Our Research Fellowship and training opportunities represent one of the most active, state-of-the-art and comprehensive programs in human reproduction and infertility in the United States.

Our Fellows gain priceless research experience under the strong mentorship of world-renowned experts in reproductive medicine and biology at our Center in the Cleveland Clinic.
Our Mission

Our unique and methodical mentorship approach develops our researchers into independent and dynamic scientists of the highest caliber.

Our Research Fellows will

- Receive personalized mentoring by well-known experts in Reproductive Research
- Receive intensive hands-on training to master various basic and advanced research skills
- Learn the basics of Good Laboratory Practices
- Learn how to conduct a thorough literature review/critical analysis of published research
- Develop superior communication and presentation skills
- Participate actively in cutting-edge reproductive research
- Develop a strong foundation in human reproduction, assisted reproduction and infertility
- Learn the process of developing a novel scientific research idea
- Learn the techniques of writing a scientific bench research proposal
- Master the art of writing high quality scientific articles
- Publish research findings in top-tier scientific journals
- Learn the fundamentals of research involving human subjects
- Learn the basics of data management and biostatistical analysis
- Learn to be an independent, confident and resourceful researcher

Develop Valuable Research Skills

- Scientific integrity and accountability
- Professionalism and leadership
- Discipline and time management
- Motivation and self-direction
- Teamwork and collaboration
- Creativity and innovation
- Organization and methodical planning
- Effective interpersonal communication
- Critical thinking and judgement
- Problem solving and trouble shooting

Research & Training Methods

- Personal mentorship approach with daily supervision
- Practical demonstration and hands-on training in laboratory techniques
- Weekly research meetings for project planning and development
- On-site and online courses on various research procedures
- Training in literature review strategies and tools
- Training in writing of scientific articles for publication
- Lectures and presentations
- Journal Club and group discussions

Testimonials from Research Alumni:

“Once I joined as Post Doctoral Research Fellow under the leadership of Dr. Agarwal at CCF, it was the beginning of the new era in my academic career. And when I look back, it was the stay at CCF which molded me or I should say prepared me as a Scientist in Biomedical field. Even after my tenure was over at CCF, I am continuing as an academic collaborator with CRM, which has resulted in many collaborative publications in journals and as books. The program offers several learning opportunities in the form of class room teachings every week by experts from multidisciplinary units of the CCF, a rich diversity of clinical cases, multitude of opportunities in both clinical as well as basic research, interaction with students from across the globe, easy access to latest literature, expert research guides and many more. It was really one of my best experiences in life.”

Alex C. Varghese, PhD | 2007 – 08

“Once a member of CRM, always a member of CRM.” Any fellow who joins the CRM develops an eternal bond with the department. The huge amount of work I’ve learnt here is an invaluable asset for all times to come. Thank you CRM for believing in my capabilities and letting me accomplish all my dreams. I’m going back home successful and with a wide smile on my face.”

Arozia Moazzam, MD, PhD | 2010 – 11

“I was extremely fortunate to work with renowned experts in the field of Reproductive Medicine from the United States, Germany, and the U.K. as a part of their collaboration with the Center for Reproductive Medicine. The innovative research that we produced remains a cornerstone in the areas of sperm sorting and sperm genomic integrity. I was able to publish over 30 articles in high-impact Reproductive Medicine journals as well as book chapters. In addition, I was provided with the opportunity to attend several international conferences during which I presented over 60 oral and poster presentations.”

Tamer Said, MD, PhD | 2002 – 06

“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.”

Shyam Allamaneni, MD | 2003 – 04

“I sincerely believe that the Center for Reproductive Medicine at the Cleveland Clinic helped me accomplish my short-term and long-term goals. I would highly recommend this program for anyone who has a desire to learn and become successful in the world of academic medicine.”

Deepinder Goyal, MD | 2006 – 07

“My memories of the Cleveland Clinic are of being pushed to work harder and to never accept mediocre quality of work. This program teaches one to set high goals, and to become better at everything one does.”

Fabio Pasqualotto, MD, PhD | 1998 – 99

“Once a member of CRM, always a member of CRM.” Any fellow who joins the CRM develops an eternal bond with the department. The huge amount of work I’ve learnt here is an invaluable asset for all times to come. Thank you CRM for believing in my capabilities and letting me accomplish all my dreams. I’m going back home successful and with a wide smile on my face.”

Sandro Esteves, MD, PhD | 1995 – 96

“From the start I knew it was going to be a challenge to produce quality work. But the regular feedback and constructive criticism from the mentors helped me to improve my research and presentation skills. The program provided me with the opportunity to attend several international conferences in both the United States and abroad. The program has greatly impacted my professional career. I have since published over 30 articles in high-impact Reproductive Medicine journals as well as book chapters. In addition, I was provided with the opportunity to attend several international conferences during which I presented over 60 oral and poster presentations.”

Won Jun Choi, MD, PhD | 2004 – 05

“I was impressed by the systematic environment in the laboratory. Although I was unfamiliar with bench research at first, I was soon able to focus on my project without hesitation. The experiences in the lab gave me a strong belief that if I had an idea, I could make anything possible in that setting.”

Arozia Moazzam, MD, PhD | 2010 – 11

“The training that I received at your Program has made a profound impact on my professional career. My achievements in the field of male infertility and andrology have to be credited to the opportunity of being a Fellow at CRM. I truly believe that this is the best research fellowship program in reproductive medicine currently available both in the United States and abroad. The program not only met but exceeded its goals in every single aspect. It was a wonderful professional and personal experience for life.”

Sandro Esteves, MD, PhD | 1995 – 96
Who can apply?
Medical graduates, physicians, and scientists interested in conducting cutting-edge bench research in the field of Reproductive Medicine are welcome to apply. Applicants are selected on a competitive basis from a pool of candidates from around the world. Once approved, the candidate is appointed as a Research Fellow through the Cleveland Clinic’s Graduate Medical Education Program.

How to apply
When applying online, you will need:
- Recent curriculum vitae/resume
- 3 recent letters of recommendation from persons with first-hand knowledge of your work
- Copies of degrees/certificates, transcripts and TOEFL score
- Copy of passport and a passport-sized photo
- Proof of sponsorship/scholarship
- Address, telephone number, and Skype ID for a personal interview with the Director

Apply NOW!
- A limited number of Fellowship positions are available every year.
- Only the most qualified applicants with a genuine desire to learn and engage in real research will be considered.
- International candidates (scientists/physician researchers) are welcome to apply.
- Open call application process (no specific deadline).
- For more information on applying for the 2017 Research Fellowship, please click here.

Testimonials from Research Alumni:

"My overall experience was good. I gained a lot of experience and friends. I would like to thank Dr. Agarwal and CRM for everything they have done for me. It was an amazing experience - I learned a lot on a professional as well as a personal level."
Amani Shamarin, MD | 2011 – 12

"I consider my experience to be successful. I am very happy with the outcome, given the unique circumstances of having a limited amount of time to spare for research due to my heavy clinical responsibilities."

John McGill, MD | 2012 – 13

"I have benefited tremendously from the time, effort, thought and care that went into my training. The on-to-one mentorship and guidance was personalized to suit my strengths and weaknesses, and this truly made the difference. The great emphasis placed on personal growth made this a unique experience with a life-long impact."

Damayanthi Durairajianayagam, PhD | 2012 – 13

"I gained a lot of knowledge and skills in the field of male infertility. The year was very exciting and went by very fast. Honestly, I would not have gained this level of knowledge anywhere else in a year’s duration. My deepest gratitude to Dr. Agarwal for being a great mentor and a real friend. I truly appreciate and value everything I have learned from Dr. Agarwal and his team. It will remain a major contributor to my success and achievements."

Saad Alshahrani, MD | 2012 – 13

"I am sure that in no other lab in the world can a Fellow accomplish such a huge amount of work in such a short time. The Andrology Center is our family in the US and I always felt Dr. Agarwal’s support and encouragement starting from the first day."

Ahmet Ayaz, MSc (PhD student) | 2013 – 14

"Throughout my training, I received strong support from my mentors. They provided me with systematic training, very good suggestions for improvement and prompt feedback. The Fellows worked as a team and supported each other in all our work. I will never forget my experience here in CRM."

Güli Zhihong, MD | 2013 – 14

"This Fellowship has revealed my strengths and weaknesses - situations in which I shine and moments in which I flame out. Besides a valuable lesson on how to work hard and smart, I have learnt which features of mine I have to work on in order to become a better scientist as well as person."

Eva Tvrda, MSc (PhD student) | 2013 – 14

"I sincerely thank CRM for providing me with the chance to pursue my research project. I am also thankful to Dr. Sharma for his generous support and for taking the time to share his expertise and knowledge on my project. The training in the Andrology laboratory procedures was well organized and very satisfactory. The ART Training was very valuable to develop technical expertise in ART techniques. The highly qualified and experienced trainers made the training more beneficial. The 2014 Summer Internship Course was a great teaching experience to be a part of different training activities."

Sezgin Gunes, PhD | 2014
During their Fellowship year at ACRM, our Research Fellows receive valuable opportunities to participate in and...

- Serve as a Mentor/Advisor during the Summer Mentorship program in Reproductive Medicine held annually in June and July. Click here to read more about our Mentorship Program.

- Receive systematic and comprehensive hands-on ART Training completely free of charge during the Advanced Reproductive Techniques course held annually in Sept and Oct. Fellows who successfully complete their ART Training will receive a Certificate. Click here to read more about our ART Training Program.

Testimonials from Research Alumni:

“ACRM offers tremendous opportunities for writing scientific articles. It provides excellent platform to collaborate and get to know other scientists. I had a great opportunity participate in the summer internship program and mentor many medical students. At ACRM, I believe someone who is willing to work very hard and is very focused could achieve more in less time.”

Gulfam Ahmad, PhD | 2015

“My stay was very helpful in improving my bench research and scientific writing skills. The extensive quality control skills learnt in setting up and running of andrology laboratory will be valuable for my own research in India.”

Shubhadeep Roychoudhury, PhD | 2016

“I am short of words to express my gratitude for being accepted as a Raman Post-doctoral Fellow to work at American Center for Reproductive Medicine during 2014-15. I feel proud to be associated with this prestigious institution. I always felt to have an eternal bond with the ACRM. Here I am once again after one year feel the urge to be associated with ACRM for years to come.”

Luna Samanta, PhD | 2015

“ACRM offers tremendous opportunities for writing scientific articles. It provides excellent platform to collaborate and get to know other scientists. I had a great opportunity participate in the summer internship program and mentor many medical students. At ACRM, I believe someone who is willing to work very hard and is very focused could achieve more in less time.”

Gulfam Ahmad, PhD | 2015

“My stay was very helpful in improving my bench research and scientific writing skills. The extensive quality control skills learnt in setting up and running of andrology laboratory will be valuable for my own research in India.”

Shubhadeep Roychoudhury, PhD | 2016

“I am short of words to express my gratitude for being accepted as a Raman Post-doctoral Fellow to work at American Center for Reproductive Medicine during 2014-15. I feel proud to be associated with this prestigious institution. I always felt to have an eternal bond with the ACRM. Here I am once again after one year feel the urge to be associated with ACRM for years to come.”

Luna Samanta, PhD | 2015

“ACRM offers tremendous opportunities for writing scientific articles. It provides excellent platform to collaborate and get to know other scientists. I had a great opportunity participate in the summer internship program and mentor many medical students. At ACRM, I believe someone who is willing to work very hard and is very focused could achieve more in less time.”

Gulfam Ahmad, PhD | 2015

“My stay was very helpful in improving my bench research and scientific writing skills. The extensive quality control skills learnt in setting up and running of andrology laboratory will be valuable for my own research in India.”

Shubhadeep Roychoudhury, PhD | 2016
The American Center for Reproductive Medicine has collaborative relationships with many highly esteemed scientists and clinicians from over 18 countries around the world. Some of our renowned collaborators include:

**Research Collaborators**

- Muhammad Abu-Elmagd, PhD  
  Jeddah, Saudi Arabia
- Mohamed Araf, MD, PhD  
  Doha, Qatar
- Mourad Assidi, PhD  
  Jeddah, Saudi Arabia
- Nabil Aziz, FRCOG, MD  
  Liverpool, United Kingdom
- Ricardo Bertolla  
  Sao Paulo, Brazil
- Chak Lam Cho  
  Hong Kong
- Rima Dada, MD, PhD  
  New Delhi, India
- Nabil Aziz, FRCOG, MD  
  Liverpool, United Kingdom
- Peter Nagy, MD, PhD  
  Atlanta, Georgia
- Ramadan Abdou Saleh, MD  
  Sohag, Egypt
- Sandra Esteves, MD, PhD  
  Campinas, Brazil
- Jaime Gosálvez, PhD  
  Madrid, Spain
- Mourad Assidi, PhD  
  Jeddah, Saudi Arabia
- Raquel Cardona Maya, PhD  
  Medellín, Colombia
- Barbara Helm, PhD  
  Heidelberg, Germany
- Avraham Harlev, MD  
  Beer Sheva, Israel
- Armand Zini, MD, FRCS(C)  
  Montreal, Canada
- Damiyanthi Durairajaanayagam, PhD  
  Kuala Lumpur, Malaysia
- Haitham Elbardisi, MD  
  Doha, Qatar
- Sandro Esteves, MD, PhD  
  Campinas, Brazil
- Jaime Gosálvez, PhD  
  Madrid, Spain
- Mourad Assidi, PhD  
  Jeddah, Saudi Arabia
- Nabil Aziz, FRCOG, MD  
  Liverpool, United Kingdom
- Peter Nagy, MD, PhD  
  Atlanta, Georgia
- Sijo Parekattil, MD  
  Clermont, Florida
- Chak Lam Cho  
  Hong Kong
- Dolores Lamb, PhD  
  Houston, Texas
- Ahmad Majzoub, MD  
  Doha, Qatar
- Walter Cardona Maya, PhD  
  Medellín, Colombia
- Barbara Helm, PhD  
  Heidelberg, Germany
- Peter Nagy, MD, PhD  
  Atlanta, Georgia
- Ralf Henkel, MD  
  Belville, South Africa
- Damayanthi Durairajaanayagam, PhD  
  Kuala Lumpur, Malaysia
- Sheryl Homa, PhD  
  London, United Kingdom
- Haitham Elbardisi, MD  
  Doha, Qatar
- Sandro Esteves, MD, PhD  
  Campinas, Brazil
- Jaime Gosálvez, PhD  
  Madrid, Spain
- Mourad Assidi, PhD  
  Jeddah, Saudi Arabia
- Nabil Aziz, FRCOG, MD  
  Liverpool, United Kingdom
- Peter Nagy, MD, PhD  
  Atlanta, Georgia
- Sijo Parekattil, MD  
  Clermont, Florida
- Botros Zini, MD  
  Montreal, Canada
- Rahman Abdou Saleh, MD  
  Sohag, Egypt
- Luna Samanta, PhD  
  Orissa, India
- Reecha Sharma, MD, MS  
  Philadelphia, PA
- Suresh C Sikka, PhD  
  New Orleans, Louisiana
- Laura Sirot, PhD  
  Wooster, Ohio
- Rima Dada, MD, PhD  
  New Delhi, India
- Chak Lam Cho  
  Hong Kong
- Sheryl Homa, PhD  
  London, United Kingdom
- Haitham Elbardisi, MD  
  Doha, Qatar
- Sandro Esteves, MD, PhD  
  Campinas, Brazil
- Jaime Gosálvez, PhD  
  Madrid, Spain
- Mourad Assidi, PhD  
  Jeddah, Saudi Arabia
- Nabil Aziz, FRCOG, MD  
  Liverpool, United Kingdom
- Peter Nagy, MD, PhD  
  Atlanta, Georgia
- Sijo Parekattil, MD  
  Clermont, Florida
- Botros Zini, MD  
  Montreal, Canada
- Rahman Abdou Saleh, MD  
  Sohag, Egypt
- Luna Samanta, PhD  
  Orissa, India
- Reecha Sharma, MD, MS  
  Philadelphia, PA
- Suresh C Sikka, PhD  
  New Orleans, Louisiana
- Laura Sirot, PhD  
  Wooster, Ohio
- Rima Dada, MD, PhD  
  New Delhi, India

**Other Important Information**

Applicants should keep in mind that:

1. All appointments for Research Fellowship are for a minimum of 1 year and there is no financial support available.
2. Candidates must have independent funds such as a private or government scholarship to support living expenses in the United States.
3. Research appointments do not result in the award of a degree; successful completion of training results in the award of a Certificate of Research Training from ACRM.
4. Candidates registered with their parent institutions/medical schools for a Master’s/PhD/MD degree can select the Cleveland Clinic for their research studies requirements. Research findings, once completed in our Center, can be submitted towards fulfillment of a degree from the candidate’s own institution.

---

Anthony J Thomas Jr, MD | Retired Urologist, Head, Section of Male Infertility, Cleveland Clinic
Oxidative Stress and Infertility

The foremost goal of the Cleveland Clinic’s American Center for Reproductive Medicine is to better understand the causes of male infertility, to design studies aimed at improving semen quality, and to comprehend the underlying mechanism of male infertility associated with various clinical etiologies. Over the last 2 decades (1993 – 2016), ACRM has established itself as a leading laboratory in human infertility research, and particularly in the field of oxidative stress and infertility. ACRM Faculty and Researchers have published over 250 key articles in this field and is dedicated to disseminating its results. Many of these studies continue to be cited today. For a publication and citation report from the Scopus database, please click here.

Proteomics – Our Current Research Focus

While semen analysis remains a cornerstone of laboratory investigation for male infertility, a routine semen analysis alone does not provide information on the underlying molecular alterations in the seminal ejaculates of infertile men. Oxidative stress can affect sperm function and result in modification of proteins in the spermatozoa.

Proteomics involves careful analysis of proteins expressed by a cell or tissue during a particular given state. The study of protein expression has been the subject of intense research for many diseases during the past decade, with much interest devoted to reproductive implications. At present, more than 6,000 discrete proteins have been identified in semen, which represents about three quarters of the entire sperm proteome.

Proteins are of significant importance in cellular remodeling events and aberrant expression could lead to marked defects in sperm function. In cases of those diagnosed with male infertility, differential proteomics may be utilized to study the alteration in protein expression of either the spermatozoa or seminal plasma of these men.

The goal of our proteomics studies is to identify proteins that may be altered or differentially expressed in a given patient population that can serve as potential biomarkers in the etiology of infertility.

Why Proteomics?

- Examination of sperm function through proteomics will improve on conventional semen analysis in the workup of male infertility.
- Identification of sperm specific proteins via proteomics would provide a further understanding of their function pertaining to fertility in the male.
- The developing field of sperm proteomics has the further advance potential to our knowledge of the numerous cellular pathways necessary for sperm function and to help identify those with the greatest biological significance in men suffering from infertility.
- Proteomics holds the key to the development of novel diagnostic and prognostic protein biomarkers for the evaluation of infertile men by comparing the differential expression of sperm and seminal plasma proteins in fertile vs. infertile men.
- The combined application of proteomics and bioinformatics tools can identify major alterations in the proteins involved in various clinical diagnosis of male infertility.
How Proteomics Studies Work

- Proteins in spermatozoa or seminal plasma samples are separated into peptides, and their expression quantified and subsequently identified using gel electrophoresis followed by a liquid chromatography – tandem mass spectrometry approach.

- Further identification of proteins separated by LC-MS/MS can be achieved using Mascot and Sequest programs. Furthermore, differentially affected processes, pathways and cellular distribution as well as protein protein interactions can be identified via the use of available functional bioinformatics analysis such as Gene Ontology (GO) annotations and proprietary software packages such as Ingenuity Pathway Analysis (IPA).

- The potential proteins that have been identified as differentially expressed are further validated by Western Blot, ELISA or immunohistochemistry to identify the biomarker status of the proteins in various pathological conditions attributed to oxidative stress or in patients with other etiologies.

- Differentially expressed proteins present in infertile men with a particular diagnosis that are involved in sperm function, sperm motility and other functions related to reproduction may serve as novel biomarkers in the identification of that certain disease.

- These biomarkers may help urologists identify better options for clinical management of infertile men.

Proteomics and Beyond

Our recent proteomics research has demonstrated differential protein expression over controls in a variety of situations that include idiopathic male infertility, varicocele, azoospermia and assisted reproductive technology failure. This early work allows the development of methods to study male infertility, which was previously believed to be idiopathic, and ultimately to stratify interventions based on laboratory results.

A list of our recent proteomic publications is featured on pages 8-9. Through these preliminary studies, we have established a platform to utilize proteomic tools to unravel the underlying mechanisms of these etiologies of male infertility. Results of these proteomics studies could eventually lead to the identification of appropriate antioxidant therapy to alleviate oxidative stress-related infertility.

While we continue to rely on conventional semen parameters in the evaluation of the subfertile male, proteomic analysis holds great promise as a diagnostic tool in the reproductive medicine armamentarium. With the identification of novel biomarkers through proteomic studies, clinical tests and treatments for sperm dysfunction may be developed to potentially help infertile couples.

2016 Key Publications from ACRM

In addition to proteomics studies, a selection of highly cited articles and other recent important studies published by our Center is featured on pages 10-14.

For a comprehensive list of our research publications in the ResearchGate database, please click here.
Selected Research on Proteomics and Infertility Published by Our Center


Our Research Collaborators

Belinda Willard, PhD
Director, Proteomics Core
Lerner Research Institute

Banu Gopalan, PhD
Director of Bioinformatics Consulting Services, Yorg Corporation
Plano, Texas

Jeff Hammel, MS
Senior Biostatistician
Cleveland, Ohio

Amy Moore, BA
Manager, Medical Editing Services, Education Institute
Cleveland Clinic

Dheepa Balasubramanian, PhD
Molecular Geneticist
Case Western Reserve University
Cleveland, Ohio

The combination of things I learned at the program truly makes it a unique program. It is multi-faceted and thus a valuable asset to any career path.
Julia Tsinberg, BS, USA
Alumni 2014

The combination of things I learned at the program truly makes it a unique program. It is multi-faceted and thus a valuable asset to any career path.
Julia Tsinberg, BS, USA
Alumni 2014
MiOXSYS: a novel method of measuring oxidation reduction potential in semen and seminal plasma

The objectives of this study were to: (i) describe a protocol measuring the oxidation-reduction potential (ORP) by MiOXSYS Diagnostic application of oxidation-reduction potential assay for measurement of oxidative stress: clinical utility in male factor infertility

Ashok Agarwal1, Shubhadeep Roychoudhury2, Rakesh Sharma1, Sajal Gupta1, Ahmad Majzoub1, Edmund Sabanegh1
1American Center for Reproductive Medicine, Cleveland Clinic; 2Department for Urology, Cleveland Clinic

Should we evaluate and treat sperm DNA fragmentation?

Ashok Agarwal1, Chak-Lam Chu3, and Sandro C. Esteves1
1American Center for Reproductive Medicine, Cleveland Clinic

Role of antioxidants in male infertility

Ashok Agarwal1, Ahmad Majzoub2
1American Center for Reproductive Medicine, Cleveland Clinic; 2Department for Urology, Cleveland Clinic

Meet Our Research Staff

Rakesh Sharma, PhD | Associate Professor and Research Coordinator

Rakesh Sharma is an Associate Professor at the Lerner College of Medicine of Case Western Reserve University and is the Coordinator of the Andrology Center and the Center for Reproductive Medicine. Dr. Sharma has published over 200 scientific papers in peer-reviewed scientific journals, authored 50 book chapters, and presented over 390 abstracts at both national and international scientific meetings. He is an investigator on 60 research grants. Dr. Sharma is a recipient of the American Foundation for Urologic Disease (AFUD) Fellow Award, Merlyn E. Bumpus Junior Investigator Award, Research Excellence Award, Research Fellow of the Year Award, Mentor Recognition Award, Scientist of the Year Award, Excellence in Male Infertility Research Award and the 2012-2016 Start Award from the American Society for Reproductive Medicine. Dr. Sharma’s current research interests include the role of free radicals in the pathophysiology of male and female infertility, oxidative stress and DNA integrity, alterations in oxidative stress-related proteins, sperm proteomics and bioinformatics tools, fertility preservation in patients with cancer, and the efficacy of certain antioxidants in improving male fertility.

Sajal Gupta, MD, MS, TS (ABB) | Assistant Professor and Assistant Research Coordinator

Sajal Gupta is an Assistant Professor of Surgery at the Lerner College of Medicine of Case Western Reserve University and is the Director of the Andrology Center and Assistant Coordinator of Research at the Center for Reproductive Medicine. She obtained a Masters in Clinical Embryology and Andrology from The Johns Hopkins Institute for Reproductive Medicine in Virginia. Dr. Gupta has published over 60 reviews and research articles in peer-reviewed scientific journals, authored a dozen book chapters and presented about 55 abstracts at both national and international scientific meetings. She is an investigator on 18 research grants. Dr. Gupta is a recipient of the Award for Highest Productivity in Female Infertility Research, Research Fellow of the Year Award, and Award for Excellence in Female Infertility Research. Her current research interests include the role of free radicals in male and female infertility, endometriosis, assisted reproductive techniques and gamete cryobiology.
20 Most Cited Articles Published by Our Center according by Google Scholar

Agarwal A, Saleh RA, Bedaiwy MA
Fertil Steril. 2003 Apr; 79(4):829-43. PMID: 12749418 Citation count: 1015

Saleh RA, Agarwal A
J Androl. 2002 Nov-Dec; 23(6):737-52. PMID: 12399514 Citation count: 452

Sharma RK, Agarwal A
Urolgy. 1996 Dec; 48(6):835-50. Review. PMID: 8973665 Citation count: 803

Agarwal A, Makker K, Sharma R

Said TM
Human Reproduction Update 2003 Jul-Aug; 9(4):331-45. PMID: 12926527 Citation count: 601

Fellows in Andrology with Highest Research Productivity

Sandro C. Esteves, MD, PhD
Campinas, Brazil
Alumni 1995-96
s.esteves@androfertil.com.br
Publications with ACRM: 40*

Tamer M. Said, MD, PhD
Toronto, Canada
Alumni 2002-06
tamersaid@repromedltd.com
Publications with ACRM: 32*

Shyam Sunder Rao Allamaneni, MD
Cincinnati, Ohio, USA
Alumni 2003-04
shyamrasa@yahoo.com
Publications with ACRM: 19*

Reda Z. Mahfouz, MD, PhD
Cleveland, Ohio, USA
Alumni 2006-2010
mahfour@ccf.org
Publications with ACRM: 19*

Jorge Hallak, MD, PhD
São Paulo, Brazil
Alumni 1996-98
hallakj@androscience.com.br
Publications with ACRM: 18*

*These publications include only peer-reviewed, PubMed-indexed research articles that were either published during the Fellow’s stint at Cleveland Clinic or subsequently in collaboration with ACRM Faculty (search date Oct 30, 2016). For a comprehensive list of publications of these alumni with ACRM, click here.

One of the best parts of this internship was meeting new people from different countries. I enjoyed the scientific writing aspect because it allowed me to read articles in a more critical and focused way. As for bench research, it was my first hands-on experience, and now I am educated in that aspect too. I couldn’t have asked for a better experience or people to help guide me.

Haya AlFaris, AlFaisal University, Saudi Arabia
Alumni 2016

Research Fellowship Brochure
Research Overview

20 Most Cited Articles from Our Center

Hendin BN, Kolettis PN, Sharma RK, Thomas AJ Jr, Agarwal A
J Urol. 1999 Jun; 161(6):1831-4. PMID: 10332447 Citation count: 347

Pasqualotto FF, Sharma RK, Nelson DR, Thomas AJ Jr, Agarwal A
Fertil Steril. 2000 Mar; 73(3):459-64. PMID: 10688996 Citation count: 319

Naughton CK, Nangia AK, Agarwal A
Hum Reprod Update. 2001 Sep-Oct; 7(5):473-81. PMID: 11556494 Citation count: 337

Moustafa MH, Sharma RK, Thornton J, Mascha E, Abdel-Hafez MA, Thomas AJ Jr, Agarwal A
Hum Reprod. 2004 Jan; 19(1):129-38. PMID: 14688171 Citation count: 341

Sharma RK, Pasqualotto FF, Nelson DR, Thomas AJ, Agarwal A
Hum Reprod Update. 2001 Sep-Oct; 7(5):473-81. PMID: 11556494 Citation count: 337


Fellows in Andrology with Highest Research Productivity

Ramadan Abdou Saleh, MD
Sohag, Egypt
Alumni 1999-2002
saleh2010@yahoo.com
Publications with ACRM: 17*

Alaa Hamada, MD
Boston, MA, USA
Alumni 2010-12
ala1977hh@gmail.com
Publications with ACRM: 14*

Alex C. Varghese, PhD
Kerala, India
Alumni 2007-08
alexc@lifeinvitro.com
Publications with ACRM: 12*

Kiran P. Nallella, MD
Warangal, India
Alumni 2003-05
nkiran_prasad@yahoo.com
Publications with ACRM: 10*

Marcello Cocuzza, MD, PhD
São Paulo, Brazil
Alumni 2006-07
mcocuzza@uol.com.br
Publications with ACRM: 10*

Nisarg R. Desai, MD
Alton, Illinois, USA
Alumni 2007-08
nisargdesai1@yahoo.com
Publications with ACRM: 10*

The program taught me a lot of things that I wasn’t aware of such as time management, presentation skills, the importance of learning how to search and write a scientific paper, and more. Most importantly, this program made me stronger, more professional, and a better leader.

Ali AlGonaim, Sattam bin Abdulaziz University, Saudi Arabia
Alumni 2015

*These publications include only peer-reviewed, PubMed-indexed research articles that were either published during the Fellow’s stint at Cleveland Clinic or subsequently in collaboration with CRM Faculty (search date Jan 30, 2015). For a comprehensive list of publications of these alumni with CRM, click here.
The research program at ACRM is very unique and offers diverse research experiences. I grew both professionally and personally under the ACRM Staff's mentorship.

Reecha Sharma, MD, MPH, USA
Alumni 2010-2011

20 Most Cited Articles from Our Center

Certificate of Training Award Ceremony

Andrology Open House, April 2014

Medical technologists conducting lab testing

The Accuri BD Flow Cytometer used to test sperm DNA damage by TUNEL damage
Selected Recent Publications from ACRM


Proteomic signatures of infertile men with clinical varicoceles and their validation studies reveal mitochondrial dysfunction leading to infertility


Spermatozoon protein alterations in infertile men with bilateral varicocele


Role of antioxidants in male infertility

**Agrawal A, Majmudar A. BJU Knowledge. 2016 Dec 1-9.**

Infertility


Abstinence Time and Its Impact on Basic and Advanced Semen Parameters

**Agrawal A, Majmudar A. BJU Knowledge. 2016 Dec 1-9.**
Selected Recent Publications from ACRM


Deterioration of semen quality is more pronounced in moderate and heavy smokers. Our results suggest that cigarette smoking has an overall negative effect on semen quality. Approximately 37% of men of reproductive age smoke cigarettes, with Europe having the highest tobacco use among all the World Health Organization (WHO) regions. This is the first meta-analysis to provide a comprehensive view of the effect of smoking on semen quality. Cigarette smoking reduces sperm concentration, sperm motility, and sperm morphology. A large study of fertile men across seven countries also demonstrated that both sperm concentration and sperm motility in smokers were reduced compared with non-smokers. Furthermore, we also conducted a literature search to evaluate the effect of smoking on the World Health Organization (WHO) semen criteria. The top five criteria of the WHO semen criteria were significantly reduced in smokers compared with non-smokers. Based on the direct effect of smoking on semen quality, the role of this exposure in face of new WHO methods needs to be clarified.

Introduction

The role of cigarette smoking in semen quality has been extensively studied and the findings are mixed. The interpretation of these results is complicated by the lack of standardisation of smoking definitions and the lack of a consistent number of semen samples analysed. Despite the significance of this exposure, there is a lack of a systematic review of the current evidence to determine the overall effect of cigarette smoking on semen quality.

Methods

We conducted a systematic review, followed by a meta-analysis, of observational studies that investigated the effect of smoking on semen quality. A total of 9034 men were involved in the meta-analysis; varicocele was associated with reduced sperm concentration (mean difference: −61.45, 95% confidence interval: −75.13 to −47.77, I² = 87%); varicocele was associated with reduced sperm motility (mean difference: −4.63, 95% confidence interval: −5.30 to −3.96, I² = 98%); and varicocele was associated with reduced sperm morphology (mean difference: −26.67%, 95% confidence interval: −34.96% to −18.38%, I² = 84%).

Summary

Cigarette smoking affects semen quality and is a major risk factor for idiopathic male infertility. Cigarette smoking reduces sperm concentration, sperm motility, and sperm morphology. A large study of fertile men across seven countries also demonstrated that both sperm concentration and sperm motility in smokers were reduced compared with non-smokers. Furthermore, we also conducted a literature search to evaluate the effect of smoking on the WHO semen criteria. The top five criteria of the WHO semen criteria were significantly reduced in smokers compared with non-smokers. Based on the direct effect of smoking on semen quality, the role of this exposure in face of new WHO methods needs to be clarified.

Conclusion

Cigarette smoking negatively affects semen quality and increases the risk of idiopathic male infertility. Therefore, smoking cessation should be recommended to all men planning to father children.
**Recent Researchers**

**Dr. Alaa Hamada**, A Clinical Fellow in Robotic and Laparoscopic Uro- oncology at St. Elizabeth Medical Center, Tufts University, Boston, MA. He graduated from Al- Nahraim Teaching Hospital in Baghdad. He was an Observer in Urology at Cleveland Clinic from 2010 to 2011. He was appointed as a Research Fellow in Andrology at the American Center for Reproductive Medicine from 2012. He published 14 original peer reviewed research articles, books chapters and reviews.


**Dr. Saad Alishahrami**, an Assistant Professor in Urology at the Salman Bin Abdulaziz University, Saudi Arabia. Saad was a Research Fellow in Andrology at the American Center for Reproductive Medicine from 2012 to 2013. Saad’s main interest is in Andrology. In one of his studies, at Cleveland Clinic, Saad examined the effect of paternal age on semen quality in infertile men. His results showed that advanced paternal age increases the risk of sperm DNA damage.


**Ahmet Ayaz** did his doctorate from the Department of Bioengineering, Yıldız Technical University, Istanbul. Ahmet was a Research Fellow in Andrology at the American Center for Reproductive Medicine from 2013 to 2014. He studied the effect of increasing presence of ROS in the seminal ejaculate on the human spermatozoa proteome in male infertility patients. The goal of his unique study was to understand the impact of precise modulation of ROS level on sperm protein alterations and biological functions on signaling pathways.


**Dr. Cui Zhihong** is an Associate Professor in the Institute of Toxicology, Chongqing, China. Zhihong was a Research Fellow in Andrology at the American Center for Reproductive Medicine from 2013 to 2014. The goal of one of her studies at Cleveland Clinic was to identify differentially expressed proteins in immature and mature ejaculated spermatozoa after density gradient separation. Her results provide important information about the proteins critical to spermatozoa maturation, motility and fertilization capacity.


**Helena Malvezzi**, an Embryologist at the Sirio Libanês (Syrian-Lebanese) Hospital, São Paulo, Brazil since 2013. She completed her Masters in Biology of Reproduction in 2011 from the University of São Paulo and did a Specialization in Human Reproduction at the Sapienza Institute, São Paulo. Helena was a Research Fellow from 2012 to 2013 at the American Center for Reproductive Medicine. In one of her studies at Cleveland Clinic, Helena studied the sperm quality after density gradient centrifugation with three commercially available sperm wash media. Her results showed that the extent of DNA damage in these media was comparable, but sperm processed using two of the commercial sperm media gave better motility.


**Dr. Cui Zhihong** is an Associate Professor in the Institute of Toxicology, Chongqing, China. Zhihong was a Research Fellow in Andrology at the American Center for Reproductive Medicine from 2013 to 2014. The goal of one of her studies at Cleveland Clinic was to identify differentially expressed proteins in immature and mature ejaculated spermatozoa after density gradient separation. Her results provide important information about the proteins critical to spermatozoa maturation, motility and fertilization capacity.


**Dr. Shubhadeep Roychoudhury** is an Assistant Professor at the Department of Life Science and Bioinformatics, Assam University, Silchar, India. He did his Masters and PhD in Biotechnology from Slovakia. Shubhadeep was a Research Fellow at the American Center for Reproductive Medicine, Cleveland Clinic from 2015 to 2016. He evaluated total antioxidant capacity to assess oxidative stress in male factor infertility. He also researched oxidation reduction potential as a new marker of oxidative stress in male infertility evaluation.


**Dr. Cui Zhihong** is an Associate Professor in the Institute of Toxicology, Chongqing, China. Zhihong was a Research Fellow in Andrology at the American Center for Reproductive Medicine from 2013 to 2014. The goal of one of her studies at Cleveland Clinic was to identify differentially expressed proteins in immature and mature ejaculated spermatozoa after density gradient separation. Her results provide important information about the proteins critical to spermatozoa maturation, motility and fertilization capacity.


**Dr. Shubhadeep Roychoudhury** is an Assistant Professor at the Department of Life Science and Bioinformatics, Assam University, Silchar, India. He did his Masters and PhD in Biotechnology from Slovakia. Shubhadeep was a Research Fellow at the American Center for Reproductive Medicine, Cleveland Clinic from 2015 to 2016. He evaluated total antioxidant capacity to assess oxidative stress in male factor infertility. He also researched oxidation reduction potential as a new marker of oxidative stress in male infertility evaluation.


**Dr. Cui Zhihong** is an Associate Professor in the Institute of Toxicology, Chongqing, China. Zhihong was a Research Fellow in Andrology at the American Center for Reproductive Medicine from 2013 to 2014. The goal of one of her studies at Cleveland Clinic was to identify differentially expressed proteins in immature and mature ejaculated spermatozoa after density gradient separation. Her results provide important information about the proteins critical to spermatozoa maturation, motility and fertilization capacity.


**Dr. Shubhadeep Roychoudhury** is an Assistant Professor at the Department of Life Science and Bioinformatics, Assam University, Silchar, India. He did his Masters and PhD in Biotechnology from Slovakia. Shubhadeep was a Research Fellow at the American Center for Reproductive Medicine, Cleveland Clinic from 2015 to 2016. He evaluated total antioxidant capacity to assess oxidative stress in male factor infertility. He also researched oxidation reduction potential as a new marker of oxidative stress in male infertility evaluation.

Recent Researchers

Dr. Sezgin Gunes received her PhD in Medical Biology and Genetics from the Faculty of Medicine, Ondokuz Mayis University, Turkey where she is currently an Associate Professor of Medical Biology. Sezgin was a Research Fellow in Andrology at the American Center for Reproductive Medicine from June to Nov 2014. During her stay in ACRM, Sezgin was involved in a bench research study on “Methylation Profile of Catalase (CAT) Gene Promoter in Oligozoospermic Infertile Males Exhibiting Oxidative Stress”. She also published an article on spermatogenesis, DNA damage and DNA repair - mechanisms in male infertility.


Dr. Avraham Harlev is a Senior Physician in the Fertility and IVF Unit, Soroka University Medical Center, Israel. He is a Lecturer in the Faculty of Medicine and Health Sciences, Ben-Gurion University of the Negev, Beer Sheva, Israel. Avi was a Research Fellow in Andrology at the American Center for Reproductive Medicine from 2014 to 2015. He conducted advanced research in male infertility and andrology at ACRM. He researched the role of smoking on male infertility, using an evidence based approach.

Harlev et al. Expert Opin Ther Targets. 2015;19:1447-64. PMID: 26256952

Dr. Luna Samanta is a Professor and Head of the Department of Zoology, Ravenshaw University, Cuttack, Orissa, India. She was appointed as a research fellow at the American Center for Reproductive Medicine, from 2014 to 2015. Luna’s current research interests include research in proteomics and male infertility. She validated the proteomic results by studying the localization and levels of expression of candidate proteins in spermatozoa and seminal plasma of varicocele patients. She also published a review on post-translational modifications of sperm proteome.


I will always remember Dr. Agarwal’s words: “Nothing is impossible in this world. There is always a way.” I repeat his motto in my mind when faced with challenges - this greatly increased my confidence and helped me overcome every hurdle. Nilofer Surti, MBBS, MD, India Alumni 2008
Dr. Damayanthi Durairajayagam is a Senior Lecturer in Physiology at the Faculty of Medicine, MARA University of Technology, Malaysia. Dama received a Fulbright Research Scholar Award to conduct advanced research at the American Center for Reproductive Medicine, Cleveland Clinic. She was a Research Fellow from 2012 to 2013. Dama’s research at Cleveland Clinic examined the sperm protein profiles of infertile men with either unilateral or bilateral varicocele. Results of these prospective studies could help identify the differential pathways that lead to infertility based on the uni- or bilateral presence of varicocele in these men. Dama has over half dozen original peer reviewed articles published on varicocele and proteomics.


Dr. Eva Tvrdá received her Masters in Biotechnology in 2009 and a PhD in 2014 from the Slovak University of Agriculture in Nitra, Slovak Republic. Eva received a Fulbright Research Scholar Award to conduct advanced research at the American Center for Reproductive Medicine, Cleveland Clinic. She was a Research Fellow in Andrology at ACRM from 2013 to 2014. Her novel research explored the proteins as a possible critical link between testicular cancer and male infertility. She also examined the relationship between teratozoospermia, seminal oxidative stress and male infertility.


Dr. Gulfam Ahmad is an Assistant Professor of Physiology, University of Health Sciences, Lahore, Pakistan. He obtained his Master in Clinical Embryology from University of Paris and PhD in Reproductive Physiology from the University of Toulouse, France. Gulfam received a Fulbright Research Scholar Award to conduct advanced research at the American Center for Reproductive Medicine, Cleveland Clinic. He was a Research Fellow in Andrology at ACRM from 2014 to 2015. Gulfam conducted research on proteomic alterations in infertile men with testicular cancer. He also examined the role of ascorbic acid in reducing redox potential in heat induced oxidative stress.

Publications by the American Center for Reproductive Medicine from 1993 to 2016 is available. For an up to date list of our publications, kindly visit us on Center’s website. The Center’s website has been ranked No. 1 for research in reproductive medicine and andrology since 2001 by Google and other top search engines, attracting close to 969,313 visitors to date.

Over the past 23 years, more than 500 physicians, scientists, biologists and medical/pre-med students from over 50 countries worldwide have received their research and ART training at the Center for Reproductive Medicine.

For an up to date list of our publications, kindly visit us on ResearchGate. A Scopus Citation Report of our Research Publications by the American Center for Reproductive Medicine from 1993 to 2016 is available here.

We Have What You Need To Research Your Way to the Top!

The Laboratories
Research and Clinical Laboratories occupy over 5000 square feet of workspace with state-of-the-art instruments and facilities for advanced research in proteomics of male infertility and molecular markers of oxidative stress and DNA integrity.

Equipment
Instruments available in our facility include: computer assisted semen analyzers, luminometer for oxidative stress measurements, Accuri BD C6 flow cytometer, ChemiDoc Imager and equipment for western blotting, culture room equipped with a sterile hood, several incubators, teaching and regular microscopes, and Narishige micromanipulators fitted on an inverted phase-contrast microscope, spectrophotometers, ELISA plate reader, centrifuges, liquid nitrogen storage tanks, programmable freezers, cold room, etc.

Core Laboratories
Our research laboratories has ready access to over a dozen highly-specialized core laboratories within the Cleveland Clinic Lerner Research Institute. These include: proteomics, metabolomics, genomics, molecular biotechnology, molecular screening, flow cytometry, mass spectrometry, translational research and imaging, etc.
For more information on these core laboratories, please visit: http://www.lerner.ccf.org/services.

IT Equipment
Along with office supplies, the office space for Fellows is equipped with over 2 dozen computers with laser printers, scanners, copiers, and all the necessary software such as EndNote for preparation of references for publication. All computers in the Center are connected to the Cleveland Clinic’s intranet that provides direct access to most online journals hosted by the Cleveland Clinic Alumni Library related to the field of medicine, urology, reproductive medicine, andrology, ob-gyn, etc.

Teamwork
A large collection of scientific journals, print and electronic journals/books, and other databases are available through the resourceful Cleveland Clinic Alumni Library. Specialized Medical Librarians are ever willing to help in research and use of electronic databases. Statistical research support is readily available from a team of biostatisticians working in the Department of Quantitative Health Sciences (QHS). Services for the design and creation of medical illustration for publication purposes are provided by the experts at The Center for Medical Art and Photography (CMAP) Arts and Photo. These artists also aid in the preparation of research posters and lecture slides for presentations at national meetings.

Take a sneak peek into our research laboratories.

Our Institution
Cleveland Clinic is ranked as one of America’s Top 2 Hospitals by U.S. News & World Report. Located in Cleveland, Ohio, Cleveland Clinic is a nonprofit, multispecialty academic medical center that integrates clinical and hospital care with research and education.

Founded in 1921 by four renowned physicians with a vision of providing outstanding patient care based upon the principles of cooperation, compassion and innovation, it is the second largest group practice in the world with 3,432 physicians and scientists practicing and researching in more than 130 medical specialties. Today with more than 1400 beds on the Cleveland Clinic main campus and 4,450 beds system-wide, Cleveland Clinic is one of the largest and most respected hospitals in the country.

In addition to the main hospital located near Cleveland’s historic University Circle, the Cleveland Clinic operates nine regional hospitals, a children’s hospital, and 18 full-service family health centers in Ohio, as well as hospitals in Florida, Las Vegas, Canada, and Abu Dhabi, employing more than 49,000 individuals and providing global world class medical care. Last year alone, 6.62 million patients from 180 countries and all 50 states received their care at the Cleveland Clinic.

The main hospital campus, located near downtown Cleveland, occupies 167 acres and 44 buildings. It includes a hospital, an outpatient clinic, a children’s hospital, cancer institute, eye institute, research institute, a medical school and supporting labs and facilities.

To learn more, visit www.clevelandclinic.org
Our researchers have:
• Published numerous articles in reputed scientific journals, including over 550 peer reviewed original research articles and reviews, and more than 150 book chapters in specialized medical books. To learn more and view our publications, click here.
• Presented over 750 research papers at national and international scientific meetings. To read, click here.
• Edited over 30 highly acclaimed medical textbooks or manuals pertaining to human reproduction, male infertility, ART, fertility preservation, sperm chromatin damage and antioxidants. To read more, click here.
• Serve as members of editorial boards of esteemed medical journals, such as:

Did You Know?

- Advances in Bioscience and Clinical Medicine
- Andrology
- Asian Journal of Andrology
- Fertility and Sterility
- Human Andrology
- Indian Journal of Experimental Biology
- Human Fertility
- International Brazilian Journal of Urology
- Journal of Reproductive and Stem Cell Biotechnology
- Translational Andrology and Urology
- Reproductive BioMedicine Online
- Reproductive Biology & Endocrinology
- World Journal of Men’s Health

Meet the Director

Ashok Agarwal, PhD, HCLD (ABB), EMB (ACE) | Professor and Director

Ashok Agarwal is the Director of Research at the Center for Reproductive Medicine and the Director of the Andrology Center. He holds these positions at Cleveland Clinic, where he is a Professor at the Lerner College of Medicine at Case Western Reserve University and, since 1993, Senior Staff in the Glickman Urological and Kidney Institute. Dr. Agarwal did his post-doctorate training in Reproductive Biology under a fellowship from The Rockefeller Foundation at Harvard Medical School in Boston, Massachusetts. He was an Instructor in Surgery and then an Assistant Professor of Urology at Harvard Medical School from 1988 to 1992. Dr. Agarwal was appointed in 1993 by the Cleveland Clinic Foundation, Ohio, as the Head of the Clinical Andrology Center, which over the years under his leadership, has become a center of excellence for the diagnosis of male infertility and fertility preservation of men with oncological conditions in the United States. He is board certified as a Clinical Laboratory Director in Andrology by the American Board of Bioanalysis and serves as an Inspector for the College of American Pathologists “Reproductive Laboratory Program” for accreditation of Andrology & IVF Laboratories.

Dr. Agarwal’s h-index is 103 (Google Scholar) and 72 Web of Science and 79 on Scopus respectively, while its citation count is nearly 40,057 on Google Scholar as of Oct’ 2016. His RG score is 52.47 on 1,727 publications (750 articles, 30 books, 150 chapters and 750 conference papers). Dr. Agarwal is ranked as the #1 Author in Andrology/Male Infertility and ART-related research, based on a Global Ranking of Authors in Andrology or Male Infertility report employing exhaustive searches of the Scopus database. Dr. Agarwal received the 2011 and 2012 Innovator Award for the development of “Remote Sperm Banking Kits” from the Cleveland Clinic Innovations. He was thrice-awarded the Scholarship in Teaching Award in 2011, 2013 and 2014 by the Case Western Reserve University Medical School in recognition of his innovative Summer Internship Course in Reproductive Medicine, which has been held annually since 2008. Dr. Agarwal was recognized by a second Scholarship in Teaching Award in 2013 and 2014 for his distinctive Hands on Training Program in Advanced Reproductive Techniques, which has been conducted yearly since 2003. Dr. Agarwal’s current research interests are identifying biological markers of oxidative stress, DNA damage and apoptosis using proteomic research tools and bioinformatics analysis as well as preserving fertility in patients with cancer. He is actively involved in laboratory and clinical studies assessing the efficacy of certain antioxidants in improving the fertility of male patients.

American Center for Reproductive Medicine (ACRM)

About

Our vision
To be a premier center for researchers interested in human reproduction, providing them individualized mentoring and high quality training opportunities that lead to technical, analytical, and intellectual expertise in the field.

Our mission
To conduct cutting-edge research in human reproduction, as well as the causes of infertility, and to train physicians and scientists to advance the understanding of reproductive sciences.

Our values
We believe in integrity, excellence, innovation, accountability, commitment, perseverance, teamwork and collaboration.

Our Story
Founded in 1993, the ACRM offers research fellowships, hands-on training in human assisted reproduction, and summer mentorship opportunities. We also offer diagnostic & therapeutic services for infertile couples and cancer patients. In the past 24 years, more than 1,000 scientists, physicians, researchers, reproductive medicine professionals and students from all over the world have trained at our Center.

The spermatozoa and oocyte represent the personalized, hands-on ART training course offered annually since 2003 and the opportunity to learn the latest techniques in the fast changing subspecialty of Assisted Reproduction at one of the world’s premier ART Training Centers. 175 candidates from more than 32 countries have participated in this course.

The microscope and a hand holding the test tube represent the routine and advanced diagnostic testing offered to infertility patients at the Andrology Center and Reproductive Tissue Bank, one of the largest state-of-the-art facilities in the country. Our staff has more than 3 decades of experience in assisting patients with male infertility.

The DNA strand represents the essence of the research fellowship in human reproduction, andrology and male infertility, offered at the ACRM since 1993. More than 500 scientists/physicians from over 50 countries have trained at the ACRM. The Center is currently focusing on the use of proteomics and bioinformatics to elucidate biomarkers of male infertility.

The open book and beaker represent the Summer Internship program, offered annually since 2008. Nearly 200 interns have experienced bench research and scientific writing under the personalized mentorship of scientists/physicians and reproductive biologists worldwide.
Cleveland — a great place to call HOME!

Cleveland is the second largest city in the state of Ohio, after Cincinnati. Located on the southern shores of Lake Erie, Cleveland lies at the outflow of the Cuyahoga River into Lake Erie. The main campus of Cleveland Clinic is situated 5 miles east of downtown Cleveland. Case Western Reserve University and University Hospitals are within one mile of Cleveland Clinic. Cleveland State University and John Carroll University are also within a short distance of the Cleveland Clinic main campus. Nearby the Cleveland Clinic is University Circle, which serves as the cultural, medical and education center of Cleveland and Northeast Ohio. Medical research in the University Circle institutions places Cleveland as one of the major medical research environments in the country.

University Circle is also the home to the Cleveland Museum of Art, the Cleveland Institute of Music, the Cleveland Institute of Art, and the Museum of Natural History. The Cleveland Museum of Art houses one of the country’s most highly acclaimed art collections. The world-famous Cleveland Orchestra, performs regularly in the elegant Severance Hall. Playhouse Square is the home to several large theaters that host traveling Broadway plays and various other performances.

The University Circle area is walking distance from Cleveland’s historic Little Italy with its brick streets, a quaint and charming area of intimate Italian restaurants, antique and craft shops, and art galleries. The Coventry Village area is close to the Clinic’s main campus and popular with its shops and restaurants.

Cleveland hosts the Rock and Roll Hall of Fame and Museum, and the Great Lakes Science Center. Outdoor enthusiasts of all ages enjoy the ‘Emerald Necklace’, the Cleveland Metroparks network of parks that encircles the city, which offer a variety of recreational opportunities. When it comes to professional sports, Cleveland is the proud home to the Browns football, Cavaliers basketball, Indians baseball and Lake Erie Monsters hockey teams respectively. As the Great Lakes city on America’s North Coast, Cleveland offers abundant lakeshore for different activities.

Cleveland and its surrounding suburbs are home to nearly 3 million residents. A vibrant and versatile metropolitan area, Cleveland has nearly 80 residential communities. Fine residential areas are located within minutes of the Cleveland Clinic campus. Recognized as one of the best places to live and visit, Cleveland and North-East Ohio is bustling with exciting things to do for people of all ages.