Welcome to Chicago!

12th Annual Oncofertility Consortium Conference

Bridging the Gaps in Oncofertility Research and Clinical Care: A Global Initiative

November 13-15, 2018
Prentice Women’s Hospital
Chicago, Illinois
2018 Conference Co-Chairs

- Clarisa Gracia, MSCE, MD
  University of Pennsylvania
  - Founding Training Member and
  - Reproductive Endocrinologist and Fertility Preservation Expert

- Antoinette Anazodo, MD
  - Pediatric Oncologist and
  - Global Oncofertility Expert
Thank You Sponsors!

The 2018 Oncofertility Conference is funded by the NIH (grants 5R13HD063248 and P50HD076188) and a generous donation from the Robert H. Lurie Comprehensive Cancer Center of Northwestern University.

Thank you to EMD Serono for their medical education grant and corporate sponsors Ferring and ReproTech, LTD.

A special thank you to Northwestern University President Morton Shapiro for his ongoing support of the Oncofertility Conference.
Welcome Advocates!
Welcome International Attendees!
Countries Represented at this Year’s Meeting

- USA
- Korea
- Brazil
- Mexico
- Japan
- United Kingdom
- Canada
- Australia
- Egypt
- Nigeria
- Thailand
- Kenya
Keynote Speakers

Richard Anderson, MD, PhD
Elsie Inglis Professor of Clinical Reproductive Science
Head of Section of Obstetrics and Gynaecology, University of Edinburgh

Lillian Meacham, MD
Kathleen V. Amos Children’s Chair for Cancer Survivorship; Medical Program Director for the Cancer Survivor Program, Aflac Cancer Center of Children’s Healthcare of Atlanta
Continuing Medical Education

Northwestern Medicine
Feinberg School of Medicine

This year the Oncofertility Consortium is able to provide AMA PRA Category 1 Credit™ for the Oncofertility Conference.

Learning Objectives
Upon completion of this activity, participants will be able to:
1. Describe the basic science advances in fertility preservation and restoration and global outcomes of pregnancy after cancer
2. Identify ethical considerations for fertility preservation in expanded patient populations such as pediatric and gender and sex diverse patients
3. Recognize alternative communication strategies for discussion fertility treatment

Accreditation Statement
The Northwestern University Feinberg School of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Credit Designation Statement
The Northwestern University Feinberg School of Medicine designates this live activity for a maximum of 11.25 AMA PRA Category 1 Credit(s)™. Physicians should claim only credit commensurate with the extent of their participation in the activity.

CME Transcript
See page 4 of your program for instructions on how to obtain your AMA PRA Category 1 Credits™ at the completion of this activity.
Goals of the meeting

What you asked for:

1. Great speakers! Keep bringing us the world of science and medicine.


3. More time for POSTER DISCUSSIONS.


5. Please provide time for case studies and reports in small group settings. Our work is hard and it is great to see how others are struggling with the same problems.

6. Keep the basic science, humanities, education, global and clinical work together in one series.

7. Give us time to Experience Chicago! (Bring your gloves!).

8. Fellows Day is the most important day for our OB/GYN and REI Fellows – Divya and Wendy are rock stars. A great invention!

9. I love the hands on lab series. I love to see what new gadgets Woodruff has in her lab. I hope she lets us mess around with gels and materials again – it is a prism to the way the body works and necessary for our field.

10. Great to have the advocates and patients with us during the meeting.
Agenda

Day 1: Tuesday, November 13, 2018
8:00 AM – 7:00 PM
Conference Room L South

8:00 AM – 8:30 AM  Registration: Continental Breakfast and Networking

8:30 AM – 9:00 AM  Welcome Year in Review: Oncofertility around the Globe
Conference Chairs: Teresa K. Woodruff, PhD, Northwestern University
Clarissa Gracia, MD, University of Pennsylvania
Antoinette Anzadoz, MD, Sydney Children’s Hospital & Prince of Wales Hospital

Basic Science Morning Session
Moderator: Teresa K. Woodruff, PhD
9:00 AM – 9:45 AM  Karla Hutt, PhD, Monash University, Australia
Radiation and Chemotherapy-Induced Cell Death Pathways in the Oocyte

9:45 AM – 10:30 AM  Chas Easley, PhD, University of Georgia, USA
Modeling Multi-generational Impacts of Paternal Preconception Exposures

10:30 AM – 11:15 AM  Teresa Woodruff, PhD, Northwestern University, USA
Engineering Reproduction

11:15 AM – 11:45 AM  So-Youn Kim, PhD, Northwestern University, USA
New Discoveries Driving Oncofertility Research and Practice

11:45 AM – 1:15 PM  Lunch, Networking, Poster Set-up

Afternoon Clinical Session
Moderator: Antoinette Anzadoz, MD
1:15 PM – 2:00 PM  Lynn Westphal, MD, Stanford University, USA
Fresh vs. Frozen Embryo Transfer Outcomes

2:00 PM – 2:45 PM  Clarissa Gracia, MD, University of Pennsylvania, USA
Ovarian Tissue Transplant Techniques

2:45 PM – 3:30 PM  Break and Poster Review

3:30 PM – 4:30 PM  Day 1 Keynote: Richard Anderson, MD, PhD, University of Edinburgh, Scotland
The Impact of Cancer Treatment on Female Fertility: Achieving Pregnancy and Live Birth

4:30 PM – 5:00 PM  Sponsor and Advocacy Highlights, Patient Perspectives

5:00 PM – 7:00 PM  Reception and Networking

Day 2: Wednesday, November 14, 2018
7:00 AM – 7:00 PM
Conference Room L South

7:00 AM – 8:00 AM  Pediatric Initiative Network Subcommittee Meeting

8:00 AM – 8:30 AM  Continental Breakfast and Networking

Morning Translational Session
Moderator: Clarisa Gracia, MD
8:30 AM – 9:45 AM  Emilie Johnson, MD, MPH and Courtney Finlayson, MD, Northwestern University, USA
Panel Discussion: Fertility Preservation and Potential for Children with Differences of Sex Development

9:45 AM – 10:30 AM  James Smith, MD, University of California, San Francisco, USA
Fertility Restoration for Children, Adolescents, Transgender Youth, and Young Adults

10:30 AM – 11:00 AM  Divya Shah, MD, University of Pennsylvania, and Wendy Vitek, MD, University of Rochester
Fellow Education in Oncofertility

11:00 AM – 11:30 AM  Kristin Smith, Northwestern University, USA and Jenna Bein Shersher, Twist Out Cancer
Patient Navigation and Patient Perspective

11:30 AM – 12:00 PM  John Salsman, PhD, Wake Forest University, USA
Fertility Preservation Decision-Making: Qualitative Approaches to Understanding Patient and Provider Communication

12:00 PM – 1:00 PM  Lunch & Networking

Afternoon Translational Session
Moderator: Teresa K. Woodruff, PhD
1:00 PM – 1:45 PM  Jennifer Levine, MD, Weill Cornell Medical College, USA
Fertility Preservation Guidelines

1:45 PM – 2:30 PM  Antoinette Anzadoz, MD, Sydney Children’s Hospital and Prince of Wales Hospital, Australia
The Development of an International Oncofertility Competency Framework to Improve the Implementation of Oncofertility Care

2:30 PM – 3:30 PM  Break and Poster Review

3:30 PM – 4:30 PM  Day 2 Keynote: Lillian Meacham, MD, Children’s Healthcare of Atlanta, USA
Infertility Risk Communication: It doesn’t matter what you say… it matters what they hear
Day 3
Applied Learning Sessions

Fellow Education Symposium 8:00am – 3:00pm
Course Directors: Divya Shah, MD, University of Pennsylvania, USA and Wendy Vitek, MD, University of Rochester, USA

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<tr>
<th>Time</th>
<th>Subject</th>
<th>Moderator/Institution</th>
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<tbody>
<tr>
<td>8:00 AM – 11:00 AM</td>
<td>Legal, Ethical, and Cultural Considerations in Fertility Preservation</td>
<td>Lisa Campo-Engelstein, Albany Medical College, USA</td>
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<tr>
<td>12:00 PM – 3:00 PM</td>
<td>Fertility Preservation Case Studies</td>
<td>Laxmi Kondapalli, Colorado Center for Reproductive Medicine, USA</td>
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<tr>
<td>12:00 PM – 3:00 PM</td>
<td>Existing and Emerging Techniques in Reproductive Health</td>
<td>Woodruff Lab, Northwestern University, USA</td>
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See page 8 of program for more information and location of each session.
Year in Review: Oncofertility Around the Globe
The Oncofertility Consortium
An Infrastructure Partnering Medicine and Science

- 99 US Sites
- 200 Sites Globally
- 19 Pediatric Sites
The Oncofertility Consortium – a new paradigm

a global 10+ year NIH-funded interdisciplinary initiative to explore the reproductive future of cancer survivors

Key Oncofertility Healthcare Team Members

- Medical Oncologists/Hematologists
- Surgical Oncologists/Surgeons
- Radiation Oncologists
- Urologists
- Primary Care Physicians
- Reproductive Endocrinologists/Infertility Specialists
- Bone Marrow/Stem Cell Transplant Specialists
- Physicians’ Nurses & Staff for the above specialties
- Social Workers
- Mental Health Staff
- Patient Navigators
- Financial Counselors
- Genetic Counselors
- Survivorship Staff
- Cryopreservation Storage Representatives
- Institutional Review Board for Investigational Procedures

Duncan et al, Reproductive Endocrinology, 8th Edition

NATIONAL PHYSICIANS COOPERATIVE

GLOBAL ONCOFERTILITY NETWORK
Oncofertility is growing at a rapid pace


A Global Community of Practice

Creating momentum

• Clinical activities
  – shared IRBs, shared patient case studies, inclusion of allied health professions

• Research
  – publications
  – sharing results, including failures and successes to avoid hastening work

• Patient Needs
  – websites, patient decision tools, and patient navigator

By facilitating these interactions, we ensure that the global oncofertility community is up-to-date on research that can continue to be rapidly translated to the clinic.
Breakthrough discoveries through the OC

Human research repository

2007
Isolated follicles can be grown in vitro
Establishment of a non-invasive index of follicle cryorecovery and growth

2010
Aging is associated with chromosome dynamics changes in the human egg

2012
The human oocyte contains zinc and its regulatory machinery
Encapsulation supports growth and survival of primordial follicles within the ovarian cortex

2014
Pediatric ovarian tissue contains primordial follicles after treatment

2015
Ovarian tissue can be decellularized
Mature eggs can be obtained following in vitro follicle growth
Endocrinology of human ovarian follicles grown in vitro
Decellularized ovary paper supports follicle survival and growth

2017
OTC usage in the pediatric population

Major Accomplishments of the NPC

- The National Physicians Cooperative (NPC) is a nationwide network of member institutions dedicated to preserving the fertility of their patients.

- The NPC has worked in a coordinated and strategic manner enabling better science, education and medical applications to reach men, women and children to preserve their reproductive potential.

- Individual participants at NPC member institutions are the direct points of contacts with patients and many are leaders in translational research.

- The Oncofertility Consortium (OC) has created an infrastructure for sharing scientific and medical advances in a way that enables patients to access to the most up-to-date medical treatment plans and emerging reproductive technologies.

- Adolescents have a strong desire to participate in their cancer treatment and have significant fertility-related concerns.

- NPC physicians and advanced practice nurses have a high comfort level in discussing fertility issues with patients while further education is needed for providers, especially nurses, to assist with fertility and FP discussions with patients and their families.

- NPC investigators can access rare human reproductive tissue in the Oncofertility Consortium (OC)-NPC Repository for further research to explore and expand the reproductive outcomes of cancer patients and those with fertility-threatening diseases or conditions.

Global Impact Is Powerful
Global Engagement

- Virtual Grand Rounds from Brazil, Japan, Portugal
- Papers in Australia
- BOR Commentary
- Meetings in Japan, Australia, Peru, China, India, Saudi Arabia etc.
- Reviews from Japan
- Portuguese Oncology Recommendations
- Survey Studies
- Resources in Spanish, Portuguese, French, and Turkish
- Developing Countries Publication
- Regional Oncofertility Networks
Authoritative Oncofertility Resources
Global Connections Are the Foundation of this Field
Visible, Valuable, and Viable

• OPEN
• Textbook of Oncofertility
• Dialogues in Oncofertility
Oncofertility Professional Engagement Network

**OPEN** will bridge the gap between domestic and international programs to establish a strong global network where members share resources, methodologies and experiences. It will build upon the strong framework of the NPC and Global Partners and maintain the valuable subcommittees where highly-engaged peers meet (both in person and virtually) to develop new research protocols, identify best practices, and discuss challenges and pathways to success.
<table>
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<tr>
<th><strong>OPEN Member Benefits</strong></th>
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<tr>
<td>Information on how to establish a multidisciplinary oncofertility program</td>
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<td>Use of all branding materials that can be tailored to each program</td>
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<td>Access to international referral network to patients seeking fertility preservation</td>
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<td>Information about the financial aspects of fertility preservation</td>
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<tr>
<td>Templates and assistance for obtaining IRB approval for ovarian or testicular cryopreservation</td>
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<tr>
<td>Access to materials and tools as needed to support research and clinical studies</td>
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<td>Invitations to the annual Oncofertility Conference, meetings, and special events</td>
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Opportunities to Participate

• Be a local champion of change!
  – Host a meeting
  – Participate in Virtual Grand Rounds
  – Attend annual Oncofertility Conference
  – Provide updates for quarterly newsletter
  – Join relevant subcommittees
  – Develop survey studies for a deeper understanding of oncofertility at your institution
  – Publish papers
  – Translate materials to native language
OPEN: Networking

• Calling all nurses!
  – Mary Caldwell from OSU

• Power in numbers
  – New subcommittees
  – Project ideas
  – Making critical connections

→ Email us: oncofertility@northwestern.edu

*Working together move the field forward at a more rapid pace!*
Become a Member

Email oncofertility@northwestern.edu
to become a member and join this exciting partnership!
From K to Gray

A NEW YOU, THAT'S WHO
ONCOFERTILITY SATURDAY ACADEMY
REPRODUCTION 101 MOOC
MASTERS IN REPRODUCTIVE SCIENCE AND MEDICINE

REPROTOPIA
REPRODUCTIVE HEALTH EDUCATION FOR ALL
Textbook of Oncofertility

- Early 2019
- 35 Chapters
- 26 Case Studies
- Editors: Teresa K. Woodruff, PhD, Divya K. Shah, MD, and Wendy Vitek, MD

- THANK YOU FIELD!
Dialogues in Oncofertility
Amplifying the Voices of Our Field

Dialogues in Oncofertility is a record of scholarly output generated by members of the Oncofertility Professional Engagement Network (OPEN). The goal of Dialogues is to preserve the intellectual works created by the oncofertility community and to promote its authors by enabling discovery and accessibility of these works by the international scientific community.

• All accepted submissions will receive a DOI (Digital Object Identifier)

• Accepted Resource Types:
  - Abstracts
  - Case Reports
  - Editorials
  - Lecture Notes
  - Presentations
  - Projects
  - Reviews
  - Articles
  - Conference Proceedings
  - Guidelines
  - Manuscripts
  - Posters
  - Reports

⇒ Submit online at oncofertility.northwestern.edu

Complete list of all accepted resource types available online
This conference is intended for physicians, nurses and other healthcare providers who treat children, adolescents and young adults with cancer before, during and after treatment: oncologists, obstetricians and gynecologists; urologists, reproductive endocrinologists and infertility specialists; primary care physicians, pediatricians, pediatric and adult endocrinologists, psychologists, social workers; and oncofertility researchers.

cancer.osu.edu/oncofertility

KEYNOTE SPEAKER – Teresa Woodruff, PhD
Vice Chair for Research, Department of Obstetrics Gynecology
Director, The Oncofertility Consortium
Northwestern University Feinberg School of Medicine

Co-Chairs
Leslie Coker Appiah, MD
Director, Fertility Preservation & Reproductive Health Program
OSUCCC – James

Leena Nahata, MD
Director, Fertility & Reproductive Health Program
Nationwide Children’s Hospital
Save the Date
2019 Oncofertility Conference
Future Hope: Reproductive Health in the Pediatric Population

November 12-14, 2019
Chicago, IL
The Future: What we hope

• No More Cancer
  – Treatments are changing in real time

• Full Fertility
  – Interventional options to preserve fertility
  – Mitigation strategies

• Fully Accessible
  – Low/no resource environments

• Fully Considered by all Stakeholders
  – Providers, patients, partners, public

• Eliminate the field
Enjoy the meeting!!