



# women's health

A publication for those who support the Department of Obstetrics, Gynecology, and Women's Health

## New clinic provides wide range of women's health and wellness services

Something extraordinary is taking place on the University of Minnesota's West Bank. A new kind of care is being provided at a new kind of clinic. On January 3, the Women's Health Specialists Clinic opened its doors to the community and began demonstrating the possibilities of truly integrative care.

Once dispersed throughout campus, women's health services can now be found together in a single location. The new clinic represents the implementation of a new model of collaborative, integrative women's care that encompasses health and wellness. Here, patients can find primary care, gynecology, preventive medicine, obstetrics and midwifery – as well as women's specialists, a nutritionist and health coach, and an acupuncturist.



*Women's Health Specialists Clinic*

*Come see the Women's Health Specialists Clinic for yourself at the official grand opening event on*

**Thursday  
April 19, 2012  
4-7 p.m.**

### Coming home

Carrie Ann Terrell, M.D., an obstetrician/gynecologist and the clinic's medical director, explains the benefit of bringing all of the women's services to the same building: "OB/GYN is on the third floor, maternal/fetal medicine is on the fourth floor, and the reproductive medicine clinic is on the fifth floor. We're all right here, and that's magical – to have all of these women's services under the same roof. You can walk to the birth place and you can walk to the O.R. where women have surgeries."

In addition, the clinic's incorporation of integrative medicine creates a truly comprehensive medical home.

### Integrative pioneers

What is integrative care? The model emphasizes greater collaboration among primary care physicians and physician specialists, while also focusing on physical health, wellness and preventive care – along with patient education and empowerment.

## New clinic, continued

“The foundation of our clinic is still obstetrics and gynecology,” says Carolyn Torkelson, M.D., M.S., who works in family practice and integrative medicine. “But we are creating a comprehensive model that is based in integrative health care and adds a wider array of services for the patient.” Nurse midwife Ann Forster Page speaks to the benefit of this inclusion: “Acupuncture and chiropractic care are ideal partners for midwifery. For years, my patients have been asking me for referrals and now we are collaborating with these practitioners on each patient’s case.”



*Pictured left to right: Carolyn J. Torkelson, M.D.; Carrie Ann Terrell, M.D.; Ann Forster Page, M.S., C.N.M.; and Diana Drake, W.H.N.P.*

### Learning from each other

The concept of integrative care has been gaining momentum for years, but the newly opened women’s clinic takes the model to a new level. Not only are traditional and complementary care practitioners working under the same roof – they’re literally working together in the same room.

“What’s really unique about our vision is that it’s integrated service – not just in what we provide for patients, but that the providers are truly integrated,” says Terrell. “We’re working side by side. We have case conferences to discuss difficult cases or new cases.”

“This is a unique model,” says Diana Drake, M.S.N., W.H.N.P., who is both the clinic’s program director and a nurse practitioner. “There are other clinics in the metro area

that do a wonderful job of delivering complementary and alternative medicine and conventional medicine in the integrative health practice model. But we are unique in that we are specially a women’s clinic, delivering babies and seeing women throughout their lifespan.”

### Treating the whole person

An important aspect of integrative medicine is its whole-person approach – a focus on treating people rather than specific ailments. Torkelson speaks to the philosophy: “When a patient comes in, we certainly assess the medical aspect of what’s happening, but our care model acknowledges that it’s never simply a medical event – it’s a life event.”

In a model that prioritizes treating the person and not just the ailment, it’s essential to have open communication and a physician-patient relationship based on mutual trust. Clinicians work alongside patients to jointly develop a comprehensive, preventive and/or treatment plan that provides the best possible outcomes.

“All providers certainly have a patient-centered focus,” Torkelson adds. “But this is more about empowering patients. It’s the idea that you are the most important person on your health care team.”

### Education is the first step

“One of the things that has always separated our OB/GYN and our primary care practice is that we focus on explaining to women what we think the issue is and what we think the potential treatment options are – including doing nothing,” says Terrell. “And then we have a discussion of what the risks and benefits are of each of those. There’s not just one cure. I don’t think a woman can make a medical decision without knowing what that really means and what the options are.”

### A teaching institution

In addition to serving as a health center, the new clinic is also a teaching institution. OB/GYN residents, medical students and nurse practitioner students all pass through, working side by side with acupuncturists and other complementary practitioners.

“It’s exciting to realize that the bulk of Minnesota’s future women’s health practitioners will be trained at the clinic and exposed to this integrative model,” says Forster Page.

The Women’s Health Specialists Clinic is one of the only clinics of its kind in Minnesota providing integrated women’s health services while being attached to a major academic institution. This connection helps the clinic stay on the cutting edge of the evolving field of integrative medicine, while also providing the opportunity to pursue grants and conduct innovative research.

### An idea is born

How did this revolutionary model come to fruition? The clinic began with a collaboration. In 2007, three extraordinary women, each representing a unique practice perspective, came together and began to imagine an evolution of women’s healthcare offerings. The women were Carrie Ann Terrell, an obstetrician/gynecologist; Ann Forster Page, a nurse midwife; and Carolyn Torkelson, who specializes in family practice and complementary medicine.

Forster Page recalls, “Carrie, Carolyn and myself felt an immediate sense of personal and professional compatibility, in addition to our strong mutual respect. From that relationship grew this new idea of what women’s health services could be. What would it look like for different kinds of practitioners to work in tandem toward a patient’s overall health? The potential benefits seemed enormous.”

The group envisioned a clinic that met two distinct goals. First, it would bring the fragmented women’s health services to a central location. Second, the new clinic would provide not only traditional medical services; it would also incorporate the integrative medicine key to women’s optimal health.

With funds sparse, the three providers shared their vision for an integrated, single-location women’s health clinic. Soon a larger network formed in support of the idea. Leadership at Fairview, University of Minnesota Physicians and the Center for Healing and Spirituality all played critical roles in making the clinic a reality.

### The pieces come together

Last summer, as the clinic’s opening neared, the providers knew that they would need help with integrative program development. Diana Drake had recently completed a Bravewell fellowship, a rigorous and highly prestigious program in integrative medicine, and she was now at the University of Minnesota School of Nursing working on her doctorate. (She has since become a faculty member.)

Drake formed an immediate connection with the clinic founders: “We met at the site and talked for hours. I began to get excited about the possibilities!”

“We really found more than we could have hoped for in Diana,” says Forster Page. “She brought an amazing perspective and knowledge base to our group.”

Drake has been instrumental in enhancing the integrative aspect of the clinic. She has spearheaded training with nurses and staff, answering the questions “What is integrative care, and how does that change what we do?”

### The future

Moving forward, the clinic also hopes to do more with integrative health care in group settings. “We can utilize group care to increase affordability,” explains Forster Page. “For example, a one-on-one meeting with a nutritionist might be out of reach financially for some people, whereas a class run by the same nutritionist would be very affordable.”

Other potential group activities include classes for diabetes, prenatal care, tai chi, meditation and yoga. But before these promising activities can become a reality, the providers will need a public space – which will depend on future funding.

“This is just phase one,” says Drake, who is developing future possibilities. “We are beginning to gather more information about what people are using and what’s working for them. These studies will enable us to continue to hone and add to our integrative services.”

## Women’s Health Specialists Clinic Services

- Well-woman physicals
- Care for mature women
  - Bone health
  - Menopause
  - Incontinence
- Obstetrics
- Midwifery
- Gynecology
- Primary care
  - Family medicine
  - Internal medicine
- Nutrition counseling
- Health coaching
- Acupuncture
- Chronic disease management
- Contraception consultation
- Immunizations
- Mammography
- Pharmacist consults
- Psychologic counseling
- Wellness and preventive care

*We can also assist you in accessing our partners for:*

- Birth services
- Cancer care
- Fertility assistance
- Heart care
- Maternal-fetal care
- Pediatrics

## “Top Doc” Nagel begins next phase of career

### Doctors named “Best doctors for women”

The following physicians from the department were recognized in the October 2011 issue of *Minnesota Monthly* as the Best Doctors for Women 2011, as chosen by their peers.

#### Obstetrics and Gynecology

Mary Mahoney, M.D.  
Carrie Terrell, M.D.

#### Gynecologic Oncology

Peter Argenta, M.D.  
Linda Carson, M.D.  
Levi Downs, Jr., M.S., M.D.  
Melissa Geller, M.D.  
Rahel Ghebre, M.D.  
Amy Jonson, M.D.

#### Maternal Fetal Medicine

Daniel Landers, M.D.  
Jessica Nyholm, M.D.  
Tracy Prosen, M.D.  
Kirk Ramin, M.D.

#### Reproductive Endocrinology/Infertility

Mark Damario, M.D.  
Theodore Nagel, M.D.

No one can connect with a patient, motivate staff and colleagues, or pull off a colorful bow tie better than reproductive endocrinologist Ted Nagel, M.D. A beloved fixture at the University since his residency in 1974, Nagel’s retirement leaves a big hole in the Department’s division of Reproductive Endocrinology and Fertility.

Nagel – who’s been listed each year by both *Minnesota Monthly* magazine and *Mpls/St. Paul* magazine as a “Top Doc” and who earned the 2006 Clinical Care Award from the University of Minnesota Medical Center, Fairview – has always considered it a “real privilege to be here. I’ve tried always to appreciate where the patients are coming from,” he says. “The thing I’ve always enjoyed most is my patients.”

The cards and letters he continues to receive from families he worked with decades ago suggest the feeling is mutual. Gail Kelly, clinical operations director, University of Minnesota Physicians, calls Nagel “just a down-to-earth human being, with natural empathy and a fantastic sense of humor. His patients see he’s a man of high integrity who always has compassion for them and what they’re dealing with.”

*“I think it’s hard to ‘create’ doctors like that; this is just who he is,” Kelly adds.*

Nagel’s warm, easygoing manner long ago endeared him to colleagues and staff as well – and has inspired those around him to “go the extra mile. He’s always managed to make his employees and partners feel that they’re all in it together,” Kelly says. “There are no airs with Dr. Nagel.”



His unpretentious nature notwithstanding, Nagel is a pioneer of infertility treatment in Minnesota. He and colleague George Tagatz, M.D., started the state’s first IVF program in 1983. And Nagel was committed from the outset to making the program as inclusive and accessible as possible, accepting patients many other programs wouldn’t (and insurance from patients whose coverage allows it, despite poor reimbursement). In the interest of making IVF more affordable for more women, he also helped develop a forward-thinking “shared risk” cost share system.

Reproductive medicine has always been more than a job to Nagel, who’s taken great pleasure in each year donating a free IVF cycle as a prize at the annual meeting of the MN chapter of RESOLVE, the National Infertility Association. “Everybody who won that darn thing got pregnant,” Nagel says with obvious delight.

His devotion to his field and his patients has made Nagel a role model to countless medical students and residents. Carrie Terrell, M.D., assistant professor of obstetrics and gynecology and medical director of the Women’s Health Specialists Clinic, says Nagel has always been happy to mentor aspiring physicians, whether through helping with journal clubs – academic endeavors in which residents and faculty gather to discuss the latest in scientific research, mentoring countless resident research projects, allowing physicians in training to observe his practice, and hosting social gatherings in his home.

## A new approach to a deadly disease

*“He’s a brilliant teacher, an exemplary role model, and so well-versed in so many subjects other than medicine that he’s a fantastic conversationalist in any setting,” Terrell says. “You just want to be like him. If I can be one one-hundredth of the doctor he is, I’ll be doing quite well.”*

Nagel’s curious mind – and his affinity for exercise and the outdoors – ensure that he’ll be as busy as ever in this new phase of his life. Along with his wife Judy, Nagel enjoys lectures, artistic performances, panel discussions and other lifelong learning opportunities on a vast range of subjects at the U. They also combine a love of nature and a commitment to staying fit by walking, biking, kayaking and spending several weeks a year skiing in Utah.

It won’t be a full retirement, in any case; Nagel’s already working on a new endeavor. He’ll be using his experience and expertise to reach out to a broader base of women: those who may not be necessarily infertile, but who are now delaying pregnancy to pursue educational and career goals. Enabling women to make informed decisions regarding family planning is part of the bigger women’s health picture.

Nagel looks forward to again serving patients in a new and innovative capacity. Plus, he’ll still have occasion to wear some of the 50-odd bow ties he’s collected over the years. “It’s gotten to be a bit of a fetish,” he laughs.

An estimated 1 in 58 women will develop ovarian cancer during her lifetime. While the survival rate is high if the disease is diagnosed and treated early, only one in five cases is detected at an early stage. Too often, the cancer has spread to the pelvis and abdomen by the time a diagnosis is made – making it difficult to treat and often fatal.

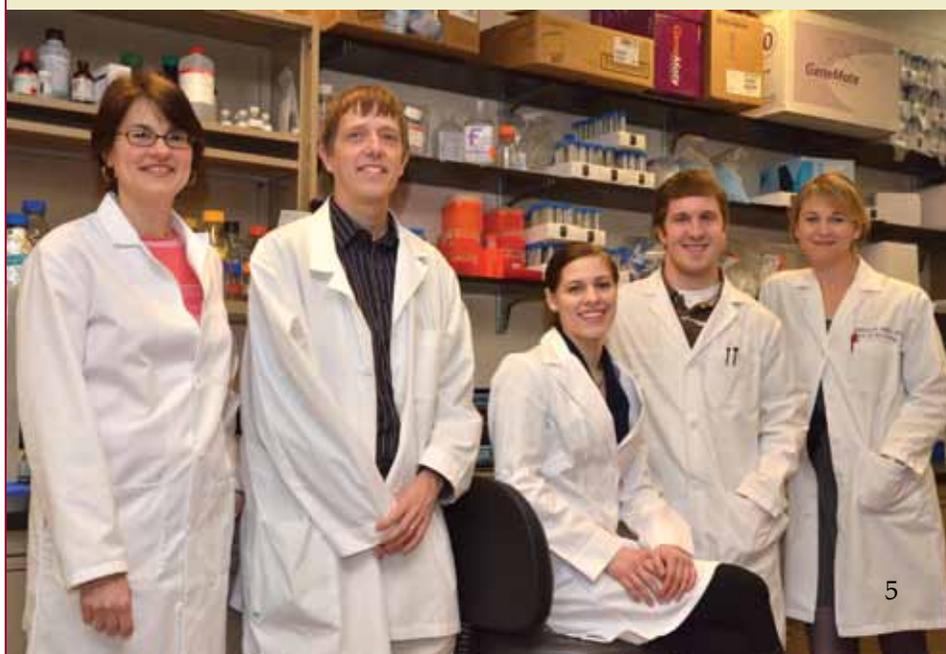
Sadly, these statistics have changed little in the last 50 years. But there is hope for the future, as clinicians and researchers are now coming together to tackle this problem. While Ph.D.s and M.D.s have traditionally worked independently at universities, a new push toward “translational” projects is now integrating the laboratory and clinic settings. The University of Minnesota Women’s Cancer Research Program, which recently added several Ph.D. scientists to its in-house ovarian cancer team, can speak first-hand to the benefits of this approach.

### Closing the gap between research and treatment

Dubbed by one team member as an ovarian cancer research “super group,” clinicians and research scientists are now working together under one roof and collaborating on a day-to-day basis. “Before, we were scattered throughout the university,” says women’s cancer researcher Amy Skubitz, Ph.D. “Now that we have everybody who’s working on the same disease together in one area, we’re able to communicate more openly.”

*continued on page 6*

***Pictured below left to right: Amy Skubitz, Ph.D.; Tim Starr, Ph.D.; Callie Janik; Lee Pribyl and Melissa Geller, M.D. Not pictured: Martina Bazzaro, Ph.D.***



## New approach, continued

This team model helps foster the sweet spot between laboratory research and clinical relevance. “We talk about the three-pronged approach: the teaching, the research, and the clinical portion,” says Melissa Geller, a full-time Gynecologic Oncologist M.D. “The addition of research scientists Dr. Amy Skubitz, Dr. Timothy Starr, and Dr. Martina Bazzaro has really strengthened the research component of what we do.”

“It’s also good for the researchers to work directly with the M.D.s,” adds Skubitz. “Traditionally, we’re working primarily with numbers and data. But seeing the cases through the M.D.’s eyes lends us new insights in relation to our lab work.”

The new model also enables in-house research to lead directly to clinical trials. “For the first time, we have the laboratory background to directly design clinical studies,” says Geller. “These clinical trials are key in developing new treatments for patients.”

### Cutting-edge research provides new hope for the future

From research to clinic, each scientist is attacking the problem from a different angle—but all are working together toward better outcomes for patients.

Starr explains his approach: “We’ve always known that cancer is a genetic disease caused by mutations, but we don’t really know which set of mutations causes any particular cancer. My research is aimed at trying to find the key mutations that cause a given cancer. We’re hopeful that in the future, if we can understand more of the genetics behind the disease, we can better tailor our therapies to treat our patients more successfully.”

Bazzaro’s research also focuses on developing targeted therapies. In one recent study, Bazzaro found that two of the pathways of cancer she was studying actually synergized to make the cancer worse. Two existing drugs treat those pathways individually—and her research can now be directly translated to a new clinical study focusing on the drug combination.

“That’s exactly what we mean by translational science,” Bazzaro says. “In the past, I might have just kept studying the

interaction in the lab, and clinical trials might have kept going on trying the individual drugs. But now, we’re not waiting for conferences to present our work. We’re discussing our research on an ongoing basis, and we see this expedited progress.”

In addition to ovarian cancer treatment, the team is also working on research supporting early detection. Skubitz specializes in this area, comparing the tissue or blood of women with ovarian cancer with that of healthy women in order to identify biomarkers—the signs that can tell lab specialists if the cancer is indeed present. The goal of this work is to develop a test for the detection of ovarian cancer that can be used with the general population. “Earlier diagnosis and treatment will make the biggest difference in survival for women with ovarian cancer,” adds Geller.

Although primarily a clinician, Geller has also done a great deal of ovarian cancer research in both clinical and laboratory settings. Her project looks at treating ovarian cancer through the use of “natural killer cells.” She explains, “These are cells we all have. They’re our first-responders to infections or malignancies.” From laboratory research, Geller knows that the natural killer cells of women with ovarian cancer don’t attack cancer or tumor cells as well as those of a healthy person. From a clinical perspective, she is now looking at different options for using the natural killer cells of healthy donors to treat this disease.

### Funding makes it happen

None of this research is possible without funding—but the sources are increasingly limited. In the past, 90 percent of biomedical research has been funded through the National Institutes of Health. However, the likelihood of receiving a grant through this organization is now only 7 percent.

In this increasingly competitive environment, private donors play an even more critical role. Philanthropic gifts often provide seed funding, allowing researchers to collect initial data, which makes their grant applications more successful. Gifts are leveraged to secure major NIH funding—and ultimately to produce research results that lead to the best care for patients.

## Ovarian cancer research team

**Martina Bazzaro, Ph.D.**  
**Melissa Geller, M.D.**  
**Tim Starr, Ph.D.**

Assistant Professors  
Division of Gynecologic  
Oncology, Department of  
Obstetrics, Gynecology  
and Women’s Health

**Amy Skubitz, Ph.D.**

Tissue Procurement  
Coordinator  
Department of Lab  
Medicine & Pathology

**Callie Janik**  
**Lee Pribyl**  
Scientists

*If you are interested  
in making a donation  
to fund ovarian  
cancer research,  
contact Kathy Beenen  
at the Minnesota  
Medical Foundation  
at 612-625-6495 or  
k.beenen@mmf.  
umn.edu.*

# What's new?

## New faculty



**Diana Drake, W.H.N.P.**  
**Doctorate:** University of Minnesota School of Nursing (*in process*)  
**Graduate education:** Drexel University; Bravewell Integrated Medicine Fellowship Program

**Clinical interests:** integrative women's health, mature women's health and colposcopy

**Clinical practice:** University of Minnesota Physicians Women's Health Specialists Clinic



**Susan Halloran, W.H.N.P.,** gynecologic oncology  
**Graduate education:** Planned Parenthood Women's Health Nurse Practitioner Program - Advanced Family Nurse Practitioner's Certificate

**Clinical interests:** women's health in gynecology, oncology and colposcopy

**Clinical practice:** University of Minnesota Physicians Gynecologic Cancer Clinic



**Kirsten Malvey, W.H.N.P.,** gynecologic oncology  
**Graduate education:** University of Minnesota School of Nursing  
**Clinical interests:** Ovarian, uterine, vulvar, vaginal and cervical cancers

**Clinical practice:** Fairview Maple Grove Medical Center and Park Nicollet/Methodist Meadowbrook



**Sally Mullany, M.D.,** assistant professor, gynecologic oncology

**Fellowship and Residency:** Mayo Clinic

**Clinical interests:** robotic gynecologic surgery;

ovarian, endometrial, cervical, and vulvar cancer; primary prevention of gynecologic malignancy; heredity cancer syndromes; clinical trial design and participation

**Clinical practice:** Gynecologic Cancer Clinic, primarily at Park Nicollet Health Services/Methodist Hospital and Regions Hospital



**Deanna Teoh, M.D.,** assistant professor, gynecologic oncology

**Fellowship:** Duke University Medical Center

**Residency:** University of California-San Francisco

**Clinical interests:** gynecologic malignancies, minimally invasive surgery techniques, and clinical trials

**Clinical practice:** Gynecologic Cancer Clinic, primarily at Regions Hospital



**Timothy Starr, Ph.D.,** assistant professor, gynecologic oncology

**Post-doctoral fellowship:** University of Minnesota Medical School

**Doctorate:** University of Minnesota

**Research interest:** Understanding T-cell development in the thymus

## U researchers recognized in *Time* magazine's Top Medical Breakthroughs

Research conducted by Christopher De Jonge, Ph.D., and Nancy Bossert, Ph.D., -- with colleagues from Stanford University-- was cited by *Time* magazine as one of the Top 10 Medical Breakthroughs for 2010. By developing a method of identifying the characteristics of strong embryos, their findings will enable physicians to select the strongest embryos for implantation and improve IVF success. Their research was published in *Nature Biotechnology*.

## Promotion

Congratulations to **Kirk Ramin, M.D.**, who was promoted to professor in the OB/GYN department. His clinical practice is in the Division of Maternal Fetal Medicine.

## Research highlights

Each year in the U.S., more than 125,000 people of reproductive age are diagnosed with cancer. One of the devastating side effects of cancer treatment is the possibility that the patient will become sterile.

**UMPhysicians' Reproductive Medicine Center** is improving fertility preservation techniques for cancer patients.

A normal but concerning consequence of pregnancy is the fact that pregnant women are more susceptible to infection. **Dr. Marijo Aguilera**, maternal fetal medicine fellow, collaborated on a study where researchers have identified the underlying mechanisms for this physiologic immune suppression that may lead to new therapies to help ward off infections during pregnancy.

**Tracy Prosen, M.D.** talked with KARE 11 about new DNA test for pregnant women that can detect Down syndrome as early as 10 weeks into the pregnancy with astounding accuracy, and how this test can help families prepare for the future.



*On My  
Mind*

Dear friends,

I've never been prouder to work with the talented, compassionate faculty and staff of the Department of Obstetrics, Gynecology and Women's Health. Thanks to a far-reaching strategic planning process we started five years ago, we've just launched the new Women's Health Specialists Clinic in the Riverside Professional Building.

Not only will we continue to offer the same superlative care we've always provided, but we're also offering an exciting array of integrative health services including acupuncture, massage, health coaching, nutrition counseling and more. (See page 3.)

Supporting patients in healthy living at every stage of their lives is the overall aim of the new clinic. Our multidisciplinary team of top-notch, credentialed providers, including physicians, nurse practitioners, nurse-midwives, psychologists, a nutritionist and a Chinese medicine specialist, will provide quality care for the *whole* woman throughout her lifespan. And we'll gather information, on an ongoing basis, to help us continually improve that care.

We're excited to offer mammography and bone density testing in the new clinic, too. Our patients also have access to a range of specialty services, including cancer care, fertility assistance, birth services, maternal-fetal care and pediatrics.

The clinic's site - adjacent to the University of Minnesota Amplatz Children's Hospital, with easy, ample parking - just makes good logistical sense. It's another example of the thoughtfulness that went into our strategic planning effort: a truly purposeful, rewarding process.

I want to extend special thanks to Carrie Terrell, M.D.; Carolyn Torkelson, M.D.; and Ann Forster Page, M.S., C.N.M. for their tremendous leadership in this bold endeavor. And kudos to our forward-thinking Fairview partners, including Kathie Taranto, Alison Koehler and Russell Williams. These visionaries - with the help of many gifted faculty and staff, united in the goal of improving health care for all women - have built something extraordinary.

**Linda Carson, M.D.**

*Professor and Chair, Department of Obstetrics, Gynecology, and Women's Health*

## women's health Winter 2012

Published by the Department of Obstetrics, Gynecology, and Women's Health

Writers:

Susan Maas

Elysia Kotke, Brass Tacks Publishing

For more information, please contact

Sue Marshall

Administrative Director

612-626-3111

obadmin@umn.edu

The University of Minnesota is an equal opportunity educator and employer.

© 2012 Regents of the University of Minnesota. All rights reserved.