CURRICULUM VITAE

Name: Mohammed Ahmed Taha Abd El-Reheem
Current Affiliation: Associate professor of plant Biochemistry.
Co-editor of Journal of Biological Chemistry and Environmental Sciences.
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Gender: Male.
Date of Birth: March 23, 1964.
Martial Status: Married.

EDUCATION:

- **Ph.D.** Plant Biochemistry, Physiology, and Molecular Biology, University of Kentucky USA, December of 2002.
- **M.S.** Plant Biochemistry, Ain Shams University, December 1993.
- **B.S.** Plant Biochemistry, Ain Shams University, May 1987.

Short training courses:

- **Faculty and Leadership Development Course** "preparing and writing researches for international publishing" Egypt, September 2006.
- **Faculty and Leadership Development Course** "economy of marketing and financing of scientific researches**"** Egypt, September 2006.
- **Faculty and Leadership Development Course** "Scientific researches management" Egypt, July 2006.
- **Detergents & Cosmetics,** Egypt, March 2005.
- **Basic radiation Safety course**, University of Kentucky USA, September 1998.
- **English Course,** ESL institute**,** University of Kentucky USA, September 1998.
- **English Course,** American University in Cairo, May 1995.
- **Training of Faculty Members**, Ain Shams University, July 1993.

AWARDS AND HONORS

Sept. 2008-present	Position at the Plant Biochemistry department as associate professor, Ain Shams University, Cairo, Egypt.
2003- Aug. 2008	Position at the Plant Biochemistry department as assistant professor, Ain Shams University, Cairo, Egypt.
2002	Second place award, Biotechnology Division Student Paper Competition from the American Oil Chemists' Society AOCS.
2002	Japanese Scholarship to attend The 15th International Symposium of Plant Lipid in Okazaki Japan.

2002	Departmental Scholarship from the University of Kentucky.
1999	Recognition of high scholarship, outstanding achievement from The Honor Society of Agriculture.
1997- 2002	Fellowship from the Egyptian Government to complete my Ph.D. degree in the United States of America.
1993	First place micro teaching award, Training of Faculty Members, Ain Shams University.
1987- 1997	Position at the Biochemistry department as assistant lecturer, Ain Shams University, Cairo, Egypt.

SCIENTIFIC HISTORY:

September 2008 – Present	Working as associate professor in the Biochemistry Dept. Faculty of Agric. Ain Shams University in Cairo Egypt.
March 2007- Present	Working as PI member in the central research laboratory of Faculty of Agric.
January 2006- Present	Working as Co-editor of Journal of Biological Chemistry and Environmental Sciences.
January 2003- 2008	Working as assistant professor in the Biochemistry Dept. Faculty of Agric. Ain Shams University in Cairo Egypt.
January 2002- May 2002	Involved with my Ph.D. supervisor in the preparation of 609 Plant Biochemistry course posted on the University of Kentucky web site: **http://www.uky.edu/~dhild/biochem/**
August 1998- September 1998	Completed the Basic radiation Safety course, University of Kentucky, USA.
September 1997- December 2002	Ph.D. study in the Plant Physiology, Biochemistry, and Molecular Biology program, at the University of Kentucky, USA.
June 1997- September 1997	English levels at ESL institute, English Department, University of Kentucky, USA.
January 1996- May 1997	Attended English classes at the American University in Cairo to meet with the Egyptian Government Scholarship requirement.
February 1993- December 1995	Went on to study for Ph.D. at Ain Shams University when Awarded a full Ph.D. Scholarship provided by the Egyptian Government to come to the United States.

October 1988- December 1993	Master's degree study majoring in Plant Biochemistry at Ain Shams University in Cairo Egypt.
May 1987- June 1997	Position at the Plant Biochemistry department as lecturer
September 1983- February 1987	Bachelor of Science degree in Plant Biochemistry, Biochemistry Dept. Faculty of Agric. Ain Shams University in Cairo Egypt.
October 1980- June 1983	Nasser High School, Cairo Egypt.

EXPERIENCES:

Research experience:

(March 2007- Present) Member of the Central Research Laboratory team work in Ain Shams University working in biochemical analysis for different animal and plant samples in order to separate and measure the amino acids, sugars, organic acids, fatty acids, and the protein contents. These include the using of many analytical instruments such as GC, HPLC, FPLC, IR, UV spectrophotometers, electrophoresis, and atomic absorption, in addition to the other bio-analytical routine research.

(March 2003- Present) Now I am involving in a project funded by the Egyptian Scientific Research Academy aimed to genetically engineer the Baculovirus with bacterial chitin hydrolysis-encoding genes (ChiA, ChiB, &ChiC) as chitinolytic machinery to use it as a biological control for some crop insects, also this including the addition of the secretion signaling peptides to the constructs to manipulate the localization of the chitinases expression.

(1998- December 2002) Since I attended the University of Kentucky in USA, I helped and Involved in many projects in addition to my Ph.D. project, in the Plant Biochemical Genetics and Lipid Metabolism Lab: http://www.uky.edu/Agriculture/Agronomy/PLBC/
In this lab I received and gained huge experiences during my Ph.D. studies on the: analysis of fatty acid distributions in TAG & PC from different oils, Northern analysis, Pulse-Chase radiolabeling studies for PC, TG, DG, MG, FFA (lipid classes), Cloning seed specific ω-3 desaturase from 18:3 high and normal accumulator plants, Rt-PCR for ω-3 desaturase and cloning into yeast plasmid (pYeDP60), Sequencing of Rt-PCR product, Transform yeast with selected ω-3 desaturases. The expression experiments: Included *E.Coli* expression to amplify the clones flowed with preps preparations, yields quality checking, restriction analysis for each clone individually. Also included yeast transformation, flowed by feeding with linoleic acid for kinetic study. In

addition I did southern and western bolting as well as cDNA library screening during the recombinant DNA biotechnology course.

(1987- June 1997) Since I got the position at the Plant Biochemistry department in Egypt**,** I joined the Central Research Laboratory team work in Ain Shams University and I gained huge experiences in biochemical analysis for different animal and plant samples in order to separate and measure the amino acids, sugars, organic acids, fatty acids, and the protein contents. These included the using of many analytical instruments such as GC, HPLC, FPLC, IR, UV spectrophotometers, electrophoresis, atomic absorption, and the other bio-analytical routine research instruments (e.g. centrifuges, balances, incubators, colorimeters, and PH meters etc.). Also I exposed to NMR, scanning and transmission electron microscopy.

Teaching experience:

(January 2003- Present) I am lecturing inorganic chemistry, analytical chemistry and advanced biochemistry& metabolism for the undergraduate student, advanced biochemistry, proteins, and metabolism for the graduate students using my laptop and multimedia projector. In addition, I am lecturing both biochemistry and advanced biochemistry practical classes to the undergraduates.

(1998- December 2002) I involved in the preparation of 609 Plant Biochemistry class in university of Kentucky USA during my Ph.D. study.

(1987- June 1997) I received a training course for the preparation of the university professor provided by Ain Shams University in Cairo and I awarded the first place in the microteaching. I taught biochemical practical courses including: carbohydrates, terpenoids, proteins, essential biochemistry, advanced biochemistry, enzymes, inorganic, and organic chemistry.

COMPUTER SKILLS:

I have a good experience with the following software:

- Windows 7/ 8
- Office 2013
- End Notes
- CS Chem Office
- Adobe Photoshop
- Seqanal
- Microsoft expression
- Acrobat distiller
- HP Photo Smart
- Quattro Pro
- WordPerfect
- Quicken 2013
- Swiss-spdb viewer
- Rasmol
- Second Nature

In addition to web browsers and WebSPIRS Database Selection and most of bioinformatics sites such as ExPASy Molecular Biology Server and NCBI.

PUBLICATIONS:

- Mohammed A.T. Abdel-Reheem, Mona M. Oraby, and Salem K. Alanazi (2014). *Nigella sativa* Essential Oil Constituents and its Antimicrobial, Cytotoxic and Necrotic Replies. J of Pure and Applied Microbiology, Vol. 8 Nov. (Spl. Edn. 2), p. 389-398.

- Muhammad Tariq Jani, Shaukat Ali, Shabir Ahmad, Mohammed A.T. Abdel-Reheem, Iqbal Hussain, and Riaz Ullah (2014). Hydroformylation of Styrene, Vinyl Acetate and Allyl Cyanide with Air-Stable Rhodium Catalysts Ligated by C2-Symmetric bis-N-Heterocyclic Carbenes. Asian Journal of Chemistry; Vol. 26 (20): 6911-6914.

- Jamshid Khan, Habibnasir, Sumera Mahboob, Mohammed A.T. Abdel-Reheem,Sharif Ullah, Riaz Ullah, Iqbal Hussain, and Sajjad Haider (2014). Synthesis and Characterization of Zinc Oxide Nanoparticles by Modified Sol-Gel Method. Asian Journal of Chemistry; Vol. 26 (20): 7069-7070.

- Mohammed A.T. Abdel-Reheem, Manawwer Alam, Emad M. El-Kholie (2014). Chemical Constituents of *Pinus densiflora* Oil and its Antimicrobial and Cytotoxic and Necrotic Responses. J of Pure and Applied Microbiology, Vol 8 (1): 547-554.

- Mohammed A.T. Abdel-Reheem (2014). ω-3 Fatty Acids, the Importance and Yeast Expression. J of Pure and Applied Microbiology, Vol 8 (1): 447-452.

- Mohammed A.T. Abdel-Reheem (2014). Fatty Acids and Lipids Biosynthesis in Yeast and Plants. J of Pure and Applied Microbiology, Vol 8 (1): 263-272.

- Mohammed Abdel-Reheem, David Hildebrand (2013). Activity of *Brassica napus* and *Perilla frutescens* microsomal ω-3 desaturases expressed in yeast (*Saccharomyces cerevisiae*). Turk J Biol (2013) 37: 591-605. doi:10.3906/biy-1301-32.

- Mohammed Abdel-Reheem, David Hildebrand (2013). 1-^{14}C Linoleoyl-COA Desaturation into Diverse Lipid Classes of *Dracocephalum moldavica* Cotyledons. Life Sci J, 10(11s):135-143.

- Mohammed Abdel-Reheem, David Hildebrand (2013). Incorporation of ^{14}C 18:2 into Different Lipid fractions of *Glycine max* Cotyledons. Life Sci J, 10(11s):144-152.

- Sultan Ayaz, Sumaira Shams, Mohammad A. T. Abdel-Reheem, Sanuallah khan, Riaz Ullah (2013). Epidemiology and Molecular Detection of

Babesiosis in Household Dairies in Districts Kohat and Karak, Khyber Pakhtunkhwa Pakistan. Life Sci J 2013; 10(10s):188-193.

- Adil Ud Din, Mohammad A. T. Abdel-Reheem, Hussain Ullah, Ijaz Ahmad, Amir Waseem, Riaz Ullah, Azhar Ul Haq Ali Shah (2013). Assessment of heavy metals in onion and potato in imported and local variety of Pakistan and Afghanistan. Life Sci J 2013;10(10s):198-204.

- Sultan Ayaz, Mohammed A. T. Abdel-Reheem, Nadia Sadiq, Raiz Ullah, Naila Gul, Sumaira Shams (2013). Current Status of Tuberculosis in Human Reported to Liaqat Memorial Hospital and District Headquarter Hospital Kohat. Life Sci J 2013; 10(10s):194-197.

- Mohammed A. T. Abdel-Reheem (2013). Biological clock Minor and Grand. Risalat Al-Jameah Vol.1133: 30.

- Mohammed A. T. Abdel-Reheem (2013). Biological Balance. Risalat Al-Jameah Vol.1123: 17.

- Mohammed A. T. Abdel-Reheem, Zaynab A. Moussa, Mona M. Oraby, Fatma S. Aboud, and Dalia A. M. Abdou (2012). Antimicrobial activity of lavender oil treated with nicotinamide. African Journal of Microbiology Research Vol. 6(21), pp. 4574-4584. doi: 10.5897/AJMR12.310.

- Emad M. El-Kholie, Magda K. El Shaer, Mohammed A.T. Abdelreheem, Mai A. Gharib (2012). Detailed evaluation of a newly attained fungal pigment from Monascus purpureus in meat burgers. International Journal of Food Sciences and Nutrition. Vol. 63, No. 7: Pages 860-865, doi:10.3109/09637486.2011.641945.

- Emad M. El-Kholie, Mohammed A. T. Abdelreheem and Seham A. Khader (2012). Azadirachta indica extracts influenced some pathogenic fungi. African Journal of Microbiology Research Vol. 6(27), pp. 5645-5649. doi: 10.5897/AJMR12.380.

- Emad M. El-Kholie, Seham A. Khader, and Mohammed A. T. Abdelreheem(2012). Chemical, physical, microbiological and quality attributes studies on River Nile crayfish. African Journal of Biotechnology Vol. 11(51), pp. 11262-11270, DOI: 10.5897/AJB12.753

- Mohammed A. T. Abdel-Reheem (2012). Biological and Environmental inelegances. Risalat Al-Jameah Vol.1115: 23.

- Mohammed A. T. Abdelreheem, Fawzy M. Lashin, Emad M. El-Kholie and Amal A. Fatani (2012). Low and high ω-3 oils consequences rats' serum lipid fractions. Scientific Research and Essays Vol. 7(19), pp. 1850-1856. DOI: 10.5897/SRE11.2209

- Emad M. El-Kholie, Mohammed A. T. Abdelreheem, and Seham A. Khader (2012). Inhibitory effect of some spices powder and its oils on pathogenic microorganisms in liquid media. African Journal of Microbiology Research Vol. 6(16), pp. 3791-3796. DOI: 10.5897/AJMR12.431.

- Mohammed A. T. Abdel-Reheem (2012). Molecular biology and Biochemistry Relation and Life. Risalat Al-Jameah Vol.1093: 17.

- Gaber El-Desoky, Mohammed Abelreheem, Abdulaziz AL-Othman, Zeid ALOthman, Mohamed Mahmoud, Kareem Yusuf (2012). Potential hepatoprotective effects of vitamin E and selenium on hepatotoxicity induced by malathion in rats. African Journal of Pharmacy and Pharmacology Vol. 6(11). pp. 806-813.

- Mohammed A. T. Abdel-Reheem (2012). Fats Between hearting and Usefulness. Risalat Al-Jameah Vol.1089: 17.

- Mohammed A. T. Abdel-Reheem (2012). The Fatty Acids "Omega-3" between the Identification and the usefulness. Risalat Al-Jameah Vol.1084: 15.

- Mohammed A. T. Abdel-Reheem (2011). The most important and abundant protein on earth. Risalat Al-Jameah Vol.1061: 22.

- Mohammed A. T. Abdel-Reheem (2011). Photosynthesis process and its importance. Risalat Al-Jameah Vol.1054: 24.

- Mohammed A. T. Abdel-Reheem (2010). Genetically modified food (GMF). Risalat Al-Jameah Vol. 1034: 22.

- Suryadevara Rao , Mohammed Abdel-Reheem , Resham Bhella , Charles McCracken , and David Hildebrand (2008). Characteristics of High *α*-Linolenic Acid Accumulation in Seed Oils. Lipids 43:749–755.

- Z. A. Moussa, M. A. T. Abdel-Reheem, M. M. Oraby, and F. S. Aboud (2008). Effect of Nicotinamide on Antimicrobial Activity of Lavender Essential Oil. J Biol Chem Environ Sci, Vol. 3 (2): 59 - 82.

- F. S. Aboud , M. A. T. Abdel-Reheem , O. A. Elbehary , And Z. A. Moussa (2008). Some Chemical Changes of *Lavendula Officinalis* Plant Treated with Nicotinamide. J Biol Chem Environ Sci, Vol. 3 (2)*:* 83 - 103

- A.M.A. El-Samawaty , M.A.T. Abdel-Reheem , K.A. Abd-Esalam , and M.R. Omar (2008). Use of Random Amplifide Polymorphic DNA (RAPD) to Differentiate Among Isolates of *Fusarium Spp*. Pathogenic on Cotton. J Biol Chem Environ Sci, Vol. 3 (1): 811 - 827.

- M. A. T. Abdel-Reheem, Y. M. Saad, M. A. Sallam, and T. M. A. Tantawi (2007). Responses of Some Tilapia Genomes to Oleic Acid. J Biol Chem Environ Sci, Vol. 2(4), 407- 430.

- F. Abdel-Azeem and M.A.T. Abdel-Reheem (2007). Reducing Toxic Effects of Mycotoxins by Using Clays and Yeast Cultures in Growing Rabbits Diets. J Biol Chem Environ Sci, Vol. 2(1): 377-404.

- M.A. A. Sallam and M.A.T. Abdel-Reheem (2006). Functional Genomic Analysis of Stearoyl-Coa Desaturase 1 Gene in Mice. Egypt.J. of Genetics and Cytolog , Vol.35:65-81.

- M. A. T. Abdel-Reheem, M. M. Oraby, A. M. El-Borollosy , and M. F. Abd Elhamied (2006). Lavender Oil Constituents as a Natural Bio-Controler and an Aphid's Virus Transmission Suppressor. J Biol Chem Environ Sci, Vol. 1 (4):1219-1238.

- F. Abdel-Azeem and M. A. T. Abdel-Reheem (2006). Effect of Supplemental Copper and Fresh Garlic on Performance and Some Biochemical Changes in Growing Rabbits. Egyptian Journal of Rabbit Science,Vol. 6 (2):341-366.

- Abdel-Reheem M.A.T., Bhella R., and Hildebrand D. (2003). Linolenic Acid Accumulation in Dragonhead. In Advanced research on Plant Lipids, Murata M., Yamada M., Nishida I., Okuyama H., Sekiya J., and Hajime W (eds.), pp. 101-104, Kluwer Academic Publishers, Netherlands.

Thesis and Dissertation

- Abdel-Reheem, M. A. T. (2002). Apperception and Appraisal of the Mechanism of ω-3 Fatty Acid Accumulation in High ω -3 Fatty Acid Producing Plants. Lexington, USA, University of Kentucky**:** 154.

- Abdel-Reheem, M. A. T. (1993). Biochemical Studies on Potato Tubers. Plant Biochemistry. Cairo, Ain Shams University**:** 198.

Abstracts

- Mohammed Abdel-Reheem, Resham Bhella, and David Hildebrand.2002. Linolenic Acid Accumulation in Dragonhead. Impact on plant lipid research, 15th International Symposium of Plant Lipid. Okazaki, Japan. P.50.

- Mohammed Abdel-Reheem, Resham Bhella, and David Hildebrand. 2002. Linolenate Acid Accumulation in *Dracocephalum*. American Oil Chemists' Society (AOCS) annual meeting, Montréal, Canada.

- Abdel-Reheem, Mohammed A. Bhella, Resham Rao, Suryadevara S. Hildebrand, David F. 2001. Linolenic acid accumulation in several high linolenic acid containing seeds. Plant Biology 2001 final program and abstract supplement, Providence, Rhode Island USA. P.108 A.477.

- Mohammed Abdel-Reheem, Resham Bhella, and David Hildebrand.2001. Characteristics of high α- Linolenic acid accumulation in seed oils. National Plant lipid cooperative, 2001 biochemistry and molecular biology of plant fatty acids and glycerolipids symposium, South Lake Tahoe, California USA. P. 31.

- Mohammed Abdel-Reheem, Suryadevara Rao, Charles McCracken, Kristine Hill, David Hildebrand. 2000. High linolenic acid content of the Flax (*Linum Usitatissimum*) seed oil- high omega-3 desaturase activity. Book of abstract supplement to reporter 18:2 of the 6th International congress of plant molecular biology Quebec, Canada. S.20-17.

- Mohammed Abdel-Reheem, Suryadevara Rao, Charles McCracken, Kristine Hill, David Hildebrand. 2000. High linolenic acid content of the Flax (*Linum Usitatissimum*) seed oil- high omega-3 desaturase activity. Book of abstract supplement to reporter 18:2 of the 6th International congress of plant molecular biology Quebec, Canada. S.20-17.

PROFESSIONAL MEETINGS ATTENDED:

- 2ed Scientific Conference of Agricultural Chemistry & Environment Protection Society "Climate changes and its effects on health and environment", Egypt March 2008.
- 1st Scientific Conference of Agricultural Chemistry & Environment Protection Society "Clean environment and save food", Egypt December 2006.
- 1st Scientific Symposium of Agricultural Chemistry & environment Protection Society "Birds flu between facing and protection", Egypt February 2006.
- 15th International Symposium of Plant Lipid, Okazaki, Japan **2002**.
- Plant Biology meeting, Providence, Road Island USA **2001**.
- National Plant lipid symposium in South Lake Tahoe, California USA **2001**.
- Soybean, Lexington, Kentucky USA **2000**.

Oral Presentation:

- **Mohammed Abdel-Reheem**, Resham Bhella, and David Hildebrand. Linolenic Acid Accumulation in Dragonhead. *ISPL* (Okazaki, Japan) May **2002**.
- Mohammed Abdel-Reheem, Resham Bhella, and **David Hildebrand**. Linolenate Acid Accumulation in *Dracocephalum*. American Oil Chemists' Society (AOCS) annual meeting (Montréal, Canada) May **2002**.

PROFESSIONAL SOCIETY MEMBERSHIPS:

2005- Present	Initiative member of the Agricultural Chemistry & Environment Protection Society.
2003- Present	Egyptian Society of Biochemistry & Molecular Biology.
1987- Present	Egyptian Agricultural Syndicate.
2001-2002	American Oil Chemists' Society.