

GENETICS

Serve as a Tool in Prevention

plus

SPOTLIGHT:
Genetic Counselor Mary Freivogel

CASE STUDY

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OUR "5280 TOP DOCS"

DOCTOR TESTIMONIAL

This volume of **in the know** is the first in a series of informative newsletters designed to better serve the practice needs of Denver-area physicians. Our goal is to bring you the latest information about Invision Sally Jobe — including new imaging technologies and case studies, profiles of staff members and our community involvement. For information on our current events and news, visit www.InvisionSallyJobe.com. As always, we welcome your feedback and opinions!

Spotlight On Our Genetic Counselor

Mary E. Freivogel, MS, CGC

Mary E. Freivogel, MS, CGC, is a board-certified genetic counselor specializing in hereditary breast, colorectal and other cancers.

Working in the genetics field for nearly seven years, five of which were with Myriad Genetics, Mary came to Invision Sally Jobe in January 2009. She immediately began developing the organizational structure for the Risk Assessment and Prevention Program (RAPP).

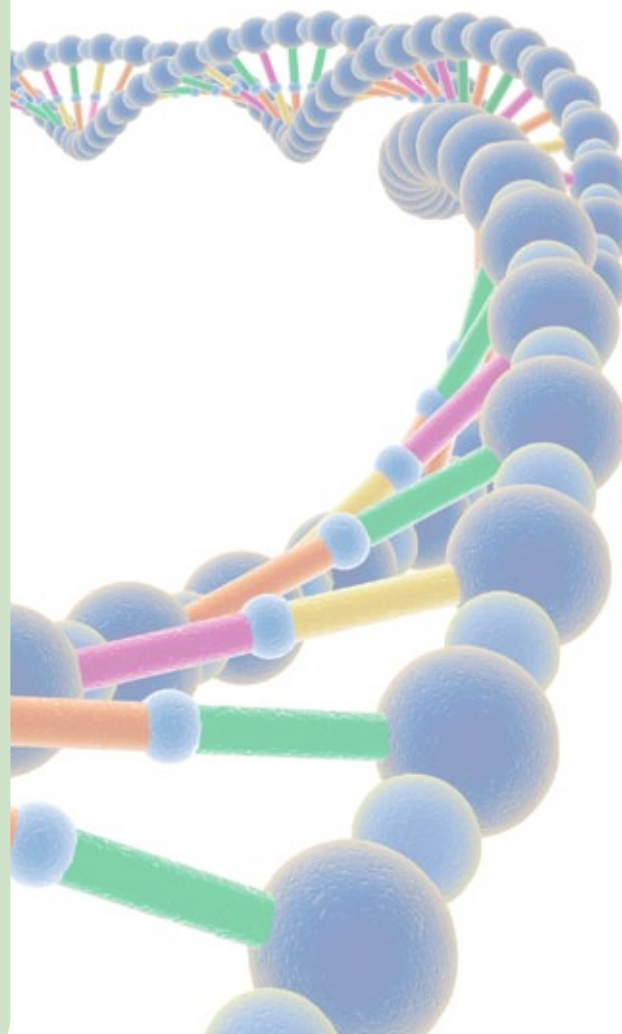
RAPP at Invision Sally Jobe provides patients with a detailed profile of their cancer risks based on their personal and family histories. Although breast cancer risk may be the most common indication for referral, all types of cancer are addressed by this program.

Mary is trained to collect a careful family history and analyze that family history for patterns that may indicate a hereditary cancer syndrome. She can make standard recommendations for cancer screening based on the history reported by the patient. If the patient is a candidate for genetic testing, Mary walks them through the informed consent process, coordinates the blood draw and interprets the test results. Her main interest is designing novel systems to identify and counsel patients at risk for hereditary cancer.

Mary's educational background includes a bachelor of science degree in chemistry from Creighton University and a masters of science in biophysics and genetics from the University of Colorado Health Sciences Center. A member of the National Society of Genetic Counselors (NSGC), Mary is chair of the NSGC Membership Committee and belongs to the NSGC Industry Special Interest Group and NSGC Familial Cancer Risk Counseling Special Interest Group.

Mary's work at Invision Sally Jobe helps to ensure that high-risk women and men know their options for preventive surgery, treatment and future screenings. Genetic testing helps patients understand how their cancer risk affects their children and siblings. 🌱

Reach Mary at 720-493-3226 or mary.freivogel@riaco.com.



GENETICS Serve as a Tool in Prevention

Genetic testing for breast cancer allows patients to be proactive in their approach to breast health and breast cancer prevention. The Risk Assessment and Prevention Program (RAPP) at Invision Sally Jobe provides detailed breast cancer risk assessment based on personal and family history. Although breast cancer risk may be the most common indication for referral, all types of cancer are addressed by this program. RAPP is managed by board-certified genetic counselor Mary E. Freivogel, MS, CGC, and involves a specially trained Patient Navigator.

When a patient is referred to RAPP, they are provided with a detailed cancer risk assessment that includes the use of various risk assessment models for breast and other cancers, as well as a family history analysis to evaluate for any hereditary cancer syndrome. Our genetic counselor can also identify if the patient may be a candidate for additional screening measures, including breast MRI.

If the patient is a candidate for genetic testing, our genetic counselor will walk them through the informed consent process, coordinate the blood draw and interpret the test results. A full report is generated and is sent directly to the patient's referring physician. The report contains standard medical management recommendations based on the patient's personalized risk for cancer.

RAPP is especially useful for high-risk patients because:

- It stratifies the patient's risk and determines whether he or she is a candidate for advanced early detection technologies (ultrasound, breast MRI, etc.).
- It determines whether a patient is a candidate for chemoprevention (shown to decrease the risk of breast cancer by as much as 50 percent).
- It assesses risk for other cancers (ovarian, colorectal, etc.).
- It helps patients understand how their cancer risk affects their children and siblings.

"I was afraid of genetic testing, but now I tell people, 'Don't be afraid of the BRCA testing because it will save your life.' It is not a death sentence; rather it allows you to be proactive with your health."

Lori St. Germain

Patient Lori St. Germain tested positive for the BRCA1 gene. Read more about her story in the case study (page 6).

The program helps to ensure that patients understand their options for surgery, treatment and screenings. In Lori's case, Invision Sally Jobe's RAPP identified an elevated risk for cancer that would not otherwise have been found.

"This is a blessing, not a negative," Lori said of her BRCA1 gene mutation and having the opportunity to catch her breast cancer early. 🌱

CLINICAL TRIALS at Invision Sally Jobe

ShearWave Elastography

Invision Sally Jobe at Centrum DTC is among a select group of medical centers to participate in an international clinical trial investigating elastography, a new technology for imaging breast tissue.

Currently, patients with suspicious breast lesions are referred for a breast biopsy. However, approximately 80 percent of those patients do not have breast cancer. Using ShearWave™ ultrasound elastography technology from SuperSonic Imagine (www.supersonicimagine.fr), investigators in the *Ultrasound Elastography of Breast Lesions* trial will analyze data to determine if the addition of elastography to a conventional breast ultrasound examination can improve the characterization and visualization of breast lesions, as compared to conventional grayscale ultrasound alone.

Based on the principle that malignant neoplasms are harder and less elastic than benign growths, elastography refers to the measurement of tissue stiffness. Clinically relevant differentiation between cancerous and non-cancerous lesions may eventually help avoid breast biopsies for non-cancerous lesions.

Sites involved in the cross-sectional, observational, case-only study have already acquired data on nearly 1,000 breast lesions with an estimated final enrollment of 2,300. Thomas Stavros, M.D., is the trial's principal investigator with sub-investigators Terese Kaske, M.D., and Lora D. Barke, D.O.

"We are one of only a few centers in the U.S. to be included in this very exciting clinical trial," said Stavros, who recently announced his retirement but is staying involved until the completion of this trial.

Tomosynthesis Clinical Trial Enrolling Patients


Under the leadership of principal investigator Lora D. Barke, D.O., Invision Sally Jobe is enrolling patients in a clinical trial to determine the efficacy of breast tomosynthesis compared to digital mammography. The study will evaluate breast tomosynthesis on the Hologic Selenia Dimensions Digital Breast Tomosynthesis System, an investigational device.

The Invision Sally Jobe Lincoln Medical Center is one of approximately 15 U.S. sites participating in the study of digital X-ray tomosynthesis, a 3-D imaging technique for producing slice images using conventional X-ray systems. The study will continue to enroll patients through 2010.

Tomosynthesis is considered to be an improvement upon or refinement of conventional geometric tomography, allowing numerous in-focus planes to be generated retrospectively from a series of digital projection radiographs. According to a Hologic research overview of breast tomosynthesis¹, images are acquired at a number of different X-ray source angles. Objects on various planes in the breast display differently. By shifting and adding these projection radiographs, specific planes may be reconstructed to generate images that enhance objects, removing tissue overlap that normally occurs on the 2-D mammogram, which can hide cancers and also cause false findings.

Hologic notes that additional acquisitions are not required to enhance the visibility of objects at any given height — one set of acquired data can be reprocessed to generate the entire 3-D volume set.

Any female undergoing a mammogram may participate in the clinical trial. Restriction on participation includes any female who: is breast feeding; is pregnant; had a previous breast surgical biopsy or breast cancer; has breast implants; or has very large breasts (generally larger than a C cup depending upon the mammographer evaluation).

Additional criteria do apply and will be discussed with the patient if she meets the above criteria and is interested in participating. Please let your patients know about this study. For more information, physicians' offices may contact Kelly Poole R.N., CCRP, Invision Sally Jobe clinical research administrator, at 720-493-3403. 

¹ Fundamentals of Breast Tomosynthesis: Improving the Performance of Mammography. www.hologic.com/data/WP-00007_Tomo_08-08.pdf

2009 DENVER Komen Race for the Cure



On October 4, many of the 230 members making up the Invision Sally Jobe & RIA team walked in the Denver Komen Race for the Cure. Recognizable by their cowboy hats with the Invision Sally Jobe logo and wrist bands, the group enjoyed a sunny October morning for the Komen race. The Invision Sally Jobe & RIA Celebrity Team chose from the 5K Run, 5K Walk, the Family Walk, and some even took advantage of the Sleep In for the Cure.



Team Captain and Sales and Marketing Representative Jennifer Dawson (center) said she and co-workers are "a group people who care passionately about providing high-quality and technologically advanced breast and breast-related imaging in Denver." By joining in the local Komen event, Invision Sally Jobe helped to raise funds for breast cancer research, as well as provide mammograms, cancer treatment and other valuable services to the women in Colorado who need it most.

Connect with Invision Sally Jobe on

Teens and 20-somethings aren't the only ones who have discovered the power and networking capabilities of social media on the Internet. The landscape is rapidly changing as corporate, professional and medical organizations are now leveraging the power of social networking to stay connected with their constituencies.

Earlier this year, Facebook became the most visited social networking site. The fastest growing demographic for Facebook is in the 35-to 54-year-old category, and the 55+ group is not far behind. That's one reason why Invision Sally Jobe has chosen to create a presence on this social media site. It gives them another way to stay in touch and communicate with our patients and referring physicians.

To access the Invision Sally Jobe Facebook page, simply go to www.Facebook.com and set up a user name and password. If you already have an account, it's easy to interact and connect with Invision Sally Jobe. Facebook visitors can then learn about services and find out the latest news and community events, and engage in a two-way conversation with Invision Sally Jobe. 

Praise From Our Referring Physicians

Peter (Dr. Ricci),

I just wanted to send a brief note of thanks and appreciation to your group. Since urology is such an image-intensive specialty, we interact with diagnostic and interventional radiologists all the time. Our group regularly comments about the level of expertise and superior service that RIA provides to us and our patients.

Actually, more often than not, you guys go above and beyond to assist in solving difficult problems, work our patients into an already busy schedule and communicate rapidly. These days, it's this kind of relationship that keeps the fun in practicing medicine. Consequently, we use your group exclusively and convey that to our referral sources and hospital administrators.

Best Regards,
Stan Galansky, M.D., FACS, FAAP
Urology Associates

CASE STUDY: Genetic Counseling

Screening Mammogram

A 50-year-old female patient visited Invision Sally Jobe for a routine screening mammogram. After a focal asymmetry was revealed in the left breast during the screening mammogram (fig.1), the radiologist recommended follow-up diagnostic testing.

Diagnostic Testing

The subsequent diagnostic mammogram (fig. 2) and ultrasound revealed no abnormalities. However, the patient's family history (ovarian cancer in mother at age 47; breast cancer in sister at age 48) made her a candidate for Invision Sally Jobe's Risk Assessment and Prevention Program (RAPP).

Genetic Counseling

The patient met with an Invision Sally Jobe genetic counselor 10 days after the diagnostic evaluation. Based on results of the patient's Gail model assessment (17 percent), she would not have been considered "high risk" and offered additional imaging (i.e. breast MRI). However, the comprehensive RAPP assessment indicated significant risk for BRCA gene mutation and she was offered genetic testing.

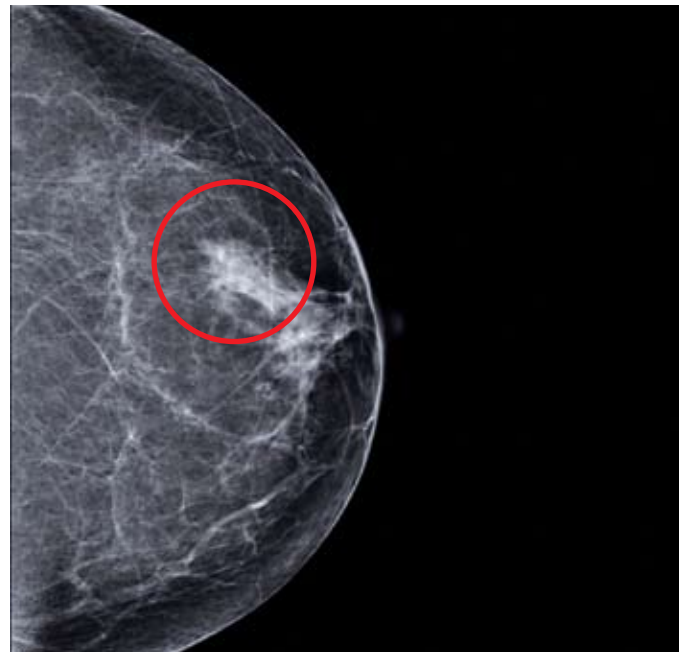


Figure 1
Screening mammography revealed an area of focal asymmetry in the outer left breast seen on the cranial caudal (CC) view.

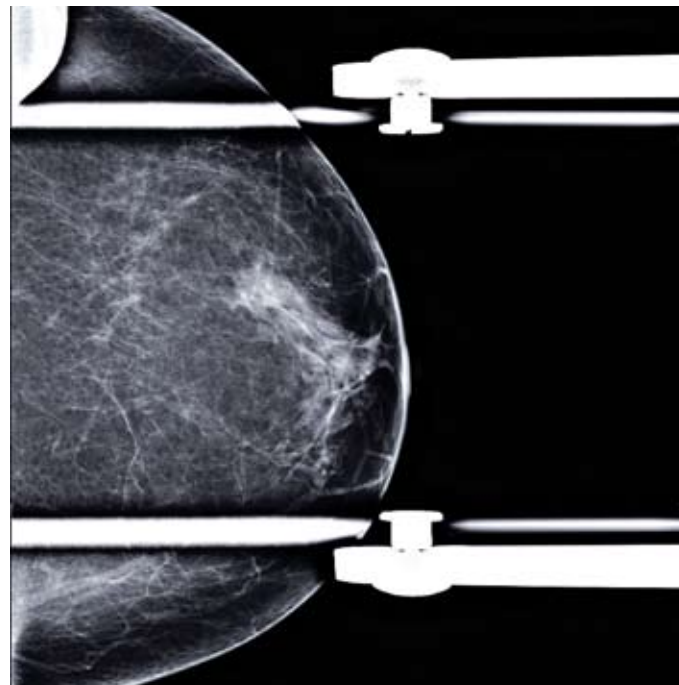


Figure 2
Additional mammographic views of the left breast followed by ultrasound revealed no suspicious abnormalities.

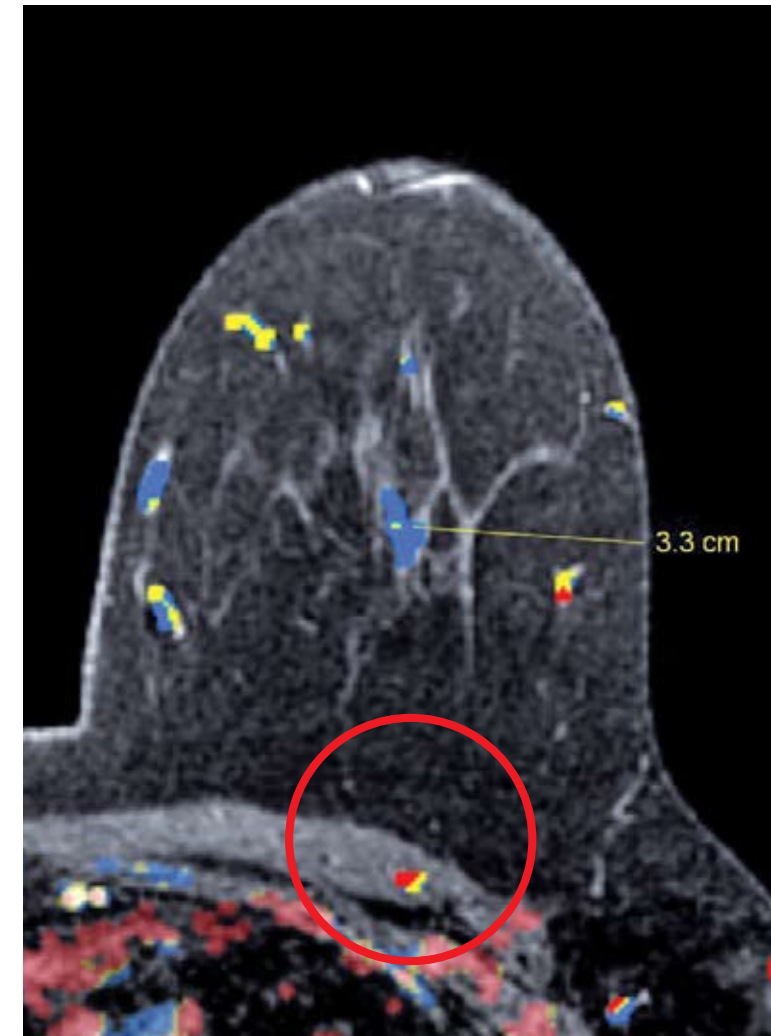


Figure 3
A linear area of non-mass like enhancement measuring 3.3 cm was identified in the central left breast on this post-contrast MRI shown in the axial projection.

If you have a patient who can benefit from Invision Sally Jobe's Risk Assessment and Prevention Program, please call centralized scheduling at 720-493-3700. You can also read more about the program by visiting www.InvisionSallyJobe.com.

Genetic Testing

The genetic test revealed a mutation in the BRCA1 gene. Because women who have an abnormal BRCA1 or BRCA2 gene have up to an 85 percent risk of developing breast cancer by age 70 (as well as other cancer risk), the patient was recommended for a baseline breast MRI.

Breast MRI and Biopsy

The breast MRI revealed a mildly suspicious pattern in the left breast (fig. 3). Subsequent MRI-guided biopsy and analysis found Ductal Carcinoma in Situ (DCIS) Stage II, a "stage zero breast cancer" likely to develop into invasive cancer if not treated.

Results

The patient elected to have bilateral mastectomy and recommended genetic testing to her two daughters, ages 21 and 24. The 21-year-old daughter has since tested positive for the BRCA1 gene mutation.

Conclusion

Invision Sally Jobe's RAPP program identified an elevated risk for cancer that would not otherwise have been found during standard risk factor analysis (Gail model). Based on the knowledge of that risk, advanced imaging technologies were used that led to detection of cancer that wouldn't have been found by a routine screening mammogram, standard diagnostic mammogram or sonography testing. This powerful information allows patients and their children to know their risk of breast cancer and take preventive measures.

CONGRATS TO OUR RADIOLOGISTS Honored As 5280 Top Docs

The annual “Top Docs” issue of 5280 Magazine hit newsstands recently, and we’re proud to announce the inclusion of four Invision Sally Jobe & RIA radiologists. They are:



Andrew Fisher, M.D., M.B.A.
Diagnostic Radiology




Matthew Fleishman, M.D.
Diagnostic Radiology



Eric Malden, M.D.
Vascular & Interventional
Radiology



Peter Ricci, M.D.
Neuroradiology

The magazine surveys Denver-area physicians to nominate and select the top doctors chosen across 79 medical specialties. The editors ask doctors to select the list based on which doctors they would entrust to care for themselves or their families. We congratulate all of 5280’s “Top Docs” for moving the practice of medicine forward for the benefit of all. 

Steve H. Parker, M.D., Receives ASBD Award

Steve H. Parker, M.D., was recognized for his dedication and work in breast imaging at the 33rd Annual American Society of Breast Disease Symposium. The ASBD Pathfinder Award is given to “Distinguished Thought Leaders.” Dr. Parker is one of only two radiologists to receive this award.

Dr. Parker gave a lecture outlining his entry into and experience in breast imaging and intervention and the minimally invasive biopsy. His family, as well as Dr. Terese Kaske, Dr. Jane Kercher, Hedi Arnold, Judy Chavez and Dr. Pilar Guzmur from Santiago, Chile, were in the audience for this momentous event.

Invision Sally Jobe and RIA are very proud to be recognized with Dr. Parker as a cutting-edge leader in the development of minimally invasive breast biopsy. His leadership and tenacity changed the direction of breast care in this community and in many communities throughout the world. Dr. Parker began his impressive career with RIA in 1989, working beside Dr. William Jobe. Dr. Parker retired from RIA in 2007, yet continues his work in the areas of research and radiology.

