

February 28, 2009

Ashok Agarwal, PhD HCLD
Director, Center for Reproductive Medicine and ART training
Glickman Urological and Kidney Institute
Cleveland Clinic Foundation
9500 Euclid Avenue, Desk A19.1
Cleveland, OH 44195

Dear Dr. Agarwal,

I was an Andrology/Urology research fellow at Reproductive Research Center from June 2003 to June 2004. First of all I would like to thank you for giving me the opportunity to work under you and complete my research fellowship at Cleveland Clinic's Reproductive Research Center. I feel really fortunate enough to work under your able guidance for full one-year duration in one of the prestigious institutions in the United States of America. Even though I joined here as a research fellow, the program allowed me to grow in all aspects of my personality.

I came to know about this premiere program and joined it with lot of ambitions. It's a lifetime experience to work in one of the most renowned places in the world in medical field. My one-year at Cleveland was like a transition year between India and USA. It gave me full orientation to the working style of the new country. The credit goes to Dr. Agrawal who made the program so well organized and unique that it teaches the fellows all the qualities that are required to work in this country.

The most important and unique feature of this program that I appreciated from the beginning was having a frank feed back at each and every step on how to improve myself. The program creates a personalized vision for each fellow. The experience and expertise of center's staff guided me through each and every difficult task assigned to me. Teamwork is the spirit of the program. Whether a person is junior or senior – the team members treat them equally. Each and every individual person at the reproductive research center is well motivated to support the other persons in times of need and success of teamwork is emphasized prominently. This one-year research gave me well required insight into how research is planned, executed and interpreted. It helped me in my further development in this country.

One of the very important attributes of you as a director of this program is that you know the in and out about each of your fellows. I found you very easily approachable to talk regarding any of my work or personal problems. Your ability to find out individual deficits, weakness and your suggestions to correct them and most importantly pursue them until the individual achieves them are exceptional. You are a true guardian in this new location. You always keep your own deadlines very ahead of actual deadlines for any work. This will ensures that we will not miss anything. The planning was initiated couple of months in advance. Your abilities to accomplish all the planned activities in a timely manner are well appreciated by everyone across the board. I really admire your multitasking abilities and going into minute details of each and every issue.

Special mention has to be given to social events at the center. Dr. Agarwal ensures that they will take place on correct dates and assigns one of the fellows to be in

charge of such activities. Every occasion is used to gather casually like birthdays, some one visiting the center or some one leaving the center. I started celebrating birthday only after I joined your program. I still remember the day I got send off party. Potluck parties give an opportunity to know different culture, food habits and to know each other in a relaxed environment. There are ample opportunities to interact with each other at social gatherings during conferences and become occasions to take off from routine research work. They makes you feel that you are with your near and dears.

The program inculcates a great deal of ability to do hard work, punctuality, sincerity, art of communication with professionals, feeling of responsibility and aptitude to work as team-member in fellows. The fellows will learn how to do multiple tasks simultaneously and efficiently. I would not have imagined anything more than what I have achieved in this program, if I have joined in any other program. I am grateful to you for my productive and satisfying stay in the research center. I am confident that the time I spent with you, advises you gave and experiences you and others shared with me throughout the training will help me pass many hurdles in the life ahead in an efficient manner. I thank each and everyone in the research center for their immense help and cooperation throughout my stay.

I am already seeing the results in multiple aspects of my life. The lengthy resume I inherited from reproductive research center kept me way ahead of other applicants' during my residency and fellowship interviews. The residency position I am doing and fellowship I am going to join are the ultimate fruits of working in this research center. As a foreign graduate immigration issues are always in the forefront before you take up any new job in this country. Having worked at prestigious institutions like CCF and having a CV full of accomplishments because of this program has allowed me to succeed in a highly competitive environment by first bagging a residency in General Surgery at New York Medical College (Brooklyn &Queens) and now selected for a Fellowship in Surgical Oncology at the prestigious Roswell Park Cancer Institute, Buffalo, NY.

With scientific writing skills that I learned from this program I continue to write and present research abstracts at various national meetings and writing articles to various prestigious journals. My CV looks like a small book and is far better than majority of the doctors surrounding me at my work place or in many other hospitals. The credit goes to Dr Agarwal and his well-structured program. My only word to any person aspiring for fellowship in this program is that this program teaches and makes you to learn all the essential work features required for the tough journey ahead in the highly competitive medical profession.

Yours Sincerely,



Shyam Allamaneni, MD
Chief Resident
Department of General Surgery
New York Medical College (Brooklyn & Queens), NY
New York

Shyam S R Allamaneni, M.D.
2003 - 2004

Honors and Awards at CCF:

1. **2005: NIH Trainee Travel Fellowship Award** for presenting at American Society of Andrology 30th Annual meeting, April 2 - 5, Seattle, WA, MD.
2. **2004: Fellow of the Year** for dedication, hard work, and high research productivity in *Center For Advanced Research in Human Reproduction Infertility and Sexual Function*, Glickman Urological Institute, Cleveland Clinic Foundation, OH.
3. **2004:** NIH (National Institutes of Health) Trainee Travel Fellowship Award by American Society of Andrology Trainee Affairs Committee and ASA Executive Council. American Society of Andrology 29th Annual meeting, April 17 - 20, Baltimore, MD.

Research grant

1. Characterization of intracellular reactive oxygen species in human spermatozoa, RPC #07549, 2004 - 05 (Co-investigator).

PUBLICATIONS

Original Peer-Review Articles

Published more than **20 articles and book chapters** in some of the prestigious peer-reviewed journals and presented over **30 abstracts** in national meetings. My research work has been cited over 150 times in articles published in some of the most renowned journals with high impact factor.

1. **ALLAMANENI, SSR.**, Bandaranayake, I., and Agarwal, A. (2004): Use of semen quality scores to predict pregnancy in couples undergoing intrauterine insemination with donor sperm, **Fertil Steril**, 82: 606-611.
2. Agarwal, A., Nallella, KP., **ALLAMANENI, SSR.**, and Said, TM. (2004): The role of antioxidants in treatment of male infertility: an overview of the literature. **Review, Reprod Biomed Online**, 8: 616-627.
3. Agarwal, A., and **ALLAMANENI, SSR.** (2004): The effect of sperm DNA damage on assisted reproduction outcomes. A review. **Minerva Ginecol**, 56(3): 235-45.
4. Agarwal, A., and **ALLAMANENI, SSR.** (2004): Role of free radicals in female reproductive diseases and assisted reproduction. **Reprod Biomed Online**, 9: 338-347.

5. **ALLAMANENI, SSR.**, Naughton, CK., Sharma, RK., Thomas, AJ, Jr., and Agarwal, A. (2004): Increased seminal reactive oxygen species levels in varicocele patients correlate with varicocele grade, not testis size. **Fertil Steril**, 82: 1684-1686.
6. Zalata, AA., Ahmed, AH., **ALLAMANENI, SSR.**, Comhaire, FH., and Agarwal, A. (2004): Relationship between acrosin activity of human spermatozoa and oxidative stress, **Asian J Androl**, 6: 313-318.
7. Nallella, KP., **ALLAMANENI, SSR.**, Pasqualotto, FF., Sharma, RK., and Agarwal, A. (2004): Relationship of interleukin-6 with semen characteristics and oxidative stress in varicocele patients, **Urology**, 64: 1010-1013.
8. Nallella, KP., Sharma, RK., **ALLAMANENI, SSR.**, Aziz, N., and Agarwal, A. (2004): Cryopreservation of human spermatozoa: comparison of two cryopreservation methods and three cryoprotectant media, **Fertil Steril**, 82: 913-918.
9. Agarwal, A., **ALLAMANENI, SSR.**, and Said, TM. (2004): Chemiluminescence technique for measurement of reactive oxygen species in the field of reproductive medicine. **Reprod Biomed Online**, 9: 466-468.
10. **ALLAMANENI, SSR.**, Agarwal, A., Rama, S., Ranganathan, P., and Sharma, RK. (2005): Comparative study of density gradient and swim-up preparation techniques in neat and cryopreserved-thawed semen specimens. **Asian J Androl**, 7: 86-92.
11. Agarwal, A., and **ALLAMANENI, SSR.** (2005): Disruption of spermatogenesis by the cancer disease process. **Review, J Natl Cancer Inst Monogr** 34: 9-12.
12. Raina, R., Agarwal, A., Lakin, MM., **ALLAMANENI, SSR.**, and Zippe C D. (2005): Combination therapy: Sildenafil citrate enhances sexual satisfaction in vacuum constriction device (VCD) failures following radical prostatectomy, **Urology**, 65: 360-364.
13. **ALLAMANENI, SSR.**, Agarwal, A., Nallella, KP., Sharma, RK., Thomas, AJ, Jr. and Sikka, S. (2005): Characterization of oxidative stress by evaluation of reactive oxygen species in whole semen and isolated spermatozoa, **Fertil Steril** 83:800-803.
14. Agarwal, A., **ALLAMANENI, SSR.**, Nallella, KP., George, AT., and Mascha, E. (2005): Correlation of reactive oxygen species levels with fertilization rates after in vitro fertilization: a qualified meta-analysis, **Fertil Steril** 84:228-231.
15. Nallella, KP, Sharma, RK, **ALLAMANENI, SSR**, Agarwal, A (2005): Identification of male factor infertility using a novel semen quality score and reactive oxygen species levels. **Clinics**. 60(4):317-24.
16. Agarwal, A., and **ALLAMANENI, SSR.** (2005): Sperm DNA damage assessment: A test whose time has come. **Fertil Steril** 84(4):850-3.

17. Agarwal, A., Prabakaran, S and **ALLAMANENI, SSR.** (2006): What an andrologist/urologist should know about free radicals and why? **Urology**, 67(1):2-8.
18. Agarwal, A., Prabakaran, S and **ALLAMANENI, SSR.** (2006): Relationship between oxidative stress, varicocele and infertility: a meta-analysis. *Reprod Biomed Online* 12(5):630-3.

Book Chapters & Other Articles

19. Agarwal, A., and **ALLAMANENI, SSR.** (2004): Current understanding on human sperm DNA damage: **Review, A.R.T. & Science**, 4: 2-4.
20. Agarwal, A., and **ALLAMANENI, SSR.** (2004): Oxidants and antioxidants in human fertility. **Review, Middle East Fertility Society Journal**, 9.
21. Agarwal, A., and **ALLAMANENI, SSR.** (2005): Sperm chromatin defects in the etiopathogenesis of male infertility, *Revista Internacional de Andrologia* 3:31-37.
22. Agarwal, A., and **ALLAMANENI, SSR.** (2006): Oxidative stress and human reproduction. **In: Oxidative Stress, Disease and Cancer**, (Editor: K.K. Singh), London: Imperial College Press, London, UK Chapter 23, pp.687-703.
23. Agarwal, A., and **ALLAMANENI, SSR.** (2007): Artificial insemination. **In: Clinical Reproductive Medicine and Surgery**, (Editors: T. Falcone, and W.W. Hurd), Mosby Publishers, Philadelphia, PA.

Presentation at scientific meetings

1. **ALLAMANENI, SSR,** Nallella, KP, Said, TM, Mascha, E, Agarwal, A (2004): Correlation of reactive oxygen species (ROS) levels with fertilization rate following in vitro fertilization (IVF): a meta-analysis. **In: 29th Annual Meeting of the American Society of Andrology**, April 17-20, Baltimore, MD, Abstract # 74.
2. **ALLAMANENI, SSR,** Cunningham, N, Sekhon, L, Said, TM, Sharma, RK, Agarwal, A (2004): Identifying factors impacting the recovery of total motile sperm after semen preparation for intrauterine insemination. **In: 29th Annual Meeting of the American Society of Andrology**, April 17-20, Baltimore, MD, Abstract # 78.
3. Said, TM, **ALLAMANENI, SSR,** Nallella, KP, Sharma, RK, Parekattil, S, Thomas, AJ Jr, Agarwal, A (2004): Prediction of sperm DNA damage in human semen by a novel reactive oxygen species-total antioxidant capacity score. **In: 29th Annual Meeting of the American Society of Andrology**, April 17-20, Baltimore, MD, Abstract # 143.
4. **ALLAMANENI, SSR,** Nallella, KP, Said, TM, Sharma, RK, Thomas, AJ Jr, Agarwal, A (2004): Defining reactive oxygen species (ROS) levels in mature and immature spermatozoa in healthy volunteers. **In: 29th Annual Meeting of the American Society of Andrology**, April 17-20, Baltimore, MD, Abstract # 71.

5. Nallella, KP, **ALLAMANENI, SSR**, Said, TM, Sharma, RK, Parekattil, S, Thomas, AJ Jr., Agarwal, A (2004): Role of semen quality score and reactive oxygen species levels in diagnosing male factor infertility. In: 29th Annual Meeting of the American Society of Andrology, April 17-20, Baltimore, MD, Abstract # 84.
6. Said, TS, Paasch, U, Grunewald, S, Sharma, RK, **ALLAMANENI, SSR**, Thomas, AJ, Jr., Agarwal, A, Glander, H-J (2004): Caspase autoactivation pattern in ejaculated human spermatozoa. In: 29th Annual Meeting of the American Society of Andrology, April 17-20, Baltimore, MD, Abstract # 17.
7. Grunewald, S, Said, TM, Paasch, U, Sharma, RK, **ALLAMANENI, SSR**, Thomas, AJ, Jr., Glander, H-J, Agarwal, A (2004): Mitochondrial apoptosis and inflammasome activation in capacitated sperm. In: 29th Annual Meeting of the American Society of Andrology, April 17-20, Baltimore, MD, Abstract # 120.
8. Sharma, RK, Said, TM, Grunewald, S, Paasch, U, **ALLAMANENI, SSR**, Thomas, AJ, Jr., Agarwal, A, Glander, H-J (2004): Induction of externalization of phosphatidyl serine (EPS) in ejaculated human spermatozoa but not caspase activation using two models of oxidative stress. In: 29th Annual Meeting of the American Society of Andrology, April 17-20, Baltimore, MD, Abstract # 81.
9. Paasch, U, Grunewald, S, Said, TM, Sharma, RK, **ALLAMANENI, SSR**, Thomas, AJ, Jr., Glander, H-J, Agarwal, A (2004): Induction of type I and type II apoptosis in human spermatozoa. In: 29th Annual Meeting of the American Society of Andrology, April 17-20, Baltimore, MD, Abstract # 155.
10. **ALLAMANENI, SSR**, Nallella, KP, Said, TM, Sharma, RK, Thomas, AJ, Jr., Agarwal, A (2004): Measurement of ROS levels in neat semen for assessment of seminal oxidative stress status. In: 99th Annual Meeting of the American Urological Association, May 8-13, San Francisco, CA, Abstract #04-AB-1377.
11. Nallella, KP, **ALLAMANENI, SSR**, Said, TM, Sharma, RK, Parekattil, SJ, Thomas, AJ, Jr, Agarwal, A (2004): Identifying infertile men with male-factor infertility with a novel semen quality (SQ) score. In: 99th Annual Meeting of the American Urological Association, May 8-13, San Francisco, CA, Abstract # 04-AB-1380.
12. Said, TM, Nallella, KP, **ALLAMANENI, SSR**, Sharma, RK, Thomas, AJ, Jr, Agarwal, A (2004): Prediction of sperm cryosurvival rates in cancer patients. In: 99th Annual Meeting of the American Urological Association, May 8-13, San Francisco, CA, Abstract #04-AB-1354, **JOURNAL OF UROLOGY** 171(4): 415-416, 2004.
13. Said, TM, **ALLAMANENI, SSR**, Nallella, KP, Sharma, RK, Bedaiwy, MA, Thomas, AJ, Jr, Agarwal, A (2004): Role of seminal growth factors in infertile men with varicocele. In: 99th Annual Meeting of the American Urological Association, May 8-13, San Francisco, CA, Abstract #04-AB-1350.

14. Said, TM, **ALLAMANENI, SSR**, Nallella, KP, Sharma, RK, Parekattil, SJ, Thomas, AJ, Jr, Agarwal, A (2004): Prediction of spermatozoal DNA damage by a novel semen quality score. In: 99th Annual Meeting of the American Urological Association, May 8-13, San Francisco, CA, Abstract #04-AB-1342.
15. Zalata, AA., Ahmed, AH., **ALLAMANENI, SSR.**, Comhaire, FH., Agarwal, A. (2004): The effect of oxidative stress associated with leukocytospermia on acrosin activity of human spermatozoa. In: 18th World Congress on Fertility and Sterility, May 23-28, Montreal, Canada, Abstract # 0650.
16. Choi, W., **ALLAMANENI, SSR.**, Agarwal, A., Yeo, H., Shin, J., Paik, W. (2004): Effect of vitrification method on the survivability, follicular growth and ovulation of preantral follicles in mice. In: 60th Annual Meeting of the American Society for Reproductive Medicine, October 16-20, Philadelphia, PA, Abstract #04-A-604.
17. Tomova, A., Kumanov, P., Kirilov, G., Dakovska, L., **ALLAMANENI, SSR.**, Agarwal, A (2004): The relationship of plasma endothelin and testosterone levels in male hypogonadism. In: 60th Annual Meeting of the American Society for Reproductive Medicine, October 16-20, Philadelphia, PA, Abstract #04-A-222.
18. Tomova, A., Kumanov, P., Kirilov, G., **ALLAMANENI, SSR.**, Raina, R., Agarwal, A (2004): Disturbances in gonadal axis in women with anorexia nervosa. In: 60th Annual Meeting of the American Society for Reproductive Medicine, October 16-20, Philadelphia, PA, Abstract #04-A-223.
19. Pasqualotto, FF., Pasqualotto, EB., Hallak, J., **ALLAMANENI, SSR.**, Arap, S., Agarwal, A (2004): Older men have higher follicle-stimulating hormone levels but not smaller testis compared to younger men. In: 60th Annual Meeting of the American Society for Reproductive Medicine, October 16-20, Philadelphia, PA, Abstract #04-A-226.
20. Hallak, J., Pasqualotto, FF., Lucon, AM., **ALLAMANENI, SSR.**, Arap, S., Agarwal, A (2004): Cigarette smoking is related to a decrease in semen volume in a population of fertile men. In: 60th Annual Meeting of the American Society for Reproductive Medicine, October 16-20, Philadelphia, PA, Abstract #04-A-245.
21. Pasqualotto, FF., **ALLAMANENI, SSR.**, Pasqualotto, EB., Oliveira, C., Salvador, M., Agarwal, A (2004): Levels of antioxidant enzyme in infertile patients with normal and abnormal semen parameters and fertile men. In: 60th Annual Meeting of the American Society for Reproductive Medicine, October 16-20, Philadelphia, PA, Abstract #04-A-464.
22. Varghese, AC., Bhattacharyya, AK., Roy, H., **ALLAMANENI, SSR.**, Bhattacharya, J., Agarwal, A (2004): A comparative study on nuclear DNA integrity and morphology of human spermatozoa processed by three different methods. In: 60th Annual Meeting of the American Society for Reproductive Medicine, October 16-20, Philadelphia, PA, Abstract #04-A-217.

23. Nallella, KP., **ALLAMANENI, SSR.**, Gorge, A., Liang L., Agarwal, A (2004): Are standard values of semen analysis by world health organization accurate? In: 100th Annual Meeting of the American Urological Association, May 21-26, San Antonio, 2005, Abstract #05-AB-3070.
24. Pasqualotto, FF., Pasqualotto, EB., Ogliari, KS., **ALLAMANENI, SSR.**, and Agarwal, A (2005): Psychological stress and semen quality among men undergoing intrauterine insemination. In: 30th Annual Meeting of the American Society of Andrology, April 2-5, Seattle, WA, Abstract # 161.
25. Ahmed A, Zalata A, **ALLAMANENI, SSR.**, et al. Relationship between acrosin activity of human spermatozoa and oxidative stress. *Journal Of Investigative Dermatology* 125(3): A83-A83, 2005
26. Pasqualotto, FF., Pasqualotto, EB., Sobreiro, BP., Hallak, J., Lucon, AM., **ALLAMANENI, SSR.**, and Agarwal, A (2005): Role of ethnicity in male reproductive function. In: 30th Annual Meeting of the American Society of Andrology, April 2-5, Seattle, WA, Abstract # 157.
27. Gromatzky, C., Mitre, AI., Pasqualotto, FF., Lucon, AM., **ALLAMANENI, SSR.**, and Agarwal, A (2005): Efficacy and safety of percutaneous testicular aspiration in evaluation of azoospermic or severe oligospermic patients. In: 30th Annual Meeting of the American Society of Andrology, April 2-5, Seattle, WA, Abstract # 160.
28. Hallak, J., Pasqualotto, FF., Saldanha, LB., Lucon, AM., **ALLAMANENI, SSR.**, and Agarwal, A (2005): Is poor semen quality in men with malignancies due to pre-existing defects in spermatogenesis? In: 30th Annual Meeting of the American Society of Andrology, April 2-5, Seattle, WA, Abstract # 155, *JOURNAL OF ANDROLOGY* 75-75, 2005.
29. **ALLAMANENI, SSR.**, Kumanov, P., Tomova, A., Raina, R., and Agarwal, A (2005): Role of inhibin b in the evaluation of male infertility In: 30th Annual Meeting of the American Society Of Andrology, April 2-5, Seattle, WA, Abstract #05-AB-59.
30. Prabakaran, SA, Agarwal, A, and **ALLAMANENI, SSR** (2005): Is oxidative stress a missing piece in varicocele related infertility puzzle? - A meta-analytic approach. In: 61st Annual Meeting of the American Society for Reproductive Medicine, October 15-20, Montreal, Canada, Abstract #05-A-1363, *FERTILITY AND STERILITY*. 84(1):S418-S419, 2005.
31. Pasqualotto, FF, Pasqualotto, EB, Umezu, FM, **ALLAMANENI, SSR**, Salvador, M, Agarwal, A (2005): Regular coffee intake is related to increased sperm motility and antioxidant levels in infertile men. In: 61st Annual Meeting of the American Society for Reproductive Medicine, October 15-20, Montreal, Canada, Abstract #05-A-319, *FERTILITY AND STERILITY* 84 (1): S461-S461, 2005.

32. Pasqualotto, FF, Sobreiro, B, **ALLAMANENI, SSR**, Hallak, J, Agarwal, A, Lucon, AM (2005): Relationship between increased seminal leukocytes and varicocele. In: 61st Annual Meeting of the American Society for Reproductive Medicine, October 15-20, Montreal, Canada, Abstract #05-A-434, **FERTILITY AND STERILITY** 84(1):S417-S418, 2005.
33. Pasqualotto, EB, Agarwal, A, Umezu, FM, Salvador, M, **ALLAMANENI, SSR**, and Pasqualotto, FF (2005): Antioxidant and lipid peroxidation levels in fertile and infertile men. In: 61st Annual Meeting of the American Society for Reproductive Medicine, October 15-20, Montreal, Canada, Abstract #05-A-424, **FERTILITY AND STERILITY** 84(1):S79-S79, 2005.
34. Pasqualotto, FF, Agarwal, A, **ALLAMANENI, SSR**, and Thomas, AJ Jr (2005): Vasovasostomy is associated with retention of sperm cytoplasmic droplets and oxidative stress. In: 61st Annual Meeting of the American Society for Reproductive Medicine, October 15-20, Montreal, Canada, Abstract #05-A-435, **FERTILITY AND STERILITY**. 84(1): S419-S420, 2005.
35. Pasqualotto, EB, Agarwal, A, de Medeiros Umezu, F, Salvador, M, **ALLAMANENI, SSR**, and Pasqualotto, FF (2005): Effect of oxidative stress in follicular fluid and serum on the outcome of assisted reproductive procedures. In: 61st Annual Meeting of the American Society for Reproductive Medicine, October 15-20, Montreal, Canada, Abstract #05-A-318.