Carbofuran cytotoxicity, DNA damage, oxidative stress, and cell death in human umbilical vein endothelial cells: Evidence of vascular toxicity, J Appl Toxicol. 2021;1–14.
5. Yanshuang Yu, Jichen Chen, b Yuanping Li, Jinxuan Liang, Zhenchen Xie, Renwei Feng,Hend A. Alwathnani,Barry P. Rosen, Anne Grove, Jian Chen, Christopher Rensinga, Identification of MarR Subfamily That Regulates Arsenic Resistance Genes, Applied and Environmental Microbiology, December 2021 Volume 87 Issue 24 e01588-21

6. Yuan Ping Li, Nicolas Carraro , Nan Yang, Bixiu Liu, Xian Xia, Renwei Feng,Quaiser Saquib, Hend A Al-Wathnani, Jan Roelof van derMeer and Christopher Rensing, Genomic Islands Confer Heavy
7. Metal Resistance in *Mucilaginibacter kameinonensis* and *Mucilaginibacter rubeus* Isolated from a Gold/Copper Mine. (2018). Genes 2018, 9, 573; doi:10.3390/genes9120573 2.
8. Xiuli Hao . Xuanji Li . Chandan Pal . Jon Hobman . D. G. Joakim Larsson . Quaiser Saquib . Hend A. Alwathnani . Barry P. Rosen . Yong-Guan Zhu . Christopher Rensing. (2017). Bacterial resistance to arsenic protects against protist killing. Biometals (2017) 30:307–311 DOI 10.1007/s10534-017-0003-4 3.
9. Sabiha M. Ansari, Quaiser Saquib, Sabry M. Attia, Eslam M. Abdel-Salam, Hend A. Alwathnani, Mohammad Faisal, Abdulrahman A. Alatar, Abdulaziz A. Al-Khedhairy, Javed Musarrat Pendimethalin induces oxidative stress, DNA damage, and mitochondrial dysfunction to trigger apoptosis in human lymphocytes and rat bone-marrow cells: (2017). Histochemistry and Cell Biology. https://doi.org/10.1007/s00418-017-1622-0 4.
10. Regin Rønn1, Xiuli Hao, Freja Lüthje1, Nadezhda A. German, Xuanji Li, Fuyi Huang, Javan Kisaka, David Huffman, Hend A. Alwathnani, Yong-Guan Zhu and Christopher Rensing(2017). Bacterial Survival in Dictyostelium Vol 7, Iss 13, Jul 05, 2017. DOI:10.21769/BioProtoc.2376 5.
11. Xiuli Hao, Freja L€uthje,2Regin Rønn, Nadezhda A. German, Xuanji Li, Fuyi Huang,Javan Kisaka, David Huffman,4 Hend A. Alwathnani, Yong-Guan Zhu and Christopher Rensing (2016). A role for copper in protozoan grazing – two billion years selecting for bacterial copper resistance. Molecular Microbiology 102(4), 628–641 6.
12. Quaiser Saquiba,b , Maqsood A. Siddiquia, Javed Ahmeda,, Abdullah Al-Salima,,Sabiha M. Ansaric, Mohammad Faisalc, Abdulaziz A. Al-Khedhairya, Javed Musarratd,, H. A. AlWathnani, Abdulrahman A. Alatarc, Saud A. Al-Arifia , (2016) Hazards of low dose flame-retardants (BDE-47 and BDE-32): Influenceon transcriptome regulation and cell death in human liver cells , Journal of Hazardous Materials 308 (2016) 37–49
13. Mohammad Faisal , Quaiser Saquib, Abdulrahman A. Alatar, Abdulaziz A. Al-Khedhairy, Mukhtar Ahmed3, Sabiha M. Ansari, Hend A. Alwathnani1, Sourabh Dwivedi, Javed Musarrat, and Shelly Praveen. (2016). Cobalt oxide nanoparticles aggravate DNA damage and cell death in eggplant via mitochondrial swelling and NO signaling pathway. Biol Res (2016) 49:20 8.

14. Rensing, C., Alwathnani, H. and Sylvia F.McDevitt, (2016). The copper metallome in prokaryotic cells, JohnWiley & Sons, Inc, JWST686-c02-12. 9.
15. Abd_allah e.f., Hashem Abeer, Alqarawi a.a, and Alwathnani H. (2015), alleviation of adverse impact of cadmium stress in sun flower
16. (hilianthus annuus l.) by arbuscular mycorrhizal fungi, pak. j. Bot., 47(2): 785-795, 2015. 10.
17. Freja L. Lüthje,a Henrik Hasman,b Frank M. Aarestrup,b Hend A. Alwathnani,c Christopher Rensinga,d,(2014), Genome Sequences of Two Copper-Resistant Escherichia coli Strains Isolated from Copper-Fed Pigs, Volume 2 Issue 6 e01341-14. 11.
18. Hao X, Taghavi S, Xie P, Orbach MJ, H.A. Alwathnani , Rensing C, Wei G. (2014), Phytoremediation of heavy and transition metals aided by legume-rhizobia symbiosis, International Journal of Phytoremediation, vol 16 (2). pp: 179-202. 12.
19. Yanan Qin,a Henrik Hasman,b Frank M. Aarestrup,b Hend A. Alwathnani,c Christopher Rensinga,d,(2013), Genome Sequences of Three Highly Copper-Resistant Salmonellaenterica subsp. I Serovar Typhimurium Strains Isolated from Pigs in Denmark, Volume 2 Issue 6 e01334- 14 13.
20. Sulaiman Ali Alharbi, Arunachalam Chinnathambi1, K. Saritha, H.A. Alwathnani, A.M. Murugan1 and Milton Wainwright. (2013) Optimization of Conditions for the Production Antibiotics by a UV Mutant Strain of Streptomyces griseus. Journal of Pure and Applied Microbiology, Vol. 7(1):235-240. 14.
21. Kahkashan Perveen, H. A. Alwathnani (2013) Antifungal activity of methanol, acetone and diethyl ether extracts of cyanobacteria against plant pathogenic fungi. Asian J. Chem., Vol. 25, No. 13, pp. 7531-7534. 15.
22. H. A. Alwathnani, and Kahkashan Perveen (2013). Evaluation of antifungal potential of *Dunaliella* salina and *Phormidium autumnale* against plant pathogenic fungi. J Pure Appl Microbio. Vol. 7, No. 2, pp. 1071-1077. 16.
23. Kahkashan Perveen, H. A. Alwathnani (2013). Bioactivity of Nostoc linckia isolated from the desert of Saudi Arabia against fungi responsible for the post-harvest diseases. J Pure Appl Microbio. Vol. 7(3), p. 2161-2166
24. A. K. Hegazyab, S. Y. Afific, A. A. Alatara, H. A. Alwathnania & M. H. Emamb (2013). Soil characteristics influence th eradionuclide uptake of different plant species, Chemistry and Ecology, Volume 29, (3), pp: 255-269. 18.

25. H.A. Alwathnani1 and Ashgan M Hessain2 (2013). Molecular Detection and Characterization of *Escherichia coli* O157:H7 and O111 Associated with Milk samples by Multiplex PCR, Journal of Pure and Applied Microbiology, Vol. 7 No. Special Edition Nov. 2013. 19.
26. Ismet Ara, H. A. Wathnani and T. Kudo (2013), Population, morphological and *Chemotaxonomica*l characterization of diverse rare actinomycetes in the mangrove and medicinal plant rhizosphere, Vol. 7(16), pp. 1480-1488 20.
27. Abdularhaman Abdullah Alatar , Mohammad Faisal, Ahmad k. Hegazy, H.A. Alwathnani , (2012), High frequency shoot regeneration and plant establishment of Rauvolfia serpentina-an endangered medicinal plant, Journal of medicinal plant research, vol. 6 (17), pp :3324-3329. 21.
28. Hend Alwathnani and Kahkshan Perveen. 2012. Biological control of fusarium wilt of tomato by antagonist fungi and cyanobacteria. African Journal of Biotechnology. vol 11 (5), pp1100:1105 22.
29. A.K. Hegazy, S.Y. Afifi, A.A. Alatar, H.A. Alwathnani, M.H. Emam. 2012. Radionuclides uptake by cultivated crop plants in the Mediterranean coastal black sand and its relationship to soil geochemical characteristics. Journal of Medicinal Plants Research JMPR. Volume 4 (3), pp1-10. 23.
30. A. Alatar A. Shahzad, M. Faisal, N. Ahmad, M. Anis and H.A. Alwathnani. 2012. An efficient system for in vitro multiplication of Ocimum basilicum through node culture. African Journal of Biotechnology. Vol. 11 (22), pp. 6055-6059. 24.
31. Yanbing Lin1, Haoxin Fan, Xiuli Ha, Laurel Johnstone, Yao Hu, Gehong Wei, Hend A. Alwathnani, Gejiao Wang and Christopher Rensing. 2012. Genome Sequence of Halomonas sp. HAL1, A moderately Aalophilic arsenite2 Oxidizing Bacterium Isolated from A gold Mine Soil. Journal of Bacteriology. 194 (1): 199-200 25.
32. H. A. Wathnani, Ismet Ara, R. R. Tahmaz, T. H. Al-Dayel and M. A. Bakir (2012) Bioactivity of natural compounds isolated from cyanobacteria and green algae against human pathogenic bacteria and yeast, Vol. 6 (18), pp. 3425-3433 26.
33. Hend A. Alwathnani, Kahkashan Perveen, Rania Tahmaz and Sarah Alhaqbani,(2012), Evaluation of biological control potential of locally isolated antagonist fungi against Fusarium oxysporum under in vitro and pot conditions, Vol. 6 (2), pp. 312-319
34. Jutta Elguindi, Hend A. Alwathnani, Christopher Rensing. 2011. Rapid inactivation and killing of Cronobacter sakazakii on copper alloys following periods of desiccation stress. World Journal of Microbiology and Biotechnology. Vol. 28 Issue (4), p1837-1841 28.

35. Elguindi, J., X. Hao, Y. Lin, H. A. Alwathnani, G.H. Wei, and C. Rensing. 2011. Advantages and challenges of increased antimicrobial copper use and copper mining. Appl. Microbiol. Biotech. Volume 91 (2), 237-249. 29.
36. Hend Alwathnani and Jeffrey R. Johansen. 2011. Cyanobacteria in Soils from A mojave Desert Ecosystem. Monographs of the Western North American Naturalist 5 (1):71-89. 2011 30.
37. Alwathnani. H.A, Ashgan M. H, Mahmoud M.H and Ihab. M. Moussa. 2011. Nested Polymerase Chain Reaction for Detection of Mycobacterium bovis in Milk Samples. African Journal of Microbiology Research. Vol. 6 (6), pp. 1338-1344. 31.
38. Alwathnani. H.A. 2011. Preliminary Study of Soil Algae of Protected Saja Mother Elegans, Saudi Arabia. Biosciences Biotechnology Research Asia 8 (2):393-398 32.
39. Alwathnani. H.A, Ismet Ara, R. R. Tahmaz, T. H. Al-Dayel and M. A. Bakir. 2011. Bioactive natural compounds of cyanobacteria and green algae and evaluation of their activity against human pathogenic bacteria and yeast. JMPR. Vol. 6 (18), pp. 3425-3433. 33.
40. Hend. A. Alwathnani, Ismet Ara, Rania. R. Tahmaz, M A Bakir. 2011. Antibacterial activities of the extracts of cyanobacteria and green algae isolated from desert soil in Riyadh, Kingdom of Saudi Arabia. African Journal of Biotechnology. Vol.11 (38), pp. 9223-9229, May 2012. 34.
41. Moussa, I. M; Ashgan, M. H., Alwathnani, H. A, Mohamed, KH.F and Al-Doss, A. A. 2010. Polymerase Chain Reaction for Detection and Characterization of Shiga Toxigenic Escherichia coli (stec). African Journal of Biotechnology 9 (28): 4356-4363. 35.
42. Kamelia M. Osman, Ihab M. I. Moussa*, Ashgan M.M. Yousef, Mona M. Aly, Moustafa I. Radwan H. A. Alwathnaniand .2010. Pathogenic Avian of some Salmonella serovars in Two Different Animal Modes: SPF Chickens and BALB/c Mic. Environ. We Int. J. Sci. Tech. 5: 65-78