American Center for Reproductive Medicine

Alumni

Research Fellows • Summer Interns • ART Trainees
**Get To Know Our Center**

The American Center for Reproductive Medicine is a research program of the Glickman Urological and Kidney Institute of Cleveland Clinic. Established in 1993, the Center is dedicated to cutting-edge, disease-oriented translational research and to the education of physicians and scientists. Our Center is rated as a leading center of excellence at the world-class Cleveland Clinic and the Department of Urology reigns in its ranking as either **No. 1 or 2 Urology program in the nation** by *U.S. News & World Report*.

The American Center for Reproductive Medicine enjoys an international reputation for excellence and innovation in human reproduction and male infertility research and is dedicated to disseminating its results. Research papers from the Center’s staff are selected regularly for publication in distinguished medical journals. 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 1,009,920 visitors to date. Dr. Agarwal’s research group has produced the largest number of peer-reviewed, high-impact male infertility/ andrology research articles in the world. Over the past 25 years, more than 1,000 physicians, scientists, biologists and medical/pre-med students from over 50 countries worldwide have received their research and ART training at the American Center for Reproductive Medicine.

---

Research Fellows
Research Fellowship in Human Reproduction and Male Infertility

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.

For more information, please contact:

American Center for Reproductive Medicine and the Andrology Center
Cleveland Clinic, X-11
10681 Carnegie Avenue
Cleveland OH 44195, United States
Tel: +1.216.444.9485
Toll-Free: 1.800.CCF.CARE (ext. 4-9485)
Fax: +1.216.445.6049
Email: CRM@CCF.ORG
http://www.ClevelandClinic.org/ReproductiveResearchCenter
Research Fellowship in
Human Reproduction and Male Infertility

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 the researchers into independent and dynamic scientists of the highest caliber.

Who We Are

Ashok Agarwal, PhD
Professor, Lerner College of Medicine
Director, American Center for Reproductive Medicine
Director, Andrology Center Department of Urology
Cleveland Clinic

Rakesh Sharma, PhD
Associate Professor, Department of Urology
Research Coordinator
American Center for Reproductive Medicine
Cleveland Clinic

Sajal Gupta, MD
Assistant Professor, Department of Urology
Assistant Research Coordinator
American Center for Reproductive Medicine
Cleveland Clinic

Edmund Sabanegh, MD
President, Main Campus & Regional Hospitals
Professor, Lerner College of Medicine
Cleveland Clinic
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/search strategies and tools
- Training in writing of scientific articles for publication
- Lectures and presentations
- Journal Club and group discussions

During their Fellowship year at ACRM, our Research Fellows receive value added opportunities to participate in and...

- Serve as a Mentor/Advisor during the Summer Mentorship program in Reproductive Medicine held annually in June and July. Go to http://www.clevelandclinic.org/reproductiveresearchcenter/summmain.html 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. Go to http://www.clevelandclinic.org/reproductiveresearchcenter/artmain.html to read more about our ART Training Program.
BOOKS PUBLISHED

1. **A Clinician’s Guide to Sperm DNA and Chromatin Damage**
   - Armand Zini, Ashok Agarwal
   - Publication Date: 2018
   - Table of Contents

   - Ahmad Majoub, Ashok Agarwal
   - Publication Date: 2018
   - Table of Contents

3. **The Diagnosis and Treatment of Male Infertility: A Case-Based Guide for Clinicians**
   - Nabil Aziz, Ashok Agarwal
   - Publication Date: 2017
   - Table of Contents

4. **Cryopreservation of Mammalian Gametes and Embryos: Methods and Protocols**
   - Zsolt Peter Nagy, Alex C. Varghese, Ashok Agarwal
   - Publication Date: 2017
   - Table of Contents

5. **Oxidative Stress in Human Reproduction: Shedding Light on a Complicated Phenomenon**
   - Ashok Agarwal, Rakesh Sharma, Sajal Gupta, Avi Harlev, Gufam Ahmad, Stefan S. du Plessis, Sandro C. Esteves, Siew May Wang, Damayanthi Durairajanayagam
   - Publication Date: 2017
   - Table of Contents

6. **Proteomics in Human Reproduction: Biomarkers for Millennials**
   - Ashok Agarwal, Luna Samanta, Ricardo P. Bertolla, Damayanthi Durairajanayagam, Paula Intasqui
   - Publication Date: 2016
   - Table of Contents

7. **Andrological Evaluation of Male Infertility: A Laboratory Guide**
   - Ashok Agarwal, Sajal Gupta, Rakesh Sharma (Editors)
   - Publication Date: 2016
   - Table of Contents

8. **Exercise and Human Reproduction: Induced Fertility Disorders and Possible Therapies**
   - Diana Vaamonde, Stefan S. du Plessis, Ashok Agarwal
   - Publication Date: 2016
   - Table of Contents

9. **Recurrent Pregnancy Loss: Evidence-Based Evaluation, Diagnosis and Treatment**
    - Asher Bashiri, Avi Harlev, Ashok Agarwal (Editors)
    - Publication Date: 2015
    - Table of Contents

10. **Puberty: Physiology and Abnormalities**
    - Philip Kumanov, Ashok Agarwal (Editors)
    - Publication Date: 2016
    - Table of Contents

    - Alaa Hamada, Sandro C. Esteves, Ashok Agarwal
    - Publication Date: 2016
    - Table of Contents

12. **Endometriosis: A Comprehensive Update**
    - Sajal Gupta, Avi Harlev, Ashok Agarwal
    - Publication Date: 2015
    - Table of Contents
BOOKS PUBLISHED

Ashok Agarwal, PhD, HCLD
Director, American Center for Reproductive Medicine (ACRM)
Cleveland Clinic
United States of America

13 Unexplained Infertility
Glenn L. Schattman, Sandro C. Esteves, Ashok Agarwal (Editors)
Publication Date: 2015
Table of Contents

14 Non-Invasive Sperm Selection for In Vitro Fertilization: Novel Concepts and Methods
Ashok Agarwal, Edson Borges Jr., Amanda S. Setty (Editors)
Publication Date: 2015
Table of Contents

15 Strategies to Ameliorate Oxidative Stress During Assisted Reproduction
Ashok Agarwal, Damayanthi Durairajanayagam, Gurpreet V.K., Stefan du Plessis
Publication Date: 2015
Table of Contents

16 Male Infertility: A Complete Guide to Lifestyle and Environmental Factors
Stefan S. du Plessis, Ashok Agarwal, Edmund S. Sabanegh Jr. (Editors)
Publication Date: 2014
Table of Contents

17 Understanding Male Infertility: Global Practices and Indian Perspective
Sonia Malik, Ashok Agarwal (Editors)
Publication Date: 2014
Table of Contents

18 Antioxidants in Male Infertility: A Guide for Clinicians and Researchers
Sijo Parekkattil, Ashok Agarwal (Editors)
Publication Date: November 2013
Table of Contents

19 Building and Managing an IVF Laboratory: A Practical Guide
Zsolt Peter Nagy, Alex C. Varghese, Ashok Agarwal (Editors)
Publication Date: October 2013
Table of Contents

20 Clinical Embryology: A Practical Guide
Zsolt Peter Nagy, Alex C. Varghese, Ashok Agarwal (Editors)
Publication Date: October 2013
Table of Contents

21 Gamete Assessment, Selection and Micromanipulation in ART
Zsolt Peter Nagy, Alex C. Varghese, Ashok Agarwal (Editors)
Publication Date: October 2013
Table of Contents

22 Male Infertility for the Clinician: A Practical Guide
Sijo Parekkattil, Ashok Agarwal (Editors)
Publication Date: August 2013
Table of Contents

23 Medical and Surgical Management of Male Infertility
Botros RMB Rizk, Nabil Aziz, Ashok Agarwal, Edmund Sabanegh (Editors)
Publication Date: September 2013
Table of Contents

24 Sperm Chromatin for the Researcher: A Practical Guide
Armand Zini, Ashok Agarwal (Editors)
Publication Date: September 2013
Table of Contents
<table>
<thead>
<tr>
<th>Book</th>
<th>Editors</th>
<th>Publication Date</th>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sperm Chromatin for the Clinician: A Practical Guide</td>
<td>Armand Zini, Ashok Agarwal</td>
<td>August 2013</td>
<td></td>
</tr>
<tr>
<td>Fertility Preservation in Males: Emerging Technologies and Clinical Applications</td>
<td>Emre Seli, Ashok Agarwal</td>
<td>October 5, 2012</td>
<td></td>
</tr>
<tr>
<td>Fertility Preservation in Females: Emerging Technologies and Clinical Applications</td>
<td>Emre Seli, Ashok Agarwal</td>
<td>October 5, 2012</td>
<td></td>
</tr>
<tr>
<td>A Workbook on Human Spermatozoa and Assisted Conception</td>
<td>Sonia Malik, Ashok Agarwal</td>
<td>February 2012</td>
<td></td>
</tr>
<tr>
<td>Fertility Preservation: Emerging Technologies and Clinical Applications</td>
<td>Emre Seli, Ashok Agarwal</td>
<td>September 23, 2011</td>
<td></td>
</tr>
<tr>
<td>Sperm Chromatin: Biological and Clinical Applications in Male Infertility and Assisted Reproduction</td>
<td>Armand Zini, Ashok Agarwal</td>
<td>August 4, 2011</td>
<td></td>
</tr>
<tr>
<td>Andrology Laboratory Manual</td>
<td>Kamini A. Rao, Ashok Agarwal, MS Srinivas</td>
<td>February 10, 2010</td>
<td></td>
</tr>
</tbody>
</table>
The American Center for Reproductive Medicine has collaborative relationships with many renowned scientists and clinicians from over 20 countries.

**Research Collaborators**

**ARAFA, Mohamed, PhD**  
Qatar

**BUSETTO, Gian Maria, PhD**  
Italy

**BERTOLLA, Ricardo, PhD**  
Brazil

**CHO, Chak Lam, PhD**  
Hong Kong

**DADA, Rina MD, PhD**  
India

**DARBANDI, Sara, PhD**  
Iran

**DARBANDI, Masha, PhD**  
Iran

**DURAIKALAIYAGAM, Damayanthi, PhD**  
Malaysia

**DUTTA, Sulagna, PhD**  
Malaysia

**ESTEVES, Sandro, PhD**  
Brazil

**ELBARDES, Haitham, MD**  
Qatar

**GUNES, Sezgin, PhD**  
Turkey

**GOPALAN, Banu, PhD**  
USA

**GOGOLEZ, Jaime, PhD**  
Spain

**HARRISON, Avraham, MD**  
Israel

**HENNEKE, Ralf, PhD**  
South Africa

**HOMA, Sheryl, PhD**  
United Kingdom

**KESARI, Navindra, PhD**  
Finland

**KOSGIL, Raghavender, MD**  
India

**LAMB, Dolores, PhD**  
USA

**MALUK, Rizwan, MD**  
USA

**MABOUD, Ahmad, MD**  
Qatar

**MAYA, Walter Cardona, PhD**  
Colombia

**MCORM, Amy, BA**  
USA

**NAOMI, Pater, MD, PhD**  
USA

**PALANI, Ayad, PhD**  
Iraq

**PAREKATTIL, Sijo, MD**  
USA

**PUSHIRAPAL, Peter Natesan, PhD**  
Saudi Arabia

**RIZK, Botros, MD, PhD**  
USA

**ROSAS, Israel Maldonado, MS**  
Mexico

**SAID, Tamer, MD, PhD**  
Canada

**SALEH, Ramadan, MD**  
Egypt

**SAMANTA, Luna, PhD**  
Orissa, India

**SENGUPTA, Pallav, PhD**  
Malaysia

**SHARMA, Riecha, MD, MS**  
India

**SIROZ, Laura, PhD**  
USA

**SHARAFI, Mohsen, PhD**  
Iran

**SHARMA, Reecha, MD, MS**  
USA

**TADROS, Nicholas, MD**  
USA

**TVRDA, Eva, PhD**  
Slovak Republic

**WILLARD, Belinda, PhD**  
USA

**ZHIHONG, Cui, MD**  
China

**Collaborating Research Alumni**

Ahmet Ayaz, PhD  
Istanbul, Turkey

Chak Lam Cho, MD  
Shatin, Hong Kong

Damayanthi Durairajayanagam, PhD  
Kuala Lumpur, Malaysia

Sandro Esteves, MD, PhD  
Campinas, Brazil

Sezgin Gunes, PhD  
Samsun, Turkey

Avraham Harles, MD  
Beer Sheva, Israel

Ralf Henkel, PhD  
Berkville, South Africa

Ahmad Majzoub, MD  
Doha, Qatar

Tamer M Said, MD, PhD  
Toronto, Canada

Ramadan Abdou Saleh, MD  
Sohag, Egypt

Luna Samanta, PhD  
Orissa, India

Reecha Sharma, MD, MS  
Philadelphia, PA

Nick Tadros, MD  
USA

Eva Tvrda, PhD  
Nitra, Slovak Republic

Cui Zhihong, MD  
Chongqing, China

To read more about our collaborators, please click here
American Center for Reproductive Medicine
Research Alumni 1993 - 2017
Summer Interns

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017
Gain priceless research experience under the guidance of world-renowned experts in reproductive medicine, male fertility, and women’s health at the Cleveland Clinic

The American Center for Reproductive Medicine (ACRM) is a part of the Glickman Urological and Kidney Institute of the Cleveland Clinic. The Department of Urology is ranked as the No. 1 Urology program in the nation by U.S. News & World Report.

ACRM enjoys an international reputation for excellence and innovation in cutting-edge research in human infertility. It is ranked as the No. 1 Research Program in Reproductive Medicine in the world due to its research outcomes including largest number of peer-reviewed high quality publications, citations and international collaborations. Research papers from ACRM staff are selected regularly for publication in distinguished medical journals. ACRM’s website has been ranked No. 1 for research in reproductive medicine and andrology since 2001 by all top international search engines, including Google, Bing, and Yahoo! It has attracted over 1,001,115 visitors from all over the world.

More than 1,000 physicians and scientists from more than 55 countries have received their training at ACRM throughout the past 25 years. More than 270 students in majors ranging from Biology to English to the Musical Arts have participated in summer mentorships at ACRM.

The Cleveland Clinic’s American Center for Reproductive Medicine gives you an unique opportunity to:
- Receive mentoring by world-renowned faculty in medicine and health sciences
- Participate in meaningful, real-time research training
- Engage in intensive training in scientific writing
- Publish research articles in prestigious medical journals
- Listen to captivating lectures delivered by a team of reputed scientists and physicians

For additional information on mentorship staff, please visit our faculty page.
The Cleveland Clinic’s American Center Center for Reproductive Medicine gives you a unique opportunity to:

- **Receive** mentoring by world-renowned faculty in medicine and health sciences
- **Participate** in meaningful, real-time bench research experience
- **Engage** in intensive training in scientific writing
- **Publish** research articles in prestigious medical journals
- **Listen** to captivating lectures delivered by a team of reputed scientists and physicians

**Faculty**

**Program Director**

Ashok Agarwal, PhD  
Professor, Lerner College of Medicine  
Director, American Center for Reproductive Medicine  
Director, Andrology Center  
Department of Urology  
Cleveland Clinic

**Coordinators**

Rakesh Sharma, PhD  
Associate Professor, Department of Urology  
Research Coordinator, American Center for Reproductive Medicine  
Cleveland Clinic

Sajal Gupta, MD  
Assistant Professor, Department of Urology  
Assistant Research Coordinator, American Center for Reproductive Medicine  
Cleveland Clinic

Sijo Parekattil, MD  
Co-Director of Personalized Urology and Robotics Clinic  
South Lake Hospital and Orlando Health  
Clermont, Florida

**Consultants**

Botros Rizk, MD  
Professor of Ob-Gyn  
Reprod Endocrinol & Infertility  
University of South Alabama  
Mobile, Alabama
Program Goals and Benefits

The American Center for Reproductive Medicine at Cleveland Clinic offers a unique and exciting summer internship opportunity for highly motivated, academically oriente medical or undergraduate students interested in a career in medicine.

The center provides an excellent environment to conduct translational research in reproductive medicine. This unsurpassed experience gives participants the opportunity to:

- Immerses themselves in a state-of-art research environment
- Train in the art and science of conducting original bench research
- Be mentored by renowned researchers at a world-class medical institution
- Develop a strong foundation for pursuing a career in academic medicine

The program’s goal is to encourage students to consider a career in medicine, whether in reproductive medicine or any other specialty of their choosing. To this end, we have designed an exceptional summer internship program to provide students a wide range of experiences.

Additional Benefits of Internship

A unique aspect of this internship is the emphasis placed by the program on cultivating soft skills and imbibing professionalism in all participants. Skills honed during the internship include:

- Leadership
- Volunteerism
- Time management
- Effective communication
- Public speaking and presentation skills

These skills and abilities are highly valued and have a prolonged impact on participants, especially as they pursue their goals and develop careers.

The intangible mix of skills nurtured during our internship sets our interns distinctly apart from their peers and empowers them to:

- Be highly competitive in their interviews for medical school, residency or jobs
- Perform better at public speaking opportunities
- Be stronger candidates when being considered for work positions

Get to Know Our Internship Program

To view a List of Publications by our Interns resulting from their participation in the Internship course, http://www.clevelandclinic.org/reproductiveresearchcenter/info/traininfo_int10.html.


To learn about the Awards received by our past Interns, http://www.clevelandclinic.org/reproductiveresearchcenter/miscs/syl_5_Certificates_and_Awards_2017.pdf.


To view the Photo Gallery of our Summer Internship program, https://www.flickr.com/photos/reproductiveresearchcenter/albums/72157685844438544.
American Center for Reproductive Medicine
Summer Interns Alumni 2008 - 2017

Armenia • Australia • Bahrain • Brazil • Canada • Egypt • India • Kuwait • Lebanon • Netherland Antilles • Pakistan • Poland • Qatar • Saudi Arabia • Turkey • United Kingdom • USA