

# Conceiveivable

REPRODUCTIVE RESOURCE CENTER

*20 years of Innovation*

Rodney Lyles, M.D. • Celeste Brabec, M.D. • Ryan Riggs, M.D.

September 2009

## Announcing our 20th Anniversary

Dr. Rodney Lyles, Founder and Director of Reproductive Resource Center of Greater Kansas City (RRC), is proud to announce the Center's celebration of "20 Years of Innovation." Dr. Lyles established Reproductive Resource Center in Overland Park, Kansas in 1988. The Center is known as the region's leading innovator in fertility services. RRC was the first in the region to perform a number of technologically advanced techniques including ICSI (intracytoplasmic sperm injection), a Donor Egg Program, Blastocyst Culture, Cryopreservation of Blastocysts, and On-Site Embryo Biopsy for Pre-Implantation Genetic Testing for Single Gene Mutations, 24 Chromosome Aneuploidy Screening or both. Throughout its 20 year history, the Center has



consistently provided one of the highest pregnancy rates in the nation, while maintaining one of the lowest high-order multiple rates. The staff is highly experienced, and several have been with the Center since its inception.

Dr. Lyles was awarded his B.A. in Biology from Oklahoma State University and received his Doctorate of Medicine from the University Of Oklahoma College Of Medicine in Oklahoma City. He then worked as an obstetrician/ gynecologist for 5 years in Stillwater, Oklahoma.

Dr. Lyles completed his Fellowship in Reproductive Endocrinology and Infertility at Baylor University in Houston, Texas in 1986. He spent time in Goteborg, Sweden, studying the then-new technique of ultrasound directed follicle aspiration of oocytes

for in vitro fertilization. He established and directed the In Vitro Fertilization/ GIFT program at St. Luke's Hospital-Plaza in Kansas City, Missouri in 1986, working with Dr. Jack Betts.



In 1988, Dr. Lyles founded Reproductive Resource Center of Greater Kansas City in Overland Park, Kansas and is

currently Founder and Director of the Center. Since 1988, Dr. Lyles has added two Reproductive Endocrinologists, Dr. Celeste Brabec and Dr. Ryan Riggs, and directs a staff of over 20. We congratulate Dr. Lyles on his outstanding service to couples in the Greater Kansas City area, and look forward to continued innovative care.



## Another Successful Arrival

Reproductive Resource Center of Greater Kansas City is delighted to announce that Ryan Riggs, M.D. joined RRC on July 16, 2009.

Dr. Riggs completed his Fellowship in Reproductive Endocrinology and Infertility at the Jones Institute for

Reproductive Medicine at Eastern Virginia Medial School. He completed his Residency in Obstetrics and Gynecology at University of South Florida in Tampa, his Doctorate of Medicine from the University Of Oklahoma College Of Medicine in Oklahoma City and his B.A. from Trinity University in San Antonio, Texas.

Dr. Riggs is Board Certified in Obstetrics and Gynecology and Board Eligible in Reproductive Endocrinology. He completed his thesis research on "Anti-Mullerian Hormone – New Insights Into Assessing Ovarian Reserve."

Dr. Riggs is originally from Oklahoma. He is married with one daughter.

We are delighted to announce Dr. Riggs' arrival. Appointments can be scheduled by calling us at (913) 894-2323.

**Dr. Riggs will be a speaker at the first fall meeting of the the Kansas City Gynecological Society on Sept. 17, 2009. His talk is entitled "Insights into the Assessment of Ovarian Reserve."**

# RRC Staff

## **Board Certified Reproductive Endocrinology**

Rodney Lyles, M.D.  
Celeste Brabec, M.D.  
Ryan Riggs, M.D.

## **Scientific Laboratory Director**

Michael Wilson, Ph.D.

## **Business Manager**

Toni Clark

## **Embryologists**

Kathy Hartke, B.A.  
Michelle Kiehl, B.S.

## **RRC Support Staff**

Mary Ellen Bulmash, PA-C  
Marcie Hodge, RN  
Amy Miller, MA  
Brandi OudeAlink, WHNP  
Tari St. Clair, LPN  
Aimee Turney, ARNP  
Margaret Vogt, WHNP

## **Laboratory Staff**

Brenda Bowen, M.L.T.  
Jonetta Rodgers, M.S.

## **Office Staff**

Barbara Day  
Wanda Dvorak  
Teri Karrer  
Carol Reese

Website: [rrc.com](http://rrc.com)

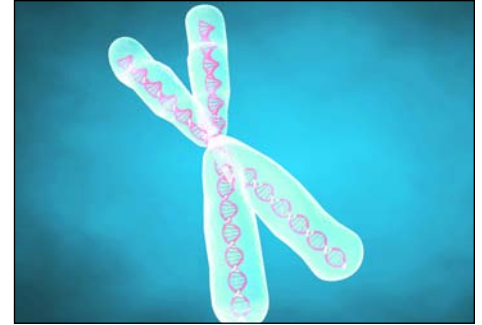
Reproductive Resource Center is open from 7:30 a.m. to 4 p.m. Phones are answered Monday through Friday, 8 a.m. to 4 p.m. Calls received during off-hours are returned as soon as possible. If you have inquiries pertaining to any urgent issues, please call 913 894-2323.

Every effort will be made to have the appropriate individual answer your question.

Editor of *Conceivable* Newsletter is Celeste Brabec M.D.

## RRC Offers a More Effective Test

Reproductive Resource Center (RRC) is proud to announce availability of the innovative technique known as 24 Chromosome (22 Autosomes, X and Y) Aneuploidy Screening with Parental Support. Techniques used to date have only been able to test a fraction of the chromosomes of an embryo. This new technology is now available to test all 24 chromosomes with on-site biopsy of a single cell of the embryo (one blastomere) with test accuracy typically exceeding 99%. For many families, Parental Support offers a more effective test that may improve the chance for IVF success and the birth of a healthy baby. RRC is the only center in the region to offer this innovative technology.



## In the News and Continuing Medical Education

Celeste Brabec, M.D. was recently featured in two Kansas City Area periodicals, the April/May 2009 edition of "Enhance" and the June 2009 issue of "Her Life", describing the innovative care available at Reproductive Resource Center.

Kerry Christifano, M.A., LPC presented "Coping with Infertility in a Fertile World" at Reproductive Resource Center on July 29, 2009. This free seminar was designed to help couples struggling with the emotional issues around infertility. Decreasing stress levels has been shown to increase pregnancy rates. Kerry is with Complementary Care Group for Infertility. The next Mind/Body Program is a 10 week program scheduled for Wednesday evenings from September 9 to November 4, 2009. See [www.complementarycaregroup.com](http://www.complementarycaregroup.com) for more information.

Toni Clark, Business Manager, successfully completed the Certified Practice Manager Executive Examination in May 2009.

Ryan Riggs, M.D., attended the nationally acclaimed conference "Frontiers in Reproductive Medicine" in Washington, D.C. in April 2009.

Aimee Turney, A.R.N.P., one of Reproductive Resource Center's IVF nurse coordinators, attended the well-known annual conference known as "Smart ART" in Orlando, Florida in August 2009.

## In an Upcoming Issue of *Conceivable*...

- Unexplained Infertility
- Assessment of Ovarian Reserve/Advanced Reproductive Age
- Third Party Reproduction (Donor Egg, Donor Sperm and Host Uterus/Gestational Carrier)
- Embryo Biopsy for Single Gene and 24 Chromosome Aneuploidy Screening with Parental Support
- Recurrent Pregnancy Loss

If you prefer to view *Conceivable* on-line, visit [rrc.com](http://rrc.com). If you have a topic you would like to see discussed, please email your ideas to [tclark@rrc.com](mailto:tclark@rrc.com).

# Teaching Pearls

## Interpreting the Semen Analysis and Treating Male Factor Infertility

Male infertility is the sole cause of 20% and a contributing cause of 40% of all couples' inability to conceive. Although the gynecologist is trained to care for women, because male infertility is so common, early evaluation of the infertile couple by semen analysis is essential and very cost-effective...do not leave it out!

The optimum collection method is masturbation with washed hands on site at the center at which analysis will be performed, ideally after 2-5 days of abstinence, into a sterile container approved for semen analysis. Use of a specially designed collection condom is also an option, but is less exact. Collection at home can be offered for those men with difficulty producing a specimen on site. The specimen should be transported at room temperature to arrive at the laboratory within 1 hour of production. Results of the semen analysis should include method of collection, date and time of collection and date and time of analysis. Sending semen analysis for out of town evaluation is not ideal.

The report itself should include days of abstinence, method of collection, semen volume, viscosity, count per ml, total count and total motile sperm in the specimen. Not only total motility, but a detailed breakdown of motility, including total progressive motility and progressively rapid sperm should be noted. Morphology, preferably using Kruger Strict Criteria, is recommended, as it is a better predictor of fertility than W.H.O. morphology criteria. Kruger Strict Morphology criteria are vastly different than W.H.O. criteria. Failure to distinguish between the two is a common mistake made by interpreters, so be sure to note which is used in the report. The direct sperm antibody assay, testing for anti-sperm antibodies on the sperm cells themselves, is optional,

and should be ordered when there is a history of male genital surgery, when motility is poor, or when there is relatively long-standing infertility (roughly 3 years or longer), but can be added without this history if desired.

When results of semen analysis are normal, this suggests male infertility is not present; however, no accurate test is available to fully determine sperm function (other than proven fertilization and a healthy live born).

Environmental causes of compromised sperm parameters include high fever, hot tub use, anabolic steroid use, marijuana use and heavy alcohol or tobacco use. Most commonly used lubricants adversely affect sperm motility. If any of these are present, they should be discontinued and a repeat analysis performed in 2-3 months.

**A common myth, even among gynecologists and urologists, is that any abnormal sperm parameter indicates the need for IVF. In fact, normal or mildly to moderately abnormal results lend themselves to treatment such as ovulation induction of the female partner combined with closely timed office intra-uterine insemination, pending results of evaluation of the female. Even severely compromised results on occasion achieve spontaneous pregnancy, or can avail themselves to a very limited number of cycles of outpatient treatment with ovulation induction and office insemination as a trial; this can be very cost effective.**

When performing intra-uterine insemination, evaluation of post-wash sperm parameters is helpful; ideally the total motile count post wash is 10 million or more. When the total motile sperm count post wash is under 1 million on two or more occasions, ART (Assisted Reproduction/IVF) or therapeutic donor insemination is recommended.

When results of semen analysis are extremely compromised on two or more occasions 2 months apart, with count, motility or total motile sperm in the single digits, although a trial of ovulation induction with intra-uterine insemination can be attempted, most couples will significantly increase their chance for pregnancy by moving to in vitro fertilization, possibly with the addition of ICSI (intracytoplasmic sperm injection). These men also need further evaluation to rule out co-existing serious medical illness. When severe compromise is seen, with results in the single digits, recommended evaluation of the male partner includes male genital examination to rule out testicular tumor/cancer, and bloodwork including karyotype, FSH, LH, free and total testosterone, TSH and Prolactin. When levels of FSH, LH and testosterone are all markedly low, consistent with hypogonadotropic hypogonadism, MRI of the pituitary is recommended to rule out pituitary tumor. Varicocele and hydrocele repair may slightly improve sperm parameters but rarely can they change severely compromised parameters into parameters normal enough for office insemination. Fertility medications also have a limited role in the treatment of male infertility. Although men with hypogonadotropic hypogonadism can be treated with medications (hCG and FSH/LH), this takes months of costly injectable medication and IVF almost always offers a more cost-effective means of achieving pregnancy.

Men with severe male factor have an increased chance of passing on male factor infertility to their offspring; however, it is thought to be unrelated to increased risk of birth defects.

Reproductive Resource Center offers a full-service laboratory. Feel free to contact one of our doctors or nurses at (913)894-2323 for more information.

Learn the facts,  
check the stats.

See [SART.org](http://SART.org)

Take a look to see  
why you should  
choose Reproductive  
Resource Center

Also visit [rrc.com](http://rrc.com)

REPRODUCTIVE  
RESOURCE  
CENTER

*20 years of Innovation*

Reproductive Resource Center  
12200 W. 106th St., Suite 120  
Overland Park, Kansas 66215

## Choose RRC for your patients with infertility needs. **Here's why:**

- RRC is the ONLY center in the region to offer on-site embryo biopsy for pre-implantation genetic diagnosis with a full-time Ph.D. Embryologist Laboratory Director on-site.
- RRC was the first center in the region to offer ICSI, a donor egg program, blastocyst transfer, blastocyst freezing, on-site embryo biopsy, and 24 chromosome aneuploidy screening with parental support.
- RRC does more cycles per year than all other programs in the metro area combined, and has done so for the past 20 years.
- RRC has an excellent national reputation, and has been consulted to help other programs throughout the country when they are having difficulties.
- RRC staff have published and presented scientific data on our revolutionary techniques both nationally and internationally.
- RRC has the most experienced, most highly educated staff in the metro area.
- RRC just celebrated our 20th Anniversary.
- RRC has some of the highest pregnancy rates and lowest high order multiple rates in the country, right here in your backyard.

Visit [www.rrc.com](http://www.rrc.com) or call (913) 894-2323.