

March 1<sup>st</sup> 2009

Dr. Ashok Agarwal  
Director, Andrology Clinical & Research Laboratories  
Glickman Urological Institute  
Cleveland Clinic Foundation  
9500 Euclid Avenue  
Cleveland, Ohio 44195

Dr. Agarwal,

I am still remembering my first day in Cleveland. I have reached the hotel with my family at night after a long trip. It was very difficult to be away from my country, my parents and my friends by thousands of miles for the first time. In the next morning you supervised me with your call to say welcome and to invite both of me and my family for lunch, this call was very important to me as I felt that it is not a start of relation between a supervisor and his student but it is much more a familiar and a friendly relationship.

On my first day on the lab, I just impressed by this systematic program. Every thing must have a time to be done on it and a method to be done with it. I discovered later that this is the only way to do a successful research. Any research start with an idea and this idea can survive and develop to a successful research if it grows in a systematic program like the Center for Reproductive Medicine, or it can be arrested to just an idea if it did not find the correct environment.

I have a great experience in your program, I have learned a lot about how to step on the correct way of the research field, to overcome any problem and to forget about the word "give up" while your are surrounded by this expert staff in the reproductive research.

Also, I can never forget your words which you always telling me whenever I need your help "you have my full support". This support was the cause of what I did achieve in your program; like my publications in peer reviewed journals, book chapters, oral and poster presentations in the most prestigious meetings and getting my Board Certification as a clinical embryologist.

I believe that the program is one of the best and the famous programs worldwide and it is the correct way to build up in your career in the reproductive medicine.

Best regards

A handwritten signature in black ink that reads "Hussein". The signature is written in a cursive style and is positioned above the printed name.

Hussein Abdelrazik MD TS(ABB)  
Board Certified Clinical Embryologist  
Assistant Lecturer of Andrology  
Suez Canal University  
Egypt.

## **List of Publications and Awards of Hussein Abdelrazik, MD 2006 – 2008**

### **Original Peer Review Manuscripts:**

1. Abdelrazik H, Sharma R, Mahfouz R, Agarwal A :L-Carnitine decreases DNA damage and improves the in vitro blastocyst development rate in mouse embryos. *Fertil Steril*. 2009; Feb;91(2):589-96.
2. Mansour G, Abdelrazik H, Sharma RK, Radwan E, Falcone T, Agarwal A :L-Carnitine supplementation reduces oocyte cytoskeleton damage and embryo apoptosis induced by incubation in peritoneal fluid from patients with endometriosis. *Fertil Steril*. 2008; Apr 2. [Epub ahead of print]
3. Kader A, Agarwal A, Abdelrazik H, Sharma RK, Ahmady A, Falcone T : Evaluation of post-thaw DNA integrity of mouse blastocysts following ultra-rapid and slow freezing *Fertil Steril*. 2008; Sep 5. [Epub ahead of print]

### **Review Articles:**

4. Agarwal A, Gupta, S, Abdelrazik H, Krajcir, N, Athayde, K :Impact of oxidative stress on gametes and embryos in an ART laboratory. *Clin Embryol* 2006; 9:5-22.
5. Abdelrazik H, Agarwal A : L Carnitine and Assisted Reproduction. *Arch Med Sci* 2008; 4, 4B:

### **Chapter in Books:**

6. Ashok Agarwal, Marcello Cocuzza, Hussein Abdelrazik and Rakesh K. Sharma : Oxidative stress measurement in patients with male or female factor infertility. *Handbook of Chemiluminescent Methods in Oxidative Stress Assessment*, 2008: 195-218 ISBN: 978-81-7895-334-2 Editors: I. Popov and G. Lewin.

### **Presentation at Scientific Meetings:**

7. Abdelrazik, H, Gupta, S, Sharma, R, Mahfouz, R, Farouk, A, Sabanegh, E, and Agarwal, A (2007): L-Carnitine improves blastocyst development rate in mouse 2-cell embryos. Presented : 32nd Annual Meeting of the American Society of Andrology, Tampa, FL, Apr 18-24
8. Abdelrazik H, Abdelkader, A, Mahfouz, R, Sharma, R, Khalid, S, and Agarwal, A (2007): Correlation of sperm DNA damage and pregnancy outcome in patients undergoing ICSI.. 32nd Annual Meeting of the American Society of Andrology, Tampa, FL, Apr 18-24

9. Abdelrazik H, Gupta, S, Sharma, R, Mhfouz, R, Abdelkader, A, Sabanegh, E, and Agarwal, A (2007): Computer assisted sperm head morphology assessment and its correlation with sperm DNA damage. 32nd Annual Meeting of the American Society of Andrology, Tampa, FL, Apr 18-24
10. Hussein Abdelrazik, MD, Ashok Agarwal, Ph.D, HCLD, , Gihan Mansour, MD, Sajal Gupta, MD, Tommaso Falcone, MD, Rakesh Sharma, Ph.D (2007).: L-Carnitine improves blastocyst development rate and reduces DNA damage in mouse embryos. 63rd Annual Meeting of the American Society of Reproductive Medicine, Washington, DC, OCT 13-17.
11. Hussein Abdelrazik, MD, Ashok Agarwal, Ph.D, HCLD, Amr Kader, MD, Moustafa M.K. Eyada, MD, Edmund Sabanegh, MD, Rakesh Sharma, Ph.D. (2007): L-Carnitine as an antiapoptotic supplement in mouse embryo culture media. 63rd Annual Meeting of the American Society of Reproductive Medicine, Washington, DC, OCT 13-17.
12. Hussein Abdelrazik, MD, Ashok Agarwal, Ph.D, HCLD, Gihan Mansour, MD, Sajal Gupta, MD, Edmund Sabanegh, MD, Rakesh Sharma, Ph.D (2007): Efficacy of L-Carnitine in antagonizing the antiproliferative effects of TNF-a on mouse embryos in vitro. 63rd Annual Meeting of the American Society of Reproductive Medicine, Washington, DC, OCT 13-17.
13. Hussein Abdelrazik, MD, Gihan Mansour, MD, Tommaso Falcone, MD, Rakesh Sharma, Ph.D, Jeffery Goldberg, MD, Ashok Agarwal, Ph.D, HCLD (2007): Reduction in cytoskeleton damage by incubation of oocytes in peritoneal from patients with endometriosis supplemented with L-Carnitine. 63rd Annual Meeting of the American Society of Reproductive Medicine, Washington, DC, OCT 13-17.
14. Amr Kader, Hussein Abdelrazik, Tommaso Falcone, Rakesh Sharma, Ashok Agarwal: Extent of apoptosis induction in biopsied blastocyst following slow cryopreservation and vitrification. 64th Annual Meeting San Francisco, California, November 8-12, 2008.
15. Hussein Abdelrazik, Ahmed El-Damen, Hamdy Badrawy, Rakesh Sharma, Ashok Agarwal: L-Carnitine improves embryo quality and increases blastocyst development rate in couples undergoing ICSI. 64th Annual Meeting San Francisco, California, November 8-12, 2008.
16. Reda Mahfouz, Nabil Aziz, Rakesh Sharma, Hussein Abdelrazik, Edmund Sabanegh, Ashok Agarwal: Comparing flowcytometry and chemiluminescence in assessing human sperm production of superoxide and hydrogen peroxide in different sperm fractions. 64th Annual Meeting San Francisco, California, November 8-12, 2008.

17. Hussein Abdelrazik, Ahmed El-Damen, Hamdy Badrawi, Rakesh Sharma, Ashok Agarwal: Diagnostic value of the comet assay in patients undergoing ICSI. 64th Annual Meeting San Francisco, California November 8-12, 2008.
18. Hussein Abdelrazik, Ahmed El-Damen, Hamdy Badrawi, Rakesh Sharma, Ashok Agarwal: Introduction of a single step medium from fertilization through blastocyst stage by supplementation of the culture media with L-Carnitine. 64th Annual Meeting San Francisco, California November 8-12, 2008.
19. Reda Mahfouz, Nabil Aziz, Rakesh Sharma, Hussein Abdelrazik, Edmund Sabanegh, Ashok Agarwal: Association of sperm morphology assessed by sperm deformity index with sperm DNA integrity/ maturity in male infertility. 64th Annual Meeting San Francisco, California November 8-12, 2008.

**Grants:**

Antioxidant Use to Minimize Human Sperm Apoptosis and DNA Damage During Cryopreservation –Cleveland Clinic Proposal Committee-. 2006.

Defining sperm DNA damage in infertile men with varicocele and its correlation with oxidative stress-Cleveland Clinic Proposal Committee 2007.

How does L Carnitine improve the Blastocyst Development rate in two cells mouse embryos in vitro? Cleveland Clinic Proposal Committee 2007.

Efficacy of L-Carnitine before sperm processing for assisted reproductive techniques-Cleveland Clinic Proposal Committee -2008.

Miscellaneous:

National Institutes of Health Award – USA -2007

Fellow of the year – Centre for Reproductive Medicine. Cleveland Clinic Cleveland Ohio – USA -2007

Award of Innovation – Innovation Centre – Cleveland Clinic USA -2007

American Board Certification of Clinical Embryology American Board of Bio-analysis (ABB)-USA -2008